University College London

Environmental Assessment from an Environmental Justice Perspective: Analysing the Impacts of Major Urban Projects in Brazil

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Declaration

I, Larissa Verri Boratti, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

Major urban projects associated with sporting mega-events have set the tone for the urban agenda of local governments in Brazil since the country was announced as the host of FIFA's Football World Cup 2014 and the Olympics 2016. Development consent for these projects is at the core of rising urban-environmental conflicts over development goals and the uneven distribution of costs and benefits of urbanization. Environmental assessment (EA) operating within this political and developmental agenda plays a central role. EA governs the gathering of information, predicting impacts, defining and calculating mitigating and compensatory measures and engaging publics in decision-making, and in carrying out each of these aspects it may produce or reinforce distributional effects. In light of this, this thesis explores the extent to which the regulatory regime and practice of project-level EA can assist in securing environmental justice, particularly when operating within the planning control process for major urban projects in specific and local socio-political contexts. The thesis offers insights into both theory (Part I) and practice (Part II) of EA in terms of the degree to which it is able to incorporate the different dimensions of environmental justice. Part I focuses on developing a theoretically-informed framework of project-level EA in the context of urban-environmental decision-making by integrating social justice, environmental justice and urban-spatial justice as key elements of law and policy in the consent regime for major urban projects. In Part II, this is explored empirically by employing socio-legal methodology (comprised of qualitative research based on case study analysis) in the examination of Brazil's EA regime. The cases selected involve two major urban developments (the redevelopment and expansion of an avenue as part of the improvement of key transport links and the construction of a football arena, supported by the building of real estate) in one specific city in Brazil (Porto Alegre). Both developments took place in the context of preparations for hosting the World Cup. The empirical research comprised gathering and analysing qualitative data on the development consent and environmental licensing procedures documentation, in particular the content of environmental impact reports.

Drawing on empirical and qualitative research methods used to compile the case studies, the key conclusion is that EA offers a central and critical stage for voicing urban-environmental conflicts: how the benefits and burdens of a development endeavour – economic, social, environmental, and cultural – are unevenly shared among different population groups in the cities. I argue that if EA, operating within development consent for urban development, is to incorporate urban-environmental justice concerns, distributional aspects, land rights, participation and just distribution of benefits and burdens of urbanization have to be taken into consideration. The case studies indicate that problems arise in this regard when the practice of EA fails to take such information into account, or when the EA process is embedded in the use of development consent arrangements in order to ensure predictability for developers and speed up decision-making, even though this is to the detriment of a thorough impact assessment and consistent public participation. Specific issues highlighted by examining the case study developments include the partial nature of participation requirements and the timing upon the calculation of mitigation and compensatory measures. In summary, the EA procedures researched show up that although social-economic and environmental impacts were capable of forming part of the process, these issues were not well studied in terms of how the impacts are felt differently amongst particular groups, particularly those most vulnerable to socio-environmental impacts.

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Acronyms

ABEMA	Brazilian Association of State Environmental Agencies *Associação Brasileira de Entidades Estaduais de Meio Ambiente*
CEQ	USA Council on Environmental Quality
CONAMA	National Council of the Environmental *Conselho Nacional do Meio Ambiente*
CONSEMA	State Council of Environment *Conselho Estadual do Meio Ambiente*
DEFRA	UK Department for Environment, Food and Rural Affairs
EA	Environmental Assessment
EIA	Environmental Impact Assessment *Estudo de Impacto Ambiental*
EPA	USA Environmental Protection Agency
EU	European Union
FPIC	Free, prior and informed consent
IBAMA	Brazilian Institute of Environment and Renewable Natural Resources *Instituto Nacional do Meio Ambiente e dos Recursos Naturais Renováveis*
IBGE	Brazilian Institute of Forestry Development *Instituto Brasileiro de Geografia e Estatística*
LI	installation license *licença de instalação*
LO	operation license *licença de operação*
LP	preliminary license *licença prévia*
MMA	Ministry of the Environment *Ministério do Meio Ambiente*
NEPA	USA National Environmental Protection Act

NIS	Neighbourhood Impact Study
PLS	Senate Bill of Law *Projeto de Lei do Senado*
RIMA	Environmental Impact Report *Relatório de Impacto Ambiental*
SEA	Strategic Environmental Assessment
SER	Simplified Environmental Report *relatório ambiental simplificado*
STF	Federal Supreme Court *Supremo Tribunal Federal*
STJ	Superior Court of Justice *Superior Tribunal Federal*
TCE	State Court of Accounts *Tribunal de Contas do Estado (Rio Grande do Sul)*
TCU	Federal Court of Accounts *Tribunal de Contas da União*
ToR	Terms of Reference
UNCED	United Nations Conference o Environmental and Development
UVS	Urbanistic Viability Study *Estudo de Viabilidade Urbanística*

Table of Cases

Brazil

TRF4, 2004.04.01.049432-1/SC, DJe 07/01/2005

2005TJSP, AI 546.688-5/9-00, DJe 21/09/2006

STJ, REsp 1.120.117/AC, DJe 19/11/2009

Tribunal de Contas da União, Decision TCU 2212/2009

Tribunal de Contas da União, Decision TCU 2856/2011

Tribunal de Contas da União, Decision TCU 3413/2012

STJ, REsp 1330841, DJe 14/08/2013

TRF4, AC 5001715-85.2011.404.7201, DJe 06/11/2014

United Kingdom and European Union

Miller v *Jackson* [1977] QB 343

Wheeler v *JJ Saunders* [1995] Env LR 286

Berkeley v *Secretary of State of the Environment, Transport and the Regions* [2001] Env. LR 16

R (Corner House Research) v *Secretary of State for Trade & Industry* [2005] 1 W.L.R. 2600

Corby Group Litigation v *Corby District Council* [2009] EWHC 1944 (TCC)

Friends of the Earth v *Secretary of State for Business Enterprise and Regulatory Reform* [2010] Env LR 11

Garner v *Elmbridge Borough Council* Court of Appeal (Civil Division) [2010] EWCA Civ 1006 29 July 2010

(on the application of Edwards and another) v *Environment Agency and others* [2010] UKSC 57 15 Dec 2010

Case C-530/11, *European Commission* v *United Kingdom of Great Britain and Northern Ireland* [2012/C 39/11]

United States of America

Calvert Cliffs'Coordinating Committee v *Atomic Energy Commission* 449 F2d 1109 (DC Circ 1971)

Stryker's Bay Neighbourhood Council Inc v *Kerlen* 444 US 223 (1980)

Table of Legislation

Brazil

Law 6,938/1981 (National Environmental Policy)

CONAMA Resolution 01/1986

CONAMA Resolution 09/1987

Federal Constitution 1988

CONAMA Resolution 237/1997

Law 9,985/2000

Law 10,257/2001 (City Statute)

Decree 4,340/2002 (amended by Decree 6,848/2009)

Law 10,406/2002 (Civil Code)

CONAMA Resolution 307/2002

CONAMA Resolution 371/2006

CONAMA Resolution 428/2010

Complementary Law 140/2011

United Kingdom

Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999

Environmental Information (Scotland) Regulations 2004

Environmental Information Regulations 2004

Planning and Compulsory Purchase Act 2004

Pollution Prevention Control (Scotland) Amendment Regulations 2005

Environmental Impact Assessment (Scotland) Amendment Regulations 2006

Planning Act 2008

Town and Country Planning (Environmental Impact Assessment) Regulations 2011

Localism Act 2011

National Planning Policy Framework 2012

Town and Country Planning (Environmental Impact Assessment) (Amendment) Regulations 2011

European Community

Directive 2011/92/EU on the assessment of the effects of certain private and public projects on the environment

UNECE Aarhus Convention 1998

Directive 2003/4/EC on public access to environmental information and repealing Council Directive 90/313/EEC

Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC

Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment

United States of America

National Environmental Policy Act (NEPA) 1969

Community Risk Reduction and Resiliency Act (Bill S6617B-2013), New York State

CHAPTER 1
ENVIRONMENTAL ASSESSMENT, ENVIRONMENTAL JUSTICE AND URBAN DECISION-MAKING IN FOCUS

1.1 Introduction

This thesis has been researched and written during a period of dramatic political and economic upheaval as Brazil moved rapidly towards global capitalism. The developmental trajectory that Brazil has experienced is highly controversial and is having marked impacts at the local level. *The Economist* reported on its cover page in 2009 that Brazil was as 'taking off' as a promising member of the BRICS and enjoying a decade-long socio-economic stability; by 2013 the cover of this magazine described Brazil as 'blowing it'[1] for having been recently engulfed in economic recession and corruption scandals, culminating in an impeachment trial (2016). This shift has evolved in the glare of worldwide media, particularly over the past four years, as sporting mega-events (the FIFA's Football World Cup 2014 and the Olympics 2016)[2] became the site of both celebrations and protests. Major urban projects associated with sporting mega-events have set the tone for the urban agenda of local governments - as part of growth strategies based on infrastructure investment - and are at the core of urban-environmental conflicts over development goals.

Brazil was announced as FIFA's Football World Cup 2014 host country in October 2007, after a biding campaign fully supported by national and local governments. The twelve host cities were chosen in May 2009. These were required to invest heavily in infrastructure improvement in order to comply with organizers' specific standards for stadiums, public transport, airports and tourism infrastructure. Local governments portrayed this as an opportunity to leverage long-lasting local socio-economic development, boosted through capital investment in infrastructure and services and

[1] The expressions 'taking off' and 'blowing it' are a reference to The Economist's covers on Brazil dated respectively 12 November 2009 and 28 September 2013.

[2] America Latina had been the stage for the World Cup other four times: Uruguay in 1930, Brazil in 1950, Chile in 1962 and Argentina in 1978. The Olympic Games in Rio will be the first in South America.

international renown, the much-anticipated World Cup's 'legacy'. Host cities' urban agenda became largely oriented towards the fulfilling of the commitments made since then. However, exceptional legal arrangements imposed,[3] delays in planning and execution,[4] scaling of costs, irregularities in contracts and displacement of low-income communities to make room for major projects turned initial excitement into national-wide protests in 2013. There seems to have flourished a general awareness that the World Cup would not tackle urban inequalities nor necessarily benefit collective development goals.

Interestingly, there are already interdisciplinary academic works in English on the impact of sporting mega-events on urban development in Brazil. These have mainly centred on the bidding history, preparation process and on the socio-spatial impacts on cities' planning.[5] This thesis, however, differs from this existing literature by specifically taking a socio-legal standpoint aiming at contributing to the debate by examining the role of environmental governance mechanisms. It examines in detail the legal processes and mechanisms which are shaping and, to some extent, constraining this development in local urban environments, focusing upon environmental assessment (EA). The main contribution of this thesis is to draw environmental justice into debates about urban development by examining the role of EA in decision-making related to development consent for major urban projects in such a situated context. Therefore, using socio-legal research methods, the thesis offers insights particularly into the theory and practice of EA and its influence on achieving urban sustainability and environmental justice, but also contributes to broader debates about how environmental law relates to processes of urban change.

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[3] Exceptional legal arrangements for the event were established through the passing of the so-called General Law of the World Cup (Law 12,663/2012), including, for example, visa and work permitting issuing, patent rights for merchandising, tickets selling, alcohol in the stadiums and street vendors' activities.

[4] Many urban mobility projects will not be completed until 2018.

[5] The main emphasis is on the city of Rio de Janeiro. See: Martin Curi, Jorge Knijnik and Gilmar Mascarenhas, 'The Pan American Games in Rio de Janeiro 2007: Consequences of a Sport Mega-Event on a BRIC Country' [2011] International Review for the Sociology of Sport 111. Christopher Gaffney, 'Mega-Events and Socio-Spatial Dynamics in Rio de Janeiro, 1919-2016' (2010) 9 Journal of Latin American Geography 7. Fernanda Sánchez and Anne-Marie Broudehoux, 'Mega-Events and Urban Regeneration in Rio de Janeiro: Planning in a State of Emergency' (2013) 5 International Journal of Urban Sustainable Development 132. Gabriel Silvestre and Nelma Gusmão de Oliveira, 'The Revanchist Logic of Mega-Events: Community Displacement in Rio de Janeiro's West End' (2012) 27 Visual Studies 204.

1.2 Research Question, Purpose and Scope

The primary aim of the thesis is to examine the extent to which the use of EA contributes to reducing environmental, social and urban-spatial injustices in urban areas. This examination involves analysing the normative dimensions of EA, which in this thesis I consider to be pursuing public participation, encouraging sustainable patterns of development and promoting fairness of procedures. More specifically, the main research question is to what extent the regulatory regime and practice of EA addresses the uneven distribution of costs and benefits associated with major urban projects. The relevance of strategic environmental assessment (SEA) is not neglected. However, because this thesis is concerned primarily with distributive impacts at the project level, and hence closer to the public and directly impacting on or resulting from localised planning decisions and development proposals,[6] the focus of debate is with project-based EA.

Questions arising from both legal doctrine and socio-legal inquiry are central to this thesis. For this reason, three research objectives guide this research. First, (i) to explore the meaning of environmental justice in the context of urban-environmental policy and decision-making; this provides the cornerstone of the analytical framework by providing a working concept for evaluating EA. Second, (ii) to examine the regulatory form of EA with the purpose of interrogating whether it can assist in securing environmental justice, an inquiry placed within debates on defining and accounting for the outcome of environmental decision making. Third, (iii) to investigate the extent to which, in practice, EA (operating within a planning control context) allows decision-making to be framed in terms of environmental justice. This last objective is fulfilled by drawing up case studies on the legal regime and operation of EA in situated contexts. This casts light on the significance of location by investigating cases of development consent for major urban projects in a growing urban centre in Latin America, embedded in particular political and governance settings (one of the Brazilian cities hosting the FIFA's Football World Cup 2014).

[6] Heather Campbell, 'Just Planning: The Art of Situated Ethical Judgment' (2006) 26 Journal of Planning Education and Research 92, 104.

When development consent consists of an urban-environmental governance mechanism that allows for decision-making that benefits one group in detriment of another in terms of urban development outcomes, this shifts the debate from concerns with regulatory efficiency to questions of distribution. EA operating within this system is part of the problem: governing information gathering, impact prediction, participation and definition of mitigating and compensatory measures, it produces distributional effects. Therefore EA benefits from environmental justice as a conceptual and normative foundation for examining its operations within planning control.

However, to present an original account of EA and environmental justice is challenging. These are themes extensively explored within environmental law and policy academic debates, ranging from theoretical formulations to political and practical dimensions. An account of how the thesis relates to the existing vast literature is part of Chapters 2 to 5. This derives from the strong linkages between notions of justice and theories and practice of environmental law (see Chapters 2 and 3) and planning law,[7] independently or taken in their intersections with each other.[8] In both fields, the existing literature draws mainly on the body of work by political philosophers,[9] but advocates a grounded, contextual, notion of justice connecting abstract principles/universal understandings to situated circumstances and events.[10] This makes explicit the concern with social justice, which would not be as effective through employing other mainstream guiding principles (such as sustainable development and cost-benefit analysis).

Specifically approaching EA *from* an environmental justice perspective – the position

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[7] See, for a general view: Susan S Fainstein, *The Just City* (Cornell University Press 2010). Heather Campbell and Robert Marshall, 'Towards Justice in Planning: A Reappraisal' (2005) 14 European Planning Studies 239. Heather Campbell, 'Just Planning: The Art of Situated Ethical Judgment' (2006) 26 Journal of Planning Education and Research 92.

[8] See, for example: Scott Campbell, 'Green Cities, Growing Cities, Just Cities?: Urban Planning and the Contradictions of Sustainable Development' (1996) 62 Journal of the American Planning Association 296. David P Lawrence, 'Planning Theories and Environmental Impact Assessment' (2000) 20 Environmental Impact Assessment Review 607. Hamil Pearsall and Joseph Pierce, 'Urban Sustainability and Environmental Justice: Evaluating the Linkages in Public Planning/policy Discourse' (2010) 15 Local Environment 569.

[9] Notably, Rawls's idea of 'justice as fairness', Habermas' 'discourse ethics' and Young's 'politics of difference' (see Ch. 3).

[10] In line with Nussbaum, Sen and Harvey (see Ch. 3).

taken in this thesis - is equally not entirely novel in the specialised literature (see a review in Section 4.2.3). Although, this particular aspect has not been explored in the range and depth this thesis aims for. This thesis provides a theoretically-informed, value-based and empirically-contextualized analysis of the integration of social justice, environmental justice and urban-spatial justice by closely examining the working of EA in its socio-political context. This is not an attempt to provide a political theory of EA within planning control. Rather, the thesis articulates the interaction between theory/concept (justice), governance and policy (environmental and urban) and praxis (EA in action) to introduce an analytical framework from which to derive practical guidance for evaluating the degree to which EA is able to incorporate the different dimensions of environmental justice (see Chapter 4). Therefore it contributes to the field of environmental law and socio-legal scholarship by developing a critical appraisal of EA's distributional effects in urban-environmental decision-making and offering a platform for investigating how EA is intertwined with, and may legitimise, certain urban development programmes. It not only adds to theoretical developments, but also contributes to explain practice.

Finally, the theoretical, policy and practical relevance of the research problem and its underlying issues remains live, emanating from recent international developments in environmental law (see Section 4.1) as well as from domestic events challenging urban-environmental decision-making in the geographic and policy context in Brazil. Urban-environmental governance is in a state of flux, creating challenges which call for responsiveness and adaptability in the regulatory form of EA. A review of this is offered in the following Section 1.5. This also emphasizes that EA lies at the centre of a set of related factors: political processes, urban-environmental governance agendas and spatial planning decisions. For this reason EA can potentially attract as participants a broad range of stakeholders: policy-makers, regulatory agencies, developers, practitioners, community groups and development agencies. Each of these participants may benefit from this research for it is directed at informing (or offering critiques for) policy and law-building, improved institutional practice, good practice in the private sector and strategic activism.

1.3 Outline of the Thesis

Having formulated the research question, explored the scope of the thesis and made the case for its relevance and contribution to environmental law and socio-legal scholarship (Sections 1.1 and 1.2 above), this introductory chapter outlines below the methodology choices (Section 1.4) and presents an overview of the underpinning and contextual legal and institutional issues (Section 1.5). From Chapter 2, the thesis is divided into two main parts, evolving from theory (Part I) to empirical work (Part II).

Part I (Chapters 2 to 5) is an exercise in theory building, with each substantive chapter unfolding specific elements of the theoretical/conceptual approach implicated in research objectives (i) (environmental justice meaning-building) and (ii) (environmental justice entry-points into EA regulatory form). It presents the theoretical framework by analysing the main bodies of literature on environmental justice and EA, drawing upon literature-based and desktop research. The purpose is to develop a set of operational concepts which map out the normative dimension of the subject under analysis, to guide the empirical work. Based on this, I deduce specific sufficient conditions required to produce an urban-environmental justice sound EA to be compared with the empirical realities of the case studies (summarized in Tables 3 and 5).[11]

I shall argue that environmental justice is a too imprecise notion to have analytical utility. Therefore, Chapters 2 and 3 map out multiple variations of environmental justice with the purpose of drawing a conceptual basis to effectively inform EA. Chapter 2 (From Political Rhetoric to Legal Notion: Tracing Law and Policy Responsiveness to Environmental Justice Claims) departs from exploring the political dimension of environmental justice to identify a distinctive set of claims that, having derived from political grassroots origins, have informed initial responsiveness from law and policy in particular contexts. It draws on the USA's and UK's long-standing

[11] This is similar to the congruence analysis approach to case study research as defined by Blatter and Haverland. Congruence analysis is focused on determining the congruence between theoretical expectations and the empirical evidence (deductive), this is to say to assess the relevance and sufficiency of the theory in explaining the cases. In terms of research design, a theoretical framework selected in advance offers the basis for information gathering and case analysis. Joachim Blatter and Markus Haverland, *Designing Case Studies: Explanatory Approaches in Small-N Research* (Palgrave Macmillan 2012) 23–31 and 218.

literature and policy and practical knowledge on the topic,[12] and investigates the historical conditions that gave birth to the environmental justice movement in Brazil. This provides the foundations for an analysis of a localized meaning of environmental justice. Next, Chapter 3 (Situating Justice: Expanding Environmental Justice Towards a Notion of Urban-Environmental Justice) examines theoretical approaches to environmental justice, addressing the central elements of justice claimed by the environmental justice movement (social justice, procedural justice and recognition), but also the plurality of theoretical discourses working within an expanded form of environmental justice (intergenerational justice, global justice, climate justice, ecological justice, and 'just sustainability'). It then turns to examine how this plays out contextually in conjunction with spatial justice concerns in order to develop a matrix of dimensions-themes-processes associated with a notion of urban-environmental justice that can offer practical guidance for decision-making.

Chapter 4 (Justice Driven Environmental Assessment in an Urban Context: Pursuing and Integrating Purpose and Value) presents an account of the current state of debates on EA, providing a concise examination of its regulatory character. The aim is to identify the different purposes assigned to EA and, thereby assess the extent to which this shapes the tension between substantive and procedural goals. By drawing attention to 'substance' and 'context', the Chapter offers an environmental justice approach fit for EA regulatory purposes. Core subjects are identified and explored in terms of their potential to be mainstreamed into EA regulation and practice within urban-environmental decision-making. These are: an enhanced status of socio-economic impacts; meaningful public participation; climate change adaptation targeting vulnerable groups; and legal dimensions of urban sustainability.

Part II (Chapters 5 to 8) addresses research objective (iii) (to explore project-level EA in practice), with the insights and concepts presented in Part I being applied to the domestic policy and legal context of Brazilian urban and environmental policies.[13] This Part is made up of chapters based on empirical research which explore the extent

[12] Although not examining the legal-institutional arrangements of these international experiences in any detail, this provides inspiration for critical appraisal and further developments with regard to Brazil.

[13] The law and policy in the thesis is up to date as 10 May 2016.

to which EA performs as an effective participatory and preventive legal tool in urban areas in Brazil as well as a means to promote environmental justice and fair urban-environmental decision-making. Empirical research employing socio-legal methodology, centred upon key case studies on major urban projects, provides the foundation of analysis.

Chapter 5 (Impact Assessment at the Interplay of Urban and Environmental Policies Framework in Brazil) outlines the domestic legal framework for addressing development consent in urban areas, which comprised the key legal concepts and arrangements that shape EA regulation. This encompasses the framing of the constitutional provisions on environmental and planning systems under a rights-based approach, as well as the close linkages between environmental and planning systems both in terms of regulatory goals and operation. Finally, this Chapter examines the legal form of the two impact assessment tools capable of expressing and giving effect to such an intersection in terms of local sustainability: environmental impact assessment (EIA) and, as an element or adjunct to the EIA, the neighbourhood impact study (NIS).

Chapters 6 to 8 provide a close analysis of the case studies. Whereas Chapter 6 (Case Study Outline: Research Design And Institutional Context) outlines the methodology for selecting the cases and case analysis criteria, Chapters 7 and 8 focus on case analysis. Two cases on major urban projects in Brazil are selected with the purpose of investigating the practical state of linkages and consistencies of the theoretical and regulatory framework with the reality of applying the mechanism in practice. They give an account of the development consent process in the city of Porto Alegre, in southern Brazil, encompassing analysis of two projects: the expansion of part of the urban road system (by the local authority); and the building of a football arena (a privately-owned development). Both projects constitute large-scale urban interventions in the context of the World Cup 2014, were located in vulnerable areas (low-income communities, lacking infrastructure), and were subject to environmental licensing by the local authority. However, the expansion of the avenue was subject to a simplified environmental study, whereas the arena was subject to a full EIA. Although a NIS was not conducted, the case studies allow for the important interface

of EIA and NIS to be addressed.

I selected these particular cases because they highlight very well the role and relevance of impact assessment tools in development consent at the local level in the context of the interplay between urban development choices and mega-events. Most importantly, they shed light on two of the many dimensions of the urban-environmental question. The avenue expansion has a particularly strong component of urban development associated with a massive resettlement scheme of low-income population (raising concerns about the extent to which rights have been trammelled: the right to housing, right to the city, urban sustainability, territory and community cohesion, and procedural justice). The building of the football arena raises debate about the practice of negotiating compensation measures towards nature preservation and city infrastructure within environmental licensing procedure, raising important issues of the just distribution of the benefits and burdens of urbanization, particularly the benefits to private property resulting from public investment. Therefore, the case studies contribute to environmental justice analysis in the realm of urban development, providing evidence to clarify what effects might be expected from legislation and practice on impact assessment in terms of environmental justice.

The final Chapter aims at highlighting the main contributions of the thesis to EA studies in terms of theory and the development of regulatory strategies. This is the development of a theoretical framework of EA in the context of urban-environmental decision-making, by integrating environmental, social and spatial justice as key elements of EA law and policy, which is informed by empirical analysis.

1.4 Methodology

Considering the nature of the main research question and the scope of related questions, qualitative empirical research was carried out,[14] using a case study approach. This section introduces the motivations for the methodological choices,

[14] The thesis's approach to qualitative empirical research is based on the guidance described by Bryman, although not following it strictly. Alan Bryman, *Social Research Methods* (4th edn, Oxford University Press 2012) 384.

including locating the thesis within socio-legal research scholarship. Case study design, which is centred on textual analysis, will be presented in detail in Chapter 7, where practical aspects aimed at ensuring internal coherence in case analysis are outlined (e.g. case selection criteria, data sources, analytical framework, and contextual legal and institutional aspects).

The thesis takes a socio-legal standpoint for understanding that the relationship between environmental justice and EA can only be properly addressed from a 'law in context' perspective, particularly when aiming to provide both a normative and a practical appraisal of the decision-making processes involved. Socio-legal scholars' longstanding claim is that the pressing demand for a critical view of legal doctrine and institutions' responsiveness to contemporary social and economic problems (Pound's well-known formulation) [15] requires 'context-governed judgements' (Selznick's expression). [16] This implies emphasizing the interface of the legal phenomenon with a specific context, favouring theoretically engaged empirical research. [17] According to Twining's useful guidance, such an effort encompasses 'relating legal doctrines to what actually happens in practice', as well as shedding light on the policies underlying rules. [18]

In this respect, not only conceptions of justice are brought to life and shaped by intellectual, historic and geographical dynamics, but also the EA regulatory frame and practice has evolved and is conditioned by socio-economic and political contours. Therefore, when seeking a grounded, contextualized, understanding of the intersection of EA and the social and environmental struggles over urban space, urban Brazil provides a highly interesting and practically significant geographic and jurisdictional setting. Here, the operations of the EA legal regime in practice are embedded in a Brazilian rights-based approach to environmental protection and public interest planning laws. This is coupled with developmental strategies and struggles arising from hosting a mega-event such as the FIFA's Football World Cup.

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[15] Roscoe Pound, 'Social and Economic Problems of the Law' (1928) 136 The Annals of the American Academy of Political and Social Science 1, 8.
[16] Philip Selznick, '"Law in Context" Revisited' (2003) 30 Journal of Law and Society 177, 183.
[17] ibid 179.
[18] William Twining, *Law in Context: Enlarging a Discipline* (Oxford University Press 1997) 9–10.

This potential for conflict signals the underlying policy values and practices guiding sustainable development rhetoric and regulatory regimes in the realisation of environmental governance.

Considering the large diversity of socio-legal studies, both theoretically and methodologically,[19] the thesis affiliates itself with law and geography studies. As a socio-legal inquiry in environmental law, the thesis draws to a great extent on urban theory and legal geography in exploring the normative dimension of the interplay between environmental and urban governance in producing and shaping urban spaces and local environments. Emphasizing the geographical and institutional location of EA practices within planning control allows the role played by socio-spatial arrangements and different institutional scales in the realization of policy goals to be considered. This reflects emerging ideas and practice to explore and realise spatial justice (Section 3.3.1), urban sustainability (Section 3.3.2) and localism (Section 4.3.3.2).

Importantly, using the case study method fits the qualitative nature of the key research questions.[20] This is because case studies provide an opportunity to focus on understanding the operations of the phenomena under analysis in practice through in-depth description and attention to detail and particularities (environmental assessment in planning control for certain projects) in light of the concepts mapped (urban-environmental justice), with an overriding emphasis on context[21] (local legal, policy and institutional arrangements in preparation for a mega-event in a Brazilian city). Focusing on two cases in the same setting - rather than attempting at a large-scale survey in different locations - makes it also possible to provide a comprehensive

[19] See: Reza Banakar and Max Travers, 'Law, Society and Method' in Reza Banakar and Max Travers (eds), *Theory and Method in Socio-Legal Research* (Hart 2005).

[20] The definition of case study as research method by Yin orients the empirical work. The author emphasizes that this is a research method that 'investigates a contemporary phenomenon in depth within its real context', and indicates, among other features, that it 'relies on multiple sources of evidence' and 'benefits from the prior development of theoretical propositions to guide data collection and analysis'. Robert K Yin, *Case Study Research: Design and Methods* (5th edn, Sage 2014) 17–18.

[21] Blatter and Haverland (n 11) 6. Robert E Stake, *Qualitative Research: Studying How Things Work* (The Guilford Press 2010) 15–16.

analysis of process in the unfolding of events (see Chapter 7).[22] Therefore, the emphasis is on what it is 'particular' and 'situational', as pointed out by Stake,[23] or on 'process' and 'contexts', as framed by Bryman,[24] rather than representing typical similar cases that could lead to generalizations.[25] This is in line with Mitchell's seminal work claiming that the case study method does not necessarily aim at representativeness,[26] but rather performs other important functions such as providing a means by which a particular theoretical position can be analysed and developed using empirical insights.

Nevertheless, the option for two cases does not prevent some degree of generalization, which is not incompatible with 'fidelity to context'.[27] This is because, firstly, as Selznick explains, context can be judged against broad or universal ideals, justice among them, allowing for reflection on how a particular legal instrument or institution, disciplined by certain contextual constraints, realises such an ideal ('transcending contexts').[28] Secondly, the selected cases display features that are specific to a local setting and others that potentially reflect national processes, leading to a broader conceptual or theoretical explanation,[29] in this case in terms of regulatory practices (see Chapter 10). The small sample does not diminish the role of theoretical concepts in qualitative research either.[30] According to the literature, theoretical concepts not only provide general guidance for empirical enquiry and therefore the basis for defining and specifying the cases[31] ('what to look for'[32]), but the way they are developed also reflects an understanding that there are different nuances and alternative ways of framing and interpreting the subject.[33] In the thesis, the case study

[22] Bryman relates these main features of qualitative research to epistemological and ontological approaches, emphasizing particularly its constructionism (ontological positions) and interpretivist (epistemological position) natures. Bryman (n 14) 380 and 401.
[23] Robert E Stake, *Multiple Case Study Analysis* (The Guilford Press 2006) 8.
[24] Bryman (n 14) 401.
[25] Stake (n 21) 16. Stake (n 23).
[26] J Clyde Mitchell, 'Case and Situation Analysis' (1983) 31 The Sociological Review 187.
[27] Selznick (n 16) 184.
[28] ibid.
[29] Yin (n 20) 10. Stake (n 23).
[30] Blatter and Haverland (n 11) 20.
[31] ibid 19.
[32] Bryman (n 14) 388.
[33] ibid.

approach helps to 'uncover' the different manifestations environmental justice may assume and then use this as a guide for analysing the cases with the aim of explaining how justice might shape decision-making processes and outcomes.

Hence, the case study method fits in the larger research purpose of developing an empirically rooted and contextualized analysis of how the EA regulatory form connects to environmental justice concerns and land use policies under specific institutional arrangements, and thereby promotes better understanding of how local context shapes the EA process and the outcome of land use and development decisions. Here, the combination of the conceptual framework developed, which binds the empirical chapters, and the evidence collected is sufficient to generate a valid description of EA in practice from an urban-environmental justice perspective, as well as to contribute to the development of a strong theoretical framework. Taking context as a key feature of this research, the remainder of this Chapter is concerned with setting out the main contextual features of the research project.

1.5 Providing Context: The Geographies and Legal-institutional Set-ups of the Subject-Matter

The thesis seeks to contribute to the debate by exploring EA tied to a specific regulatory context, particularly casting light on the challenges of environmental regulation in geographic and policy settings facing the contradictions of attempting to combine economic growth, environmental protection and inclusive development. Brazil's regime for development consent and its operation for major urban projects at the local level offer elements for such an analysis. Brazil is part of a group of countries (developing, upper-middle income countries)[34] which have presented not only rapid growth of gross national income due to increased economic performance and inequality reduction, but also the fastest urbanization rates.[35] These are aspects that play out with legal and policy strategies in sustainability and urban governance.

[34] Classification by the World Bank based on estimates gross national income (GNI) per capita, available at <http://data.worldbank.org/news/new-country-classifications-2015> access 19 May 2016.

[35] Available at <http://esa.un.org/unpd/wup/Publications/Files/WUP2014-Highlights.pdf> access 19 May 2016.

Therefore, the examination of particular aspects of Brazilian policy background and legal-institutional arrangements against which EA regime has advanced may help to elucidate the many facets of the role of such a mechanism in integrating and promoting sustainability goals, equity and welfare into urban development.

1.5.1 The state of urban-environmental Brazil

Demographic and socio-economic information is highly relevant for understanding the constraints of context. Brazil, with a population of 206 million, is the world's seventh largest economy and has drastically reduced poverty and inequality in recent years (its Gini coefficient[36] is the lowest in decades, at 0.515 in 2014).[37] The gap in regional inequalities has also contracted, with the municipal human development index (HDI) increased 47,5% between 1990 and 2010 within the twenty metropolitan areas.[38] This notwithstanding, the economy entered technically into recession in 2015,[39] poverty reduction seems to have stagnated and the country is still in the seventy-fifth position in the rank,[40] with persisting socio-economic inequalities at the local scale[41] and broadly between north and south.[42]

Importantly, Brazil is the largest country in Latin America, with a forest area of approximately 60%,[43] containing biomes extremely rich in biodiversity and mineral reserves. However, despite achievements in conservation policy,[44] deforestation and

[36] Gini coefficient at 0,60, which is the coefficient used to measure the degree of income concentration, varying from 0 (complete equality) to 1 (complete inequality).

[37] Available at <http://www.worldbank.org/en/country/brazil/overview>.

[38] Atlas do Desenvolvimento Humano nas Regiões Metropolitanas Brasileiras, Brasília: PNUD, IPEA, FJP, 2014.

[39] Available at <http://www.worldbank.org/en/country/brazil/overview>.

[40] Available at <http://hdr.undp.org/en/content/table-1-human-development-index-and-its-components>.

[41] The difference between the highest and lowest municipal human development index has reduced from 22,1% to 10,3% in the 2000s. However, income inequality within the same city can vary 45 times. Available at <http://www.atlasbrasil.org.br/2013/>.

[42] Available at <http://www.atlasbrasil.org.br/2013/pt/ranking/>.

[43] Data from 2012 available at <http://data.un.org/CountryProfile.aspx?crName=BRAZIL>.

[44] Jeff Tollefson, 'Stopping Deforestation: Battle for the Amazon' (2015) 520 Nature 20.

agricultural expansion (major sources of GHG emissions),[45] and infrastructure development[46] threaten greatly the natural environment and traditional livelihoods. For instance, despite having announced voluntary GHG emission targets,[47] it is the fourth historic emissary, having registered up-and-down variation in emission rates in last years[48] and opted for the maintenance of significant investments in fossil energy sources.[49]

Urban development is also challenging. 85% per cent of the Brazilian population live in urban areas,[50] which increases the human impact on ecosystems, as well as raising environmental justice concerns.[51] Socio-economic and urban-environmental conditions of the 5,570 municipalities are heterogeneous, with discrepancies among regions and populations groups locally. One of the common pressing issues though is the lack in reach and quality of sanitation infrastructure: despite the advances over the last decades, only 40.8% of sewage is treated[52] and just over half of the municipalities have proper solid waste management.[53] Moreover, there has been investment in social housing programmes,[54] but due to long-standing urbanization patterns and non-inclusive land market, the number of precarious settlements is significant and access to urban services is uneven.[55] As a result, land conflicts and vulnerability to disasters are commonplace in Brazilian cities.

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[45] Accounting for 34,6% of total emissions by sector. Interestingly, deforestation rate in Amazon region increased between 2012 and 2013 (29%) after a decade in reduction, experiencing reduction again in 2014 (18%). However, emissions rate remained stagnated in 2014, not following the decrease in deforestation. Available at <http://www.seeg.eco.br/>.

[46] The government launched the Growth Acceleration Plan in 2007 in order to increase investment in infrastructure. See: <http://www.pac.gov.br/>.

[47] The emissions reduction target is established in the National Policy on Climate Change Act (Law n. 12,187/2009), between 36,1% and 38,8% by 2020.

[48] See data available at <http://www.obt.inpe.br/prodes/index.php> and <http://www.seeg.eco.br>.

[49] Available at <http://www.epe.gov.br/pdee/forms/epeestudo.aspx>.

[50] Available at <http://data.un.org/CountryProfile.aspx?crName=BRAZIL>.

[51] Available at <http://www.atlasbrasil.org.br>.

[52] Available at <http://www.snis.gov.br/diagnostico-agua-e-esgotos/diagnostico-ae-2014>.

[53] Available at <http://www.snis.gov.br/diagnostico-residuos-solidos/diagnostico-rs-2014>.

[54] The main national social housing programme in place since 2009 targeting affordable housing for low- and middle-income population is My House, My Life Programme. Available at <http://www.minhacasaminhavida.gov.br/> and <http://mirror.unhabitat.org/pmss/listItemDetails.aspx?publicationID=3453&AspxAutoDetectCookieSupport=1>.

[55] According to data from the latest demographic census (2010), approximately 6% of Brazilian population lives in 'subnormal settlements', specially concentrated in metropolitan areas with over one

Law and policy responsiveness to such a scenario is at the same time innovative and flawed. Not only has Brazil risen in global influence, both for its economic performance and for the value of its natural resources, but it has also played a leadership role within Latin America by developing progressive domestic environmental and planning law, based on the overarching constitutional provisions established by the 1988 Constitution (see Chapter 6). Nevertheless, law and legal institutions are affected by the contradictions in pursuing development goals and realising rights within the constraints of such a contrasting socio-economic, environmental and political context. Consequently, there is a constant dynamic move forwards and backwards in terms of legislative advances.

A key player in international environmental negotiations,[56] Brazil has also developed advanced domestic environmental legislation, notable features of which are the recognition of a constitutional right to a healthy environmental and the dominance of sustainable development rhetoric. At the constitutional level, this appears in the chapters on the Economic Order (Article 170, VI) and on Environmental Policy (Article 225). At the statutory level, sustainable development is one of the policy goals established in the National Environmental Policy Act (Law 6,938/1981). Nevertheless, the legal framework gives room for large discretion, enforcement gaps persist,[57] and a set of controversial proposals for regulatory changes is under debate (e.g. the approval of the 2012 Forest Code reducing special designated areas, and ongoing proposals on the status of indigenous lands, mining, and EA regulation).[58]

Notably, the latest survey on Brazilian municipalities (for the year 2015 but announced in 2016) showed that local governance on urban-environmental management has largely increased since the enactment of the 1988 Constitution. In 2015, 65.5% of the municipalities had passed some sort of environmental legislation

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million inhabitants. Also, favelas and/or informal settlements existed in more than 3.800 municipalities. Available at <http://censo2010.ibge.gov.br/en/resultados>.

[56] Brazil is a signatory to environmental treaties and conventions. The most recent example is the position Brazil has assumed in climate change negotiations, putting forward a strong argument in favour of the historical responsibility of countries and voluntarily committing to emission reductions.

[57] Lesley K McAllister, *Making Law Matter: Environmental Protection and Legal Institutions in Brazil* (Stanford University Press 2008) 20.

[58] Available at <www.camara.gov.br>.

and 22% (1,225) had put in place arrangements to implement Local Agenda 21 (an increase by 4% in comparison with 2012). Nevertheless, only 30.4% (1,696) performed EA at the local level, with lower figures for less populated municipalities (21.3% - or 341 - of the ones with 5,000 to 10,000 inhabitants).[59]

With regard to land use, the constitutionally established goal of urban planning is fostering the social function of the city and of urban property, mainly through local governance via implementation of master plans (see Section 6.2.3). With the law regulating the constitutional provision (City Statute) having been enacted for 15 years, combined with the development of a substantive legal framework for land regularization attempting to correlate social and environmental concerns,[60] and intense legislative activity by municipalities, it is timely to assess legislative and policy advances.

In this regard, in 2015, 50% (2,786) of the municipalities had master plans in place,[61] while 12.4% (691) were elaborating these and 37.6% neither have nor were debating such a plan. This also varies according to population size: whereas all municipalities over 100,000 inhabitants had approved master plans, this was true for only 28.9% (358) of the ones with up to 5,000 inhabitants. Also, 95% had adopted legislation locally at least on one of the planning instruments defined in the City Statute (with a high percentage across all population-size ranges). Interestingly, neighbourhood impact study legislation exists in only 34.2% of the municipalities (one of the three less implemented planning instruments).[62] Nevertheless, there remain difficulties in terms of local governments' limited technical and financial capacities to implement increased executive powers. Also, the implementation of urban projects exposes fragilities of land use, impact assessment and participation mechanisms when conflicts of interest arise. These aspects and influences will be closely examined through case study analysis (Chapters 7 and 8).

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[59] Available at: <http://www.ibge.gov.br/home/estatistica/economia/perfilmunic/2015/>.

[60] See Federal Laws n. 11,997/2009 and 12,651/2012.

[61] Only 10,8% of the municipalities for which the master plan is mandatory (population over 20,000) have not yet done so.

[62] Available at: <http://www.ibge.gov.br/home/estatistica/economia/perfilmunic/2015/>.

1.5.2 EA's policy relevance within development consent for major projects in Brazil: why the urban locus?

It is common sense that investments in large-scale infrastructure projects have the potential to lend assistance to development, in particular in many low and middle-income countries, such as Brazil, through major tax revenues, infrastructure development, employment and capacity building.[63] However, receiving those benefits is challenging, and more often than not these investments have been a source of corruption, social disruption, and environmental degradation. This is one of the greatest challenges Brazil has faced in terms of the current development strategy adopted. The country is at the fore of a 'new developmentalism' whereby the state shows renewed activism in promoting economic growth (through mobilizing resources and investment and emphasizing public-private collaboration) as well as tacking inequality (through social programmes).[64] Law plays its part, having its role instrumentally adjusted to new state practices in fostering economic and social change.[65]

One of the facets of such a development policy, which places infrastructure development at the core of economic growth through ambitious investment programmes in key sectors (e.g. energy, logistics, urban infrastructure and services, and extractive industry), is claims for legal reform in licensing and permitting procedures. This has brought the regulatory form of EA under scrutiny (see Section 6.3.1.2). Social tension has also arisen from disputes over development goals in terms of resources appropriation, threats to livelihoods and ecosystems, biodiversity loss, land conflicts, as well as socio-spatial and environmental inequality in cities, tensions which are channelled into EA processes and reflected in the outcomes of decision making.

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[63] César Calderón and Luis Servén, 'Infrastructure in Latin America' [2010] World Bank Policy Research Working Paper Series, Vol.

[64] See: David M Trubek and others (eds), *Law and the New Developmental State: The Brazilian Experience in Latin American Context* (Cambridge University Press 2013).

[65] To explore law and development scholarship see: David Kennedy, 'Law and Development Economics: Toward a New Alliance' in David Kennedy and Joseph Stiglitz (eds), *Law and Economics with Chinese Characteristics: Institutions for Promoting Development in the 21st Century* (Oxford University Press 2013) 5. See also: World Bank, Rule of Law and Development <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTLAWJUSTINST/0,,contentMDK:20934363~menuPK:1989584~pagePK:210058~piPK:210062~theSitePK:1974062,00.html#rule_of_law>.

This sets the scene for a heated debate on regulatory purposes and procedural flaws of the Brazilian regime. On the one hand, developers and sectors of the government complain, mainly, that the Brazilian EA regime of a three-step procedure contributes to revisiting old disputes during the three phases. As a result, it generates much uncertainty, lengthy delays and high operational costs. On the other hand, communities, NGOs and academics express strong dissatisfaction about the low quality of the environmental and neighbourhood impact reports (too generic, major omissions, incomplete or inaccurate); lack of information and meaningful participation; and poor evaluation of the socio-economic component of the statements. It is usually said that the coverage tends to be narrowly focused on a small number of beneficial economic impacts (such as employment and income). There is agreement, though, about the lack of technical and resource capacity of the public sector to analyse the studies, as well as there being no clear criteria for establishing mitigation and compensatory measures.

For example, controversy over EA's effectiveness in the case of major projects in Brazil has had repercussions recently in the face of two striking events that portray the scale of environmental and human cost at stake due to developmental policies in place. One is the building of the Belo Monte hydroelectric dam complex in the Brazilian Amazon (Xingu region), the fourth biggest in the planet, planned since the 1970s, and about to enter into operation. The EA process gave voice to confronting interests. On one side was the rhetoric in favour of socio-economic and environmental benefits associated with the project (jobs creation, energy security and renewable energy matrix). On the other side there were concerns for irreversible biodiversity loss, human rights violations and social and cultural disruption[66] (diversion of Xingu River, flooding of standing rainforest, disruption of indigenous and riverside

[66] See 'The Battle of Belo Monte' Folha de São Paulo 13 December 2013 <http://arte.folha.uol.com.br/especiais/2013/12/16/belo-monte/en/>. See also 'Belo Monte dam operations delayed by Brazil court ruling on indigenous people' The Guardian 15 January 2016 <http://www.theguardian.com/world/2016/jan/15/brazil-belos-monte-dam-delay-court-indigenous-people>.

livelihoods).[67] As a result, this development became highly judicialized, allowing for the emergence of many questions over the legal form of EA and the limits of judicial control and review about the content of EA. These involved disputes over scientific information, judgements about the accuracy of predictions of the significance of effects on the environment, consideration of alternatives and mitigating and compensation measures, as well as procedural fairness.[68]

The other example is the collapse of an iron ore mining dam in November 2015 (city of Mariana, State of Minas Gerais), considered one of the biggest environmental disasters in the country to date, having destroyed riverside communities, affected large special protected areas and contaminated one of the most important Brazilian rivers (Rio Doce).[69] Questions were raised about the role of EA in ensuring sound safety regulation, monitoring systems and responsiveness to disaster in the extractive industry. Both environmental authorities and developers have been accused of negligence, and the reach of criminal, administrative and civil environmental responsibilities schemes is still unclear. These are not isolated cases, but they exemplify the many contemporary development challenges which have EA at their heart.

Rather less attention has been dedicated though, from a socio-legal standpoint, to the role played by EA in planning control in a context of urban developmental policies. This is relevant and timely due to the implications of developmental policies in terms of infrastructure development in the urban Brazil, where territorial planning, social cohesion and environmental management face the realities of intense urbanization and uneven socio-spatial distribution of services and opportunities. Therefore, among the many sites and levels of operation of EA, its urban face is the subject matter of

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[67] For an analysis of the environmental and territorial tensions due to the building of hydroetrectric dams in Brazil, see Andréa Zhouri (ed), *Tensões Do Lugar: Hidroelétricas, Sujeitos E Licenciamento Ambiental* (Editora UFMG 2011).

[68] For a broader analysis of civil public actions filed with regard to the EA of hydroelectric dams in the Brazilian Amazon, see Flávia Silva Scabin, Nelson Novaes Pedroso Junior and Julia Cortez da Cunha Cruz, 'Judicialização de Grandes Empreendimentos no Brasil: Uma Visão sobre os Impactos da Instalação de Usinas Hidrelétricas em Populações Locais na Amazônia' (2014) 11 Revista Pós Ciências Sociais 129.

[69] Brazil's mining tragedy: was it a preventable disaster? The Guardian 25 November 2015 <http://www.theguardian.com/sustainable-business/2015/nov/25/brazils-mining-tragedy-dam-preventable-disaster-samarco-vale-bhp-billiton>.

analysis, with emphasis on its contribution to inclusive, democratic, sustainable and fair cities in urban Brazil.

Particularly, two major developmental strategies have propelled mega-infrastructure projects initiatives in urban areas. The Growth Acceleration Plan (PAC) is a massive programme for financing infrastructure expansion all around the country, encompassing logistics, energy and cities. In operation since 2007, PAC has covered investment for more than 30,000 developments within the target areas.[70] Its urban infrastructure stream comprises projects in sanitation, flooding and landslide prevention, urban mobility, housing, regularization of urban settlements, and preservation of historical sites.[71] The projects are usually jointly carried out by federal and state or municipal governments, which seek financing for realizing long-planned urban interventions. The other major strategy is the hosting of so-called mega-events, especially the political articulation for winning the bid for the World Cup 2014 (twelve host cities) and the Olympics 2016 (city of Rio de Janeiro). It has been argued that such events offer opportunities for economic development and social inclusion at the local level through fostering urban infrastructure development related to sports facilities, urban mobility and neighbourhood renovation.[72]

However, urban studies have offered well-developed literature discussing how urban policy and decision-making motivated by competition for capital investment devalues urban governance in terms of participation and urban rights promotion.[73] This body of literature focus on the impacts of globalisation on urban governance, in a context of neoliberal-driven policies guided by managerial approaches to public administration.[74] Harvey explains that 'urban entrepreneurialism', by associating

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[70] Available at <http://www.pac.gov.br/> accessed 15 October 2015.

[71] Available at <http://www.pac.gov.br/infraestrutura-social-e-urbana> accessed 15 October 2015.

[72] See: 'Sustainable Brazil: Social and Economic Impacts of the 2014 World Cup' (Ernst & Young Terco 2012) <http://www.ey.com/Publication/vwLUAssets/Sustainable_Brazil_-_World_Cup/$FILE/copa_2014.pdf> accessed 19 May 2016. 'Bang for the Buck: Maximizing the Economic Returns for Mega Events' (Ernst & Young Terco 2012) <http://www.ey.com/Publication/vwLUAssets/EY-bang-for-the-buck/$FILE/EY-bang-for-the-buck.pdf> accessed 19 May 2016.

[73] Bob Jessop, 'Liberalism, Neoliberalism, and Urban Governance: A State-Theoretical Perspective' in Neil Brenner and Nik Theodore (eds), *Spaces of Neoliberalism* (John Wiley & Sons, Ltd 2002).

[74] Jonathan Murphy, *The World Bank and Global Managerialism* (Routledge 2007). David Harvey, *Spaces of Capital: Towards a Critical Geography* (Routledge 2001).

local development with local economic growth, emphasizes improving a city's competitiveness position through public-private partnerships in order to deploy certain strategic planning, which may include, amongst others, promoting infrastructure improvement, tourism, entertainment and sports-related projects.[75] Purcell[76] points out that the 'global cities' (or peripheral cities aspiring to greater visibility) - in Sassen's expression referring to the new strategic site of decision-making that cities represent in a globalised world[77] –enjoying extended governance powers locally ('rescaling'), have emphasized competition to the detriment of other policy priorities, namely distribution ('policy reorientation') and promoted institutional changes in order to foster close links between public and private sectors (public-private collaboration).

The attraction of mega-events in Brazil exemplifies that, with host cities seeking to become protagonists at the international stage by planning highly visible and culturally significant and successful international experiences,[78] and associating the hosting of mega-events with promoting economic and urban development through major urban projects. However, these events have caused controversial changes in regulatory regimes and have led to extreme urban-environmental conflicts. Many of the developments associated with these events have been carried out following controversial environmental studies, changes in master plans, and massive population relocation.[79] In such a context, the role of law, and particularly the normativity of EA within planning control, demands analysis, which shall focus on discussing the

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[75] David Harvey, 'From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism' (1989) 71 Geografiska Annaler. Series B, Human Geography 3, 7–9.

[76] Mark Purcell, 'Excavating Lefebvre: The Right to the City and Its Urban Politics of the Inhabitant' (2002) 58 GeoJournal 99, 100. There are authors also in Brazil exploring the topic, see for example: Otília Arantes, Carlos Vainer and Ermínia Maricato (eds), *A Cidade Do Pensamento Único* (Vozes 2000).

[77] Saskia Sassen, 'The Global City: Strategic Site/New Frontier' in Engin F Isin (ed), *Democracy, Citizenship and the Global City* (Routledge 2000).

[78] Extensive literature has flourished on strategic planning associated with mega-events. See, for example: John R Gold and Margaret M Gold, *Olympic Cities: City Agendas, Planning, and the World's Games, 1896 – 2016* (Routledge 2010). Scarlett Cornelissen and Kamilla Swart, 'The 2010 Football World Cup as a Political Construct: The Challenge of Making Good on an African Promise' (2006) 54 The Sociological Review 108. Francisco-Javier Monclús, 'The Barcelona Model: An Original Formula? From "Reconstruction" to Strategic Urban Projects (1979–2004)' (2003) 18 Planning Perspectives 399.

[79] See: 'Mega-Events and Human Rights Violation in Brazil' (National Coalition of Local Committees for a People's World Cup and Olympics 2012).

function of EA, as a spatially grounded process where different agendas interact, in the emerging geography and socio-legal processes of planned urban environments. In the following Chapter I begin to address this questions by highlighting the political nature of urban-environmental conflicts, as opposed to the regulatory rationale of the environmental planning systems, encapsulated in grassroots claims for environmental justice.

CHAPTER 2
FROM POLITICAL RHETORIC TO LEGAL NOTION: TRACING LAW AND POLICY RESPONSIVENESS TO ENVIRONMENTAL JUSTICE CLAIMS

2.1 Introduction

In this chapter I appraise the extent to which law and policy are responsive to environmental justice claims. This forms part of a two-step attempt to establish a legal basis for environmental justice to inform EA within planning control processes. To this end, the chapter traces how a number of distinctive sets of claims about urban-environmental justice have been incorporated into law and policy formulations. This understanding of the political-oriented discourse provides key insights into the context giving support to policy and legal initiatives in each jurisdiction. Considering that the environmental justice literature is very extensive, the analysis focuses upon those aspects having clear relevance to identifying law and policy responsiveness in Brazil. The next chapter completes and complements this two-step effort by addressing conceptual formulations emerging from theoretical responsiveness to environmental justice. Together, these chapters form the basis for the empirical inquiry set out in Chapters 6 to 8.

Claims that distributive justice issues arise from environmental and planning law and decision-making are not fully original. When environmental laws are unevenly enforced, they might generate distributional implications.[80] Land use regulation is potentially a powerful tool either to address or reinforce socio-spatial inequality.[81] This has been well explored in the vast body of evidence-based research and literature produced on the grassroots origins of the environmental justice movement and its contextual manifestations. This scholarship shows that the notion of environmental justice has become a powerful example of political rhetoric used to question the

[80] See Richard J Lazarus, 'Pursuing "Environmental Justice": The Distributional Effects of Environmental Protection' (1993) 87 Nw. UL Rev. 787.

[81] See Craig Anthony Arnold, 'Planning Milagros: Environmental Justice and Land Use Regulation' (1999) 76 Denver University Law Review 1.

unequal territorial and population distribution of benefits and environmental negative costs resulting from development particularly at the local level. Such a rhetoric galvanizes social-economic and political demands in situated contexts and gives political actors justification to cast claims into environmental governance arena in terms of justice. Also, it has evolved from political mobilization to become an influential element in environmental law and policy debates over the last two decades, providing in the last a new paradigm.[82] Academics have theorised the meanings attributed to environmental justice and examined political and legislative achievements.

However, environmental justice still lacks a more precise definition in order to be framed as an analytical tool and policy principle. The terminology used to describe occurrences of environmental injustice situations is still vague and the political status and legal effectiveness of environmental justice measures remain uncertain and sometimes weak.[83] Critical studies have already flagged the tension between the broad, flexible approach emerged from the political grassroots movements and the need for a consistent set of principles for analysis, interpretation and decision-making.[84] Without overcoming conceptual difficulties in the realm of law and policy,[85] environmental justice is confined to remain a rhetorical influence upon political action, with no power to challenge policies, institutions and practices or to guide legal process.

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[82] Dorceta E Taylor, 'The Rise of the Environmental Justice Paradigm: Injustice Framing and the Social Construction of Environmental Discourses' (2000) 43 American Behavioral Scientist 508, 580.

[83] David V Carruthers, 'Introduction: Popular Environmentalism and Social Justice in Latin America' in David V Carruthers (ed), *Environmental Justice in Latin America: Problems, Promise, and Practice* (MIT Press 2008) 2.

[84] This tension is explored in David Naguib Pellow and Robert J Brulle, 'Power, Justice, and the Environment: Toward Critical Environmental Justice Studies', *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement* (MIT 2005) 16. Ryan Holifield, 'Defining Environmental Justice and Environmental Racism' (2001) 22 Urban Geography 78. Robert Benford, 'The Half-Life of the Environmental Justice Frame: Innovation, Diffusion, and Stagnation' in David Naguib Pellow and Robert J Brulle (eds), *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement* (MIT Press 2005) 46.

[85] The need for a more tangible legal conception of environmental justice is argued in: Ole W Pedersen, 'Environmental Justice in the UK: Uncertainty, Ambiguity and the Law' (2011) 31 Legal Studies 279, 295. Stephen Connelly and Tim Richardson, 'Value-Driven SEA: Time for an Environmental Justice Perspective?' (2005) 25 Environmental Impact Assessment Review 391, 403.

This thesis is focused upon the Brazilian context and therefore the chapter draws mainly on the historical conditions that gave birth to the environmental justice movement in Brazil in order to provide a foundation for analysis of a localised and urbanised meaning of environmental justice. Nevertheless, the Brazilian experience in terms of law and policy developments is limited, hence the analysis relies on approaching the dynamics of the debate outside this national scenario. For this reason I briefly look at the progression of the different environmental justice discourses in the USA and the UK into environmental regulatory frameworks. I do not assess the success of any initiatives. This actually provides a substantial point of comparison and analysis when assessing the Brazilian experience and allows to identify what is common grounds and what is contextual in delivering an environmental justice framework fit for policy and regulation.

These connections can be associated with Sassen's idea of activist networks, in which highly specific, localized struggles can become part of the global politics through the circulation of place-based information, multi-lateral communication and collaboration. The environmental justice agenda is a clear example of cross-border struggles resulting in transboundary networks.[86] Not only have there been exchanges among social groups mobilized around environmental justice struggles in different jurisdictions, but also law and policy has been shaped in similar ways, although marked by contextual specificities. In this respect, it is worth highlighting the limited developments in legislation, despite some policy achievements, and the focus on procedural justice as a means of pursuing distributional substantive outcomes rather than focussing on regulatory distributional goals.

[86] Saskia Sassen, 'Local Actors in Global Politics' (2004) 52 Current Sociology 649.

2.2 Tracing Law and Policy Responsiveness to Environmental Justice

2.2.1 Environmental justice discourse in the USA: from grassroots to mainstream policy

The pioneering North-American environmental justice movement experience spread out through other jurisdictions and helped to build up networks which inspired and guided other national groups,[87] including in Brazil. For this reason it is relevant for the purpose of this thesis to approach – albeit briefly - the policy and legislative responses to environmental justice established by the USA government. This offers insights particularly on how the conceptual underpinnings and political rhetoric emerging from grassroots mobilizations – as a fundamental characteristic of the USA context is the 'bottom-up' advancing of environmental justice[88] - shaped mainstream policy.

The environmental justice movement in the USA is a result of local contexts and grassroots activism, which highlighted effectively the occurrence of environmental racism - the institutionalised and discriminatory effect of decision about siting industrial facilities.[89] Substantial research work produced in the 1980s and 1990s shed light on the correlation between pollution and low-income groups, supporting such accusations (organised around 'locally unwanted land uses' - LULUs) .[90] Although

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[87] Bunyan Bryant and Elaine Hockman, 'A Brief Comparison of the Civil Rights Movement and the Environmental Justice Movement' in David Naguib Pellow and Robert J Brulle (eds), *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement* (MIT Press 2005) 34.

[88] Gordon P Walker and Harriet Bulkeley, 'Geographies of Environmental Justice' (2006) 37 Geoforum 655, 656.

[89] See the definition of 'environmental racism' by Taylor: '[…] environmental racism or environmental discrimination is the processes by which environmental decisions, actions, and policies result in racial discrimination. It arises from the interaction of three factors: (a) prejudicial belief and behavior, (b) having the personal and institutional power to enact policies and actions that reflect one's prejudices, and (c) privilege - being given unfair advantages over another'. Taylor, 'The Rise of the Environmental Justice Paradigm' (n 82) 536.

[90] See, for example, the Annex in L Cole and S Foster, Luke W Cole and Sheila R Foster, *From the Ground up: Environmental Racism and the Rise of the Environmental Justice Movement* (NYU Press 2001). 1987 United Church of Christ, Toxic Wastes and Race in the United States; Robert Doyle Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality*, vol 3 (Westview Press Boulder, CO 2000).

not immune to criticism,[91] this body of research gave credence to the argument that environmental racism was pervasive and provided a galvanising and organising theme which connected the environmental justice movement and the civil rights movement.

Therefore, this nascent movement coalesced with the civil rights movement and built powerful political coalitions.[92] Consequently, as Taylor argues, the 'environmental justice frame has emerged as a master frame used to mobilize activists who want to link racism, injustice, and environmentalism in one frame'.[93] In this sense, the language of race discrimination was a key element of the USA's environmental justice movement, challenging mainstream environmentalism (which had traditionally been characterised by strong conservative elements).[94] Also, with respect to the notion of justice shaped by the movement in the US, Taylor advocates that it represents a complex ideological framework expressed in the Principles of Environmental Justice, compiled at the People of Colour Conference 1991, in which social justice is a key element (in both distributive and corrective justice senses). Additionally, she identifies concerns relating to intergenerational and intra-generational equity, as well as to sustainable development and sustainable rural and urban communities.[95]

Remarkably, the USA has successfully promoted the institutionalization of environmental justice concerns into the national public policy agenda. As a political response to the grassroots environmental justice mobilisation, the USA government has established, over the past decades, a series of measures and guidelines to be

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[91] The empirical evidence produced in the US was criticised by authors who argue that it was based on very specific contexts; that multiples causes related to injustice situations were not investigated; and that the racially discriminatory motivation of initial siting of facilities was not clearly demonstrated: see, for example, Vicki Been, 'What's Fairness Got to Do with It? Environmental Justice and the Siting of Locally Undesirable Land Uses' (1992) 78 Cornell Law Review 1001. Walter Block and Roy Whitehead, 'The Unintended Consequences of Environmental Justice' (1999) 100 Forensic Science International 57. José Drummond, 'What I Would Like to See Published in Environmental Justice' (2008) 1 Environmental Justice 179.

[92] Julian Agyeman, 'Constructing Environmental (in) Justice: Transatlantic Tales' (2002) 11 Environmental Politics 31, 43. The powerful nature of this linkage is explored by Bryant and Hockman (n 87) 23–36. The authors highlight the key aspects of this interplay, evoking as similarities the relevant role of women and church, the campaigning methods adopted, and the scepticism towards mainstream environmentalism.

[93] Taylor, 'The Rise of the Environmental Justice Paradigm' (n 82) 514.

[94] Joan Martinez-Alier, *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation* (Edward Elgar Publishing 2003) 170.

[95] Taylor, 'The Rise of the Environmental Justice Paradigm' (n 82) 537–542.

observed by governmental agencies, which shall carry out environmental justice analyses over the environmental decision-making and planning process in general.[96] These incorporate the notions advocated by grassroots movements, emphasizing the recognition of the interplay of race, ethnicity, socio-economic status, and social justice concerns in the formulation and implementation of federal and state environmental policies.[97]

The USA federal environmental justice policy is, above all, informed by the Executive Order 12898, issued by President Clinton in 1994, under the title 'Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations'.[98] The Order represents a procedural justice response to the popular claims, consisting of a federal guideline aiming at promoting non-discrimination in Federal agencies programmes and activities affecting human health and the environment.[99] In addition, it points to the need to ensure public participation and access to information, and the Environmental Agency (EPA) has organised its administrative structures to guarantee compliance with the Executive Order.[100]

The Memorandum accompanying the Executive Order 12898 emphasizes the existing statutory provisions regarding civil rights as key tools for enhancing and ensuring environmental justice.[101] In particular, it refers to Title VI of the Civil Rights Act of

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[96] For an analysis of the environmental justice evolution as a policy issue in the US from the 1960s to the 1990s see Edwardo Lao Rhodes, *Environmental Justice in America: A New Paradigm* (Indiana University Press 2005).

[97] Taylor, 'The Rise of the Environmental Justice Paradigm' (n 82) 537–542.

[98] The introduction of environmental justice legislation has been put in place by states and municipalities. However, such an analysis is well beyond the scope of this Section.

[99] Order 12898 requires that: '[…] each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and lower income populations […]'. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* <http://epa.gov/environmentaljustice/resources/policy/exec_order_12898.pdf> accessed 01 August 2012.

[100] It led to the creation of the Federal Agency Working Group on Environmental Justice in the same year and later to EPA to created the National Environmental Justice Office, the National Environmental Justice Advisory Council and established environmental justice co-ordinators within its departments and regional offices.

[101] Presidential Memorandum Accompanying Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. <http://www.epa.gov/environmentaljustice/resources/policy/clinton_memo_12898.pdf> accessed 01 August 2012.

1964, according to which Federal agencies shall ensure that activities and programmes funded by Federal financial resources are non-discriminatory (both discriminatory effects and intentional discrimination) in terms of affecting disproportionately minority communities and low-income population. This suggests the conflation and mutual reinforcement of civil rights and environmental interest movements through law. In this respect, EPA has developed regulation to implement Title VI, most importantly the Interim Guidance that establishes the processing of complaints challenging permits that create discriminatory effects.[102]

Also, in an effort to coordinate this general mandate on environmental justice action more assertively and more broadly (including discrimination effects and socio-economic analysis), EPA has published specific guidance documents for its practices. Amongst these, the Interim Guidance on Considering Environmental Justice During the Development of an Action (2010), which presents a policy framework for the development of legislation and decision-making, bringing about some development of the environmental justice concept. It states that 'EPA defines 'environmental justice' as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.'[103] According to the Interim Guidance, 'fair treatment' is related to the fair distribution of environmental harms and risks, and 'meaningful involvement' represents participatory rights in decision-making process.[104]

Notably, the debate around the advancement of environmental justice through regulatory contexts in the USA has highlighted the key role of existing law, not only civil rights law but also, and mainly, environmental law. This has been long

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[102] EPA's Interim Guidance for Investigating Title VI Administrative Complaints Challenging Permits (1998). For a description of EPA's Program to Implement Title VI of the Civil Rights Act of 1964, in particular the EPA's Office of Civil Rights strategic action, see: <https://www.epa.gov/ocr/epas-title-vi-policies-guidance-settlements-laws-and-regulations>.

[103] U.S. Environmental Protection Agency, *Interim Guidance on Considering Environmental Justice During the Development of an Action*. <http://www.epa.gov/compliance/ej/resources/policy/considering-ej-in-rulemaking-guide-07-2010.pdf> accessed 01 August 2012.

[104] ibid.

recognized by both literature[105] and EPA[106] and CEQ guidelines,[107] which emphasize opportunities for factoring environmental justice considerations into permitting decisions within a broad range of federal environmental laws (e.g. from clean air to water to land regulation), as well as into environmental review under NEPA (when EPA exercises its authority of reviewing environmental impact statements issued by other federal agencies). These processes would allow for assessing compliance with the 1994 Executive Order in terms of community participation and investigation of aggregation and disproportionality in environmental risks distribution, and even for conditioning permits on environmental justice grounds through imposing mitigating measures.[108]

However, longstanding criticism suggests quite restricted effects in the practice of all these developments in USA environmental justice policy, in particular that Executive Order 12898 does not establish any rights for communities experiencing environmental injustices, since it is not enforceable by law. Consequently, this might also allow successive administrations to ignore its guidance.[109] Additionally, the fact that the Order does not give a definition of environmental justice results in the adoption of vague and broad understandings by EPA in practice, creating uncertainty,[110] which may not have been sufficiently addressed by the issuing of guidelines.

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[105] See Michael Gerrard, 'The Role of Existing Environmental Laws in the Environmental Justice Movement' (1994) 9 St. John's Journal of Legal Commentary. Michael B Gerrard and Sheila R Foster, *The Law of Environmental Justice: Theories and Procedures to Address Disproportionate Risks* (2nd edn, American Bar Association 2009). Richard J Lazarus and Stephanie Tai, 'Integrating Environmental Justice into EPA Permitting Authority' (1994) 26 Ecology Law Quarterly 617.

[106] See U.S. Environmental Protection Agency, 'Plan Environmental Justice 2014' <https://www.epa.gov/sites/production/files/2015-02/documents/plan-ej-progress-report-2014.pdf> accessed 9 October 2014.

[107] See: Council on Environmental Quality, 'CEQ Environmental Justice Guidance under the National Environmental Policy Act' <https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf> accessed 19 January 2012.

[108] Lazarus and Tai (n 105) 620.

[109] See Willie G Hernandez, 'Environmental Justice: Looking Beyond Executive Order No. 12,898' (1995) 14 UCLA J. Envtl. L. & Pol'y 181. R Gregory Roberts, 'Environmental Justice and Community Empowerment: Learning from the Civil Rights Movement' (1998) 48 Am. UL Rev. 229.

[110] See Ryan Holifield, 'Neoliberalism and Environmental Justice in the United States Environmental Protection Agency: Translating Policy into Managerial Practice in Hazardous Waste Remediation' (2004) 35 Geoforum 285. EPA Office Inspector General Evaluation Report: EPA Need to Consistently Implement the Intent of the Executive Order on Environmental Justice (Report n. 2004-P-00007, 2004) <www.epa.gov/org/reports/2004/20040301-2004-P-00007.pdf> accessed 02 January 2013.

Importantly, developments in law have been far more limited than policy achievements for tangible outcomes in terms of environmental justice regulation are still lacking. Despite attempts to formalise legal responses through the proposing of environmental justice bills at the federal level, none have been passed.[111] Initiatives at the state-level have taken breath and range with some new approaches addressing climate change and exploring potentially land use regulation mechanisms, but this remains fragmented.[112] Also, scholarship and policy documents do not go as far as to affirm that existing environmental statutory provisions do impose legal obligations on the EPA to condition or deny permits on environmental justice grounds or formally and systematically consider distributional impacts in environmental review. Finally, litigation under the environmental justice argument is also highly challenging, in particular because of the difficulty in proving intent in relation to racial discrimination.[113]

2.2.2 Environmental justice discourse in the UK: merging with sustainability rhetoric and emphasizing procedural justice

Environmental justice debate in the UK has evolved with increasing interest from the early 2000s, attracting efforts from both government and campaigning groups, and assuming a central position in the environmental policy framework.[114] Although stimulated by the US experience – in what is called a 'transatlantic' journey[115] of exchanges within social mobilization and conceptual formulations - there are substantial differences between the developments in the two contexts. In this respect,

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[111] Pedersen mentions S 2806, 102nd Cong (1992); HR 5326, 102nd Cong (1992); the 2005 Environmental Justice Act (HR 427 (Rep Udall, D-Co)). Pedersen, 'Environmental Justice in the UK' (n 85) 296.

[112] For a report on state-level initiatives, see 'Environmental Justice for All: A Fifty State Survey of Legislation, Policies and Cases' (Hastings College of the Law 2010) 4th ed <http://gov.uchastings.edu/public-law/docs/ejreport-fourthedition.pdf> accessed 14 May 2016.

[113] Karen Smith, 'How the Legal System Has Failed the Environmental Justice Movement' (1996) 12 J. Nat. Resources & Envtl. L. 325. Pedersen, 'Environmental Justice in the UK' (n 85) 297. For an attempt at mapping cases related to environmental justice issues in the USA, see Denis Binder, 'Environmental Justice Index III' (2005) 35 Environmental Law Reporter 10605.

[114] Julian Agyeman and Bob Evans, '"Just Sustainability": The Emerging Discourse of Environmental Justice in Britain?' (2004) 170 The Geographical Journal 155, 155. Harriet Bulkeley and Gordon Walker, 'Environmental Justice: A New Agenda for the UK' (2005) 10 Local Environment 329, 329–331.

[115] An expression used in Agyeman (n 92). Ole W Pedersen, 'Transatlantic Movements of Justice: A Story of Inspiration and Diversity' (2009) 2 Environmental Justice 35.

the most relevant aspects of the British progress on the topic are twofold: (i) the framing of environmental justice by a centralized policy agenda which articulates sustainable development strategies; (ii) and a great emphasis on access to justice concerns, from a procedural rather than a substantive perspective. The former aspect contributes to understanding potential avenues for integrating fairness and justice into environmental policy framework as overarching guidance, and, the latter, to mainstreaming this into environmental legislation.

With regards to contextual aspects, while the USA environmental justice movement was originally most concerned with racial justice, the UK formulation has expressed a broader perspective embracing low-income groups, environmental inequality and poverty.[116] Also, besides the specific forms of pollution related to the location of industrial facilities that were the core of the USA protests (toxics, landfills, dangerous contaminants), the struggles in the UK have been related to a wider range of social justice concerns, such as housing, fuel poverty, access to services, and access to green spaces.[117] There exist geographical and constitutional variations though. Pedersen flags these up stating that England and Wales present similar approaches to environmental injustices when associating proximity to pollution to low-income residents. Scotland has a particular context of historical injustices and social conflicts associated with industrial decline and patterns of land ownership. Northern Ireland has not experienced significant mobilisation on the topic.[118]

Most importantly, the literature suggests that the UK environmental justice debate represents a top-down experience, compared with the bottom-up USA experience,[119]

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[116] Agyeman (n 92) 32. Pedersen, 'Transatlantic Movements of Justice' (n 115) 37. This may be related to the patter of distribution of ethnic communities in the UK not contributing specifically to evidencing environmental racism in sitting facilities decisions. See Gordon Walker and Karen Bickerstaff, 'Polluting the Poor: An Emerging Environmental Justice Agenda for the UK?' [2000] Critical Urban Studies occasional papers. London: Centre for Urban and Community Research, Goldsmiths College, University of London. G Walker, 'Environmental Justice and the Politics of Risk' (1998) 67 Town and Country Planning 358, 359.

[117] Agyeman (n 92) 32. Walker and Bickerstaff (n 116). Gordon Mitchell and Danny Dorling, 'An Environmental Justice Analysis of British Air Quality' (2003) 35 Environment and planning A 909, 910–911.

[118] Pedersen, 'Environmental Justice in the UK' (n 85) 294. Anne-Michelle Slater and Ole W Pedersen, 'Environmental Justice: Lessons on Definition and Delivery from Scotland' (2009) 52 Journal of Environmental Planning and Management 797, 798. Pedersen, 'Transatlantic Movements of Justice' (n 115) 37.

[119] Agyeman and Evans (n 114) 155.

a consequence of the absence of well-articulated activist and local action groups in the fashion of the USA grassroots[120] and civil rights movement.[121] Therefore, the issue has been mostly framed within elite groups (academics and campaigning groups) and governmental rhetoric,[122] integrating policy documents from the early stages.[123] In this respect, empirical studies produced by academic and pressure groups (occasionally commissioned by the government) have provided an evidence base into the relationship between environmental quality and distributional socio-economic patterns, and these have fostered policy-making improvements.[124] Significantly, the Environmental Agency has been at the forefront of such efforts,[125] not only by commissioning substantial research but also by drawing up policy targets and strategic priorities.[126] At the level of central government DEFRA has set out a commitment to tackle environmental inequalities, acknowledging that environmental and social justice consist of key issues to be integrated across the policy framework.[127]

Notably, there has been a close linkage between environmental justice and the sustainability discourse in the UK. This was initially articulated by non-governmental organisations through their campaign tactics.[128] Subsequently, it has become a main rhetoric of environmental policy, with this progressively featuring environmental

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[120] Pedersen, 'Transatlantic Movements of Justice' (n 115) 41. Andrew Dobson, *Justice and the Environment: Conceptions of Environmental Sustainability and Dimensions of Social Justice* (OUP 1998) 26. Mitchell and Dorling (n 117) 910–911. There have been a number of UK-based environmental groups adopting an overtly socio-economic and racial dimension, such as the Black Environmental Network and Women's Environmental Network, but not achieving the same wide impact of environmental justice groups in the USA. Walker and Bickerstaff (n 116).

[121] Walker and Bickerstaff (n 116). Pedersen, 'Transatlantic Movements of Justice' (n 115). Agyeman and Evans (n 114).

[122] Agyeman (n 92) 43. Walker and Bulkeley (n 88) 656.

[123] Agyeman and Evans (n 114) 155.

[124] See for examples Table 1, reports 3; 5; 7; 12; 26. However, there has been debate about the extent to which a causal link may be identified between socio-economic hardship and deprivation and exposure to various environmental harms, as was identified in the case of evidence produced in the USA. Pedersen, 'Environmental Justice in the UK' (n 85) 288.

[125] Bulkeley and Walker (n 114) 330.

[126] See, for example, UK Environmental Agency, *Position Statement*: *Addressing Environmental Inequalities* <http://www.environment-agency.gov.uk/static/documents/Research/ca221final_888457.pdf> accessed 05 August 2012.

[127] DEFRA, *2012 Strategic Business Plan* <http://www.number10.gov.uk/wp-content/uploads/2012/05/DEFRA-2012-Business-Plan.pdf> accessed 05 August 2012.

[128] Agyeman and Evans (n 114) 160.

justice concerns within the national strategies for sustainable development.[129] This practice has been conditioned by the EU's mainstreaming strategy of integrating sustainability as a principle of all its policies.[130] The first strategy document was published in 1994, as a response to the UNCED 1992[131] agreements on the adoption of actions to develop the Agenda 21 at the domestic level. In 1999 the strategy was reviewed in order to express a new approach, setting out progress indicators and emphasising the social dimensions of sustainable development by including the commitment to reduce poverty and social exclusion within its guiding principles.[132] The latest strategy (2005 Securing the Future)[133] stressed the societal dimension of sustainability. The government acknowledged that deprived and socially excluded communities are affected disproportionally by environmental degradation and the associated risks. This is followed by a commitment to tackle environmental inequalities, including social justice and environmental quality within the set of indicators formulated to assess progress towards sustainability.[134]

A further example of changes in policy expressing the linkages between both agendas is the planning system reform on sustainable development. The guidance documents produced, although not explicitly referring to environmental justice, emphasize that development plans should aim at reducing social inequality, as well as enhance access

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[129] Emblematic here is the FoE campaign for environmental justice in Scotland 'No less than a decent environmental for all, no more than a fair share of Earth resources', and the Scottish Prime Minister Speech addressing environmental justice issues in 2002. See Walker and Bulkeley (n 88) 656. Agyeman and Evans (n 114). Pedersen, 'Transatlantic Movements of Justice' (n 115) 37.

[130] For an analysis of the inclusion of sustainable development in the Article 2 of the TEU by the 1999 Amsterdam Treaty amendments see Richard Macrory, *Regulation, Enforcement and Governance in Environmental Law* (Hart 2010) 553–554.

[131] The 1992 United Nations Conference on Environmental and Development was the high profile world conference in Rio in 1992 (Earth Summit), at which heads of state were due to debate and arrive at agreements on the Report of the World Commission on Environment and Development: Our Common Future (the Brundtland Report) on sustainable development (OUP 1987).

[132] DEFRA, (1999) *Building a Better Life. The UK Government Sustainable Development Strategy* <http://collections.europarchive.org/tna/20080530153425/http://www.sustainable-development.gov.uk/publications/uk-strategy99/index.htm> accessed 05 August 2012.

[133] DEFRA, (2005) *Securing the Future. The UK Government Sustainable Development Strategy* <http://www.defra.gov.uk/publications/files/pb10589-securing-the-future-050307.pdf> accessed 05 August 2012.

[134] It is important to mention that the sustainable development agenda within the devolved administrations is similar. See for Wales: Welsh Assembly Government, *One Wales: One Planet* (2009). See for Northern Ireland: Northern Ireland Government, *First steps towards sustainability* (2006). See for Scotland: Scottish Executive, *Choosing the Future* (2006) and Sustainable Development Commission Scotland, *Sustainable Development: A Review of Progress by the Scottish Government* (2008).

to information and participation guarantees.[135] Despite not being considered legally binding, they acknowledge the necessity of considering environmental justice issues.[136]

Notwithstanding, this rhetorical choice of articulating environmental justice as a component of sustainable development strategies does not come without raising controversies related to disputes and ambiguities that surround sustainable development itself. The increasing interest in the notion of environmental justice is actually closely related to growing criticism that sustainable development as a concept fails to capture a social dimension when it forms the basis of policies, programmes and projects on the ground.[137] Critics have pointed to the failure of both 'weak' and 'strong' sustainability approaches.[138] Under weak sustainability, environmental protection is cast in economically efficient terms, which is associated to the ecological modernisation discourse.[139] Strong sustainability neglects social equity in favour of an overriding concern with sustaining critical environmental capital. In this respect, according to Walker and Burkeley, environmental justice may be seen 'as a means of reconciling the sustainable development agenda with that of social justice'.[140] Agyeman and Evans call this 'just sustainability'.[141]

The UK path makes explicit the adoption of an ecological modernisation discourse, by which radical social and environmental movements were absorbed within a more limited framework of sustainable development, upheld by economic efficiency

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[135] Office of the Deputy Prime Minister, *Planning Policy Statement 1: Delivering Sustainable Development* (2005); Office of the Deputy Prime Minister, *Planning Policy Statement 10: Planning for Sustainable Waste Management* (2005).

[136] Pedersen, 'Environmental Justice in the UK' (n 85) 301.

[137] Bulkeley and Walker (n 114) 330.

[138] Eric Neumayer, *Weak Versus Strong Sustainability: Exploring the Limits of Two Opposing Paradigms* (2nd edn, Edward Elgar Publishing 2003).

[139] See Andrew Blowers and others, 'Environmental Policy: Ecological Modernisation or the Risk Society?' (1997) 34 Urban studies 845.

[140] Bulkeley and Walker (n 114) 329.

[141] Agyeman and Evans (n 114) 155. In contrast, Ruhl provides a different view to the adoption of environmental justice as a policy agenda, arguing that it is a too narrow, single-trait approach; therefore, sustainable development, as a more adaptive, multi-trait concept would subsume environmental justice. JB Ruhl, 'The Co-Evolution of Sustainable Development and Environmental Justice: Cooperation, Then Competition, Then Conflict' (1998) 9 Duke Envtl. L. & Pol'y F. 161.

arguments.[142] This has therefore resulted in trade-offs in order to prioritize a specific interpretation of sustainable development related to economic growth as a policy target.[143] Interestingly, recent reforms in planning law have highlighted the problem. This is the case of the Localism Act 2011[144] and the accompanying National Planning Policy Framework, issued by the Department for Communities and Local Government in 2012.[145] The establishment of a 'presumption in favour of sustainable development' has stimulated debate surrounding the clear and overriding adoption by the government of an economic imperative of development, considering the aim of reducing complexity and encouraging growth.[146]

With regards to legislation developments, the form of environmental justice expressed in the UK is predominantly concerned with procedural matters, especially the adequacy of access to justice, in particular access to courts.[147] This is, again, a consequence of the EU's influence in these areas, which is driven by the 1998 UNECE Aarhus Convention.[148] The substantive rights of access to environmental information, public participation in environmental decision-making, and access to justice in environmental matters explicitly established in the Aarhus Convention[149] reflect obligations to the UK government in fostering the adaptation and improvement of the domestic legal system and administrative structure. As a result, national legislation now guarantees access to information and participation in decision-making

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[142] Oluf Langhelle, 'Why Ecological Modernization and Sustainable Development Should Not Be Conflated' (2000) 2 Journal of Environmental Policy & Planning 303.

[143] Connelly and Richardson (n 85) 403.

[144] DCLG, The Localism Bill <http://www.communities.gov.uk/localgovernment/decentralisation/localismbill/> accessed 03 March 2013.

[145] DCLG, *National Planning Policy Framework* (DCLG 2012) <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf> accessed 03 March 2013.

[146] This is particular evident in the NPPF's Draft: 'At the heart of the National Policy Framework is a presumption in favour of sustainable development which should be seen as a golden thread running through both plan-making and decision takings'. DCLG, *Draft National Planning Policy Framework* (DCLG 2011).

[147] Maria Adebowale, *Using the Law: Barriers and Opportunities for Environmental Justice: Executive Summary* (Capacity Global 2004).

[148] The UNECE Aarhus Convention entered into force on 30 October 2001 and was ratified by UK in 2005.

[149] EU Directives which implement Aarhus Convention: Directive 2003/4/EC on Public Access to Environmental Information; Directive 2003/35/EC on Public Participation; Directive 85/337/EEC on the Assessment of the Effects of Certain Private and Public Projects on the Environment (amended by Directive 97/11/EC).

of plans and programmes, as well as in planning application.[150] Holder points out that the focus on procedural justice rather than distributional goals 'might suggest faith in the ability of procedural safeguards and mechanisms […] to deliver substantive results in terms of environmental protection'.[151]

From reviewing influential research reports and papers on environmental justice in domestic law and policy covering the period from 2000 to 2012, it is clear that access to justice has developed greater policy traction (see Appendix I). While eleven out of twenty-five documents reviewed include sustainability indicators [152] or policy appraisal,[153] the majority (fourteen reports) debate access to justice in environmental issues within the UK judicial system. In general, the reports articulate two main approaches. First, there are those focused on analysing the benefits of an environmental tribunal (before 2010) and on evaluating the outcomes of the new First-tier Tribunal (2010). [154] The second approach embraces research on the effectiveness of the judicial system in promoting access to courts in environmental matters, encompassing mainly stakeholders' perception and identification of obstacles.[155] Amongst the latter group, there are reports which intend to verify UK's compliance with the Aarhus Convention requirements specifically in terms of costs barriers.[156]

From the review of these reports, it might be concluded that, despite the policy progress and legislative advancements regarding environmental justice in the UK, the justice system still needs improving towards more coherent, simple and effective structures, in particular the system of environmental appeals (administrative appeals

[150] See for England and Wales: Planning and Compulsory Purchase Act 2005; Environmental Information Regulations 2004; Town and Country Planning (England and Wales) Regulations 1999. See for Scotland: Environmental Information (Scotland) Regulations 2004; Pollution Prevention Control (Scotland) Regulations 2005; Environmental Impact Assessment (Scotland) Amendment Regulations 2006.

[151] Jane Holder, '"Doing the Sustainable Development Dance": Tracing a Critical Route from the Education for Sustainable Development Movement to Environmental Justice in Legal Education' (2012) 65 Current Legal Problems 145, 166.

[152] See for examples Table 1, reports 2 and 4.

[153] There are reports dealing with policy appraisal intending to discuss the extent to which appraisal tools incorporate the analysis of distributional effects. See Table 1, reports 13; 15; 16.

[154] See Annex 1, reports 1; 8; 23.

[155] See Annex 1, reports 9; 10; 11; 24.

[156] See Annex 1, reports 17 (The Sullivan Report 2008); 19; 21 (The Sullivan II 2010); 27 (The Jackson Review 2012).

and judicial review). The main obstacle identified is the excessive cost of environmental litigation in the UK (the 'loser pays' rule), which prevents legal challenge by NGOs and individuals because of the possibility of having to pay large and uncertain bills.[157] The argument is that the cost regime should be altered to recognise that there is public interest in environmental matters.

This issue has been subject of case law,[158] as well as of review by the Aarhus Convention Compliance Committee (ACCC).[159] The Committee concluded in 2011[160] that the UK was not in compliance with provisions on access to justice established in the Convention[161] and in Directive 2003/35 implementing it with regards to certain procedures,[162] which determine that it should be ensured fair, equitable and non-prohibitively expensive environmental procedures. The Committee then referred the case to the Court of Justice of the European Union (CJEU), on the basis that the high costs of judicial review proceedings (involving the 'looser pays' rule in addition to the discretionary of the 'protective cost orders') were preventing legal challenges, and also that no legislative provisions were in place. The Court declared in 2014 that the UK had failed to transpose the Directive in this respect for UK cost protection regime as practiced by case law was insufficient to oblige national courts to ensure that proceedings are not prohibitively expensive.[163]

To sum up, although there has been some success in mainstreaming the concept through policy targets, legislative changes and institutional commitments, major obstacles remain. The concept embraced by the Executive remains vague, with no specific targets or standards addressed, which might result in little effectiveness in

[157] In the reports mentioned above, alongside with cost barriers other factors are also identified as obstacles to access to environmental justice in the UK, such as: the lack of expertise on environmental issues by the courts; the limited scope of judicial review; and the insufficient sources of free legal advice for socially and economically excluded communities.

[158] See *R (Corner House Research) v Secretary of State for Trade & Industry* [2005] 1 W.L.R. 2600; *Garner v Elmbridge Borough Council* Court of Appeal (Civil Division) [2010] EWCA Civ 1006 29 July 2010; and *(on the application of Edwards and another) v Environment Agency and others* [2010] UKSC 57 15 Dec 2010.

[159] ACCC/C/2008/33.

[160] ACCC 2011 (ECE/MP .PP/C.1/2011/2/Add.9).

[161] Articles 9(4), 9(5) and 3(1).

[162] Articles 3(7) and 4(4).

[163] Case C-530/11, *European Commission v. United Kingdom of Great Britain and Northern Ireland* [2012/C 39/11].

practice[164] as well as addressing access to justice with respect to environmental claims is seriously challenged by the cost regime. Also relevant for the thesis analysis, impact assessment regulatory system has not institutionalised the assessment of distributional issues (no statutory status and little or none guidance documents), which result in environmental justice enjoying a low profile in the practice of EIA and SEA.[165] Finally, there is no evidence of case law concerned with environmental justice per se. Instead, environmental justice/distributional issues are being articulated explicitly as challenges to decision making. Pedersen argues that related claims (such as fuel poverty, noise, smell) have been argued on the ground of traditional liability - land use or public and private and human rights.[166]

2.3 The Brazilian Environmental Justice Framework: 'Environmentalization of Social Struggles'

I now trace the ways in which the Brazilian environmental movement has integrated environmental justice discourse, analysing whether this has led to policy and legal achievements. I argue that, in order to understand the national experience, it is necessary to look at the domestic socio-economic and political scenario and, in such a context, at the relationship that the environmental movement has established with organised movements struggling for social justice. Authors have called this phenomenon the 'environmentalization of social struggles'[167] or 'greening Brazilian politics'.[168] To this end, I firstly synthesise the influential key elements of the political and economic changes. I then present the main characteristics of the environmental justice framework in Brazil. Finally, I debate the developments in law

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[164] Pedersen, 'Transatlantic Movements of Justice' (n 115) 41. Pedersen, 'Environmental Justice in the UK' (n 85) 293–294.

[165] Gordon P Walker, 'Environmental Justice, Impact Assessment and the Politics of Knowledge: The Implications of Assessing the Social Distribution of Environmental Outcomes' (2010) 30 Environmental Impact Assessment Review 312, 317.

[166] The author mentions a few cases in support of the argument: *Friends of the Earth* v *Secretary of State for Business Enterprise and Regulatory Reform* [2010] Env LR 11; *Miller* v *Jackson* [1977] QB 343; *Wheeler* v *JJ Saunders* [1995] Env LR 286; *Corby Group Litigation* v *Corby District Council* [2009] EWHC 1944 (TCC). Pedersen, 'Environmental Justice in the UK' (n 85) 299–300.

[167] Henri Acselrad, 'Ambientalização Das Lutas Sociais-O Caso Do Movimento Por Justiça Ambiental' (2010) 24 Estudos avançados 103, 119.

[168] Kathryn Hochstetler and Margaret E Keck, *Greening Brazil: Environmental Activism in State and Society* (Duke University Press 2007) 02.

and policy, questioning whether a statutory concept might be identified within the environmental regulatory framework.

2.3.1 Accommodating environmental activism and social struggles: contexts and circumstances (from the 1970s to the 1990s)

The Brazilian environmental movement has frequently faced a 'legitimacy question': how to campaign for environmental protection without ignoring the priorities of combating poverty and underdevelopment (as formulated by Acselrad).[169] The overriding dilemma is therefore how to promote an integrated debate about environmentalism and economic development that tackles social injustice. Two major factors have shaped the political and social background of this debate, producing tension between the prioritisation of socio-economic distributional concerns and environmental protection: the economic development model adopted and the political activism resulting from the democratisation process.

Firstly, as noted by Viola, Brazilian environmentalism must be considered as part of the broader economic context experienced by developing and emerging countries in global North-South relationships, in particular in Latin America.[170] The economic development model, resulting from the late modernisation of industry and agriculture when integrating into the global financial market, and the intense social changes implicated (intense urbanisation and rural poverty), are key determinants for the raise of social conflicts.[171] The 'structural arrangement' policies adopted under the recommendation of financial agencies in the 1980s, and the neoliberal economic policies imposed on developing countries in the 1990s, are key drivers of this

[169] Henri Acselrad, 'Grassroots Reframing of the Environmental Struggles in Brazil' in D Carruthers (ed), *Environmental Justice in Latin America: Problems, Promise, and Practice* (MIT 2008) 77.

[170] As a result, in its early stages, the environmental movement in Brazil had a limited social base, experiencing difficulties in mobilizing popular sectors. Eduardo J Viola, 'O Movimento Ecológico No Brasil, 1974-1986: Do Ambientalismo à Ecopolítica' in J Padua (ed), *Ecologia e Política no Brasil* (Espaço & Tempo 1987) 8.

[171] For an analysis of the social conflicts in the context of the 'peripheral capitalism' see Manuel Castells see *The Urban Question: A Marxist Approach, Translated by Alan Sheridan* (Alan Sheridan tr, Edward Arnold 1977).

process.[172] Secondly, the military regime, from 1964 to 1984, played an important role in shaping political activism. The economic policy of military governments concentrated on intensive economic growth, and opposition to this focused almost exclusively on the resulting social inequalities produced, rather than on the environmental costs.[173] Due to a limited capacity for the mobilisation of social movements, however, people identified existing environmental groups as a means of making their claims against the prevailing authoritarianism heard (mainly in the 1970s).[174]

Such a context contributed to forging a highly pluralistic environmentalism.[175] This has evolved in two pivotal periods, according to Acselrad, progressing from a first phase based on grassroots groups, to a second phase of institutionalization, with professional activist groups.[176] The first stage, still under the military regime, involved public awareness building from the 1970s, through groups considered 'non-politicized',[177] in a context of developmentalist economic policy.[178] This was made up of individual citizens, neighbourhood groups, and victims of negative environmental impacts, targeting problems affecting the life of local communities.[179] Also, in the 1970s, urban degradation gradually emerged as a major concern of intensive and rapid urbanisation. Moreover, a conservationist discourse targeted the protection of essential ecosystems, such as the Atlantic Forest and the Amazon, as well as resistance against installation of nuclear power plants.[180] Additionally, under the influence of the international debate, biodiversity loss and climate change became part of the campaigning landscape.[181] From the 1980s, the struggle for land

[172] Zander Navarro, 'Mobilization without Emancipation': The Social Struggles of the Landless in Brazil' in B Santos (ed), *Another production is possible: Beyond the capitalist canon* (Verso 2006) 147.
[173] Viola (n 170) 17.
[174] Acselrad (n 169) 76.
[175] Hochstetler and Keck (n 168) 20–21. Acselrad (n 169) 75.
[176] Acselrad (n 169) 75.
[177] Viola (n 170) 15.
[178] The Brazilians diplomats were exponents of pro-development arguments at the 1972 UNCED. Hochstetler and Keck (n 168) 22.
[179] Acselrad (n 169) 75. Viola (n 170) 15. Navarro (n 172) 151.
[180] Acselrad (n 169) 76. Viola (n 170) 21–22.
[181] Acselrad (n 167) 104.

intensified, mobilising rural workers' unions and social movements.[182] This was a result of the structural changes in the agrarian economy stimulated by liberal market economic policy, as well as the raise of mechanical monoculture.[183]

It is worth highlighting that the military regime promoted formal environmental protection initiatives. In 1973, the Special Environmental Secretary was set up and regional environmental agencies were organised in many states. In the early 1980s, relevant legislative and administrative achievements included the setting up of the National Environmental Council, which consists of a representative body of both government and civil society. Also, Statute 6938/1981 was enacted, which established the National Environmental Policy. This was more a result of international 'pressure' (the 1972 UNCED and the World Bank requirements for investment), however, rather than a domestic policy priority.[184]

According to Acselrad, the last years of the military regime in Brazil also contributed to the emergence of stronger linkages between environmentalism and social issues. The reason for this was the growing criticism of the development model adopted, and of the hopes for a more democratic political landscape, in a context of economic stagnation in the 1980s and 1990s. [185] As a consequence, environmentalists needed to broaden their social bases, and started to work together with a diverse number of social movements, reshaping the socio-ecological discourse and calling for growth to be balanced with social equity.[186] Hochstetler and Keck assume this to be a form of environmentalism that is more politicized and further develops so-called 'socio-environmentalism'.[187]

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[182] The Movement of the Landless Rural Works is an important example of this political activism. Navarro (n 172) 151.

[183] Hochstetler and Keck (n 168) 8. See also Elisabeth Jay Friedman and Kathryn Hochstetler, 'Assessing the Third Transition in Latin American Democratization: Representational Regimes and Civil Society in Argentina and Brazil' [2002] Comparative Politics 21. Marcelo Firpo Porto, 'Movements and the Network of Environmental Justice in Brazil' (2012) 5 Environmental Justice 100, 101.

[184] Viola (n 170) 18. For a review of environmental legislation and agencies that were created in the 1970s and 1980s in Brazil see Ch 1 of Hochstetler and Keck (n 168).

[185] Acselrad (n 169).

[186] Hochstetler and Keck (n 168) 20.

[187] ibid 8. On the topic see Jennifer Clapp and Peter Dauvergne, *Paths to a Green World: The Political Economy of the Global Environment* (MIT press 2011). Also Gilney Viana, Marina Silva and Nilo

When the democratic transition was put in place from 1982 onwards, civil society mobilisation gained ground, mainly through trade unions, social movements, progressive branches of the Catholic Church, and the reorganisation of political parties.[188] This was also an opportunity for the environmental movement to influence decision-making, focusing especially on the new constitution-making process (1988),[189] and on the preparations for the 1992 UNCED. As a result, the environmental movement experienced a 'process of professionalisation', working towards pragmatic strategies involving scientific-based action, and technical and administrative structures, as well as providing consultancy work.[190] Here, the preparatory meetings for the 1992 UNCED played a particularly relevant role,[191] when the Brazilian NGOs and Social Movements Forum was organized.[192]

Providing a contrast to this process of professionalisation, however, there has been growing resistance from the grassroots social-environmental movement.[193] In an attempt to reframe its scope, this movement has incorporated an environmental justice approach, criticising the technocentrism and ecological modernization agenda of public policies, and promoting a debate about distributional aspects of the regulatory framework. The strategy is based on a concept of environmental justice that identifies the unequal distribution of risks and hazards in terms of income, race or gender,[194] providing a closer correlation to the US experience. As a result, the domestic arena from 2000 onwards has seen tension between these two diverse discourses: on the one side, a 'consensus-seeking discourse' on sustainable development led by professional

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Diniz, 'O Desafio Da Sustentabilidade: Um Debate Socioambiental No Brasil', *O desafio da sustentabilidade: Um debate socioambiental no Brasil* (Editora Fundação Perseu Abramo 2001).

188 Edesio Fernandes, 'Implementing the Urban Reform Agenda in Brazil: Possibilities, Challenges, and Lessons' (2011) 22 Urban Forum 299, 303.

189 Hochstetler and Keck (n 168) 22. For an analysis of the constitutional system see Celina Souza, *Constitutional Engineering in Brazil: The Politics of Federalism and Decentralization* (Macmillan 1997).

190 Acselrad (n 169) 78–81.

191 This is the high profile UN Conference held in Rio de Janeiro, attended by a large number of environmentalist organisations, and which has since gained totemic importance in environmental circles.

192 Acselrad (n 169) 79.

193 ibid 85.

194 Acselrad (n 167) 110–111.

NGOs; on the other side, an 'environmentalism of protest' that has embraced the environmental justice framework.[195]

2.3.2 Claims within the environmental justice frame (from 2000 onwards)

Considering the above analysis on the progress of Brazilian environmentalism and its interplay with contemporary socio-economic and political contexts, here I specifically debate the ways in which the environmental justice discourse was embraced nationally from 2000 onwards. The purpose is, firstly, to establish a critical appraisal in relation to the environmental justice approach in the USA and the UK, and secondly, to analyse whether there might be a context-specific meaning of environmental justice.

As with many other developing and emerging countries, Brazilian environmentalist groups experienced a process of 'local appropriation of international experience', in particular, of the USA environmental justice movement experience. The US's environmental justice concept, as it was originally built on the civil rights movement, was reframed locally under the tensions resulting from social-economic struggles and environmental protection concerns.[196] This contributed to the linking of environmental problems to questions of public health, human rights, and justice.[197]

In terms of context, while in the USA the concept was forged by local communities and ethnic groups, and in the UK it was formed largely as part of the campaigning strategies of NGOs, as well as government rhetoric, in Brazil, the concept is strongly associated with the position of the country within the international trade regime. Environmental justice as a concept was built upon criticism of the development model, and the inequalities derived from capitalist production and trade patterns imposed on developing countries, in particular during the 1990s.[198] In this context, activists have identified investment dynamics, combined with an absence of effective

[195] Acselrad (n 169) 85.
[196] Acselrad (n 167) 119.
[197] Porto (n 183) 101.
[198] ibid.

environmental and social policies, as the main mechanism through which environmental risks are imposed on deprived populations.[199]

In conclusion, the environmental justice discourse was organised as a rhetorical argument aimed at discussing distributional conflicts arising from economic, social, and ecological issues operating on a global (rather than a local) scale, but with the consequences of these distributional conflicts being felt particularly in the terms of development burdens upon the poor and the most discriminated against populations.[200] Consequently, the Brazilian movement has mobilised a wider range of struggles reinterpreted under the environmental question, in comparison with both the US and the UK.[201]

This linkage between environmental struggles and social justice claims culminated in the creation of a networking body during preparation for the 1992 UNCED. This was a preparatory forum for the parallel Civil Society Conference on Environment and Development, the so-called Brazilian NGO and Social Movements Forum for the Environment and Development. The aim was to incorporate environmental issues within the broader debate that critiqued the developmental model, bridging the gap between social justice claims and environmental concerns.[202]

Nevertheless, the environmental justice discourse was more fully and effectively embraced and framed in the late 1990s, when US environmental justice activists visited Brazil and engaged with members of local movements and academics. This resulted in the first Brazilian publication on the topic in 2000,[203] and in the launching of the Brazilian Environmental Justice Network in 2001. Also, a manifesto was

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[199] Acselrad (n 169) 93.

[200] ibid 92. Acselrad (n 167) 114–115.

[201] The rubber tappers' movement, in the Amazon region, is an example of a social movement that reframed its scope towards the interface between environmental protection and social equity. See Margaret E Keck, 'Social Equity and Environmental Politics in Brazil: Lessons from the Rubber Tappers of Acre' [1995] Comparative Politics 409. The anti-dam movement is another example. See Franklin Rothman and Pamela Oliver, 'From Local to Global: The Anti-Dam Movement in Southern Brazil, 1979-1992' (1999) 4 Mobilization: An International Quarterly 41.

[202] The Forum joined a wide range of social movements, such as trade union activists, the landless rural workers' movement, communities displaced by dam construction, urban community movements, rubber tappers, exploiters of forest products, and indigenous groups. Acselrad (n 169) 77. Acselrad (n 167) 106.

[203] IBASE/CUT-RJ/IPPUR-UFRJ, *Sindicalismo e Justiça Ambiental* (IBASE 2000).

elaborated, containing a general understanding of environmental justice.[204] Significantly, the Brazilian Declaration was based on the US Principles of Environmental Justice drawn up at the People of Color Summit (1991),[205] but the concept was expanded according to the local context. The various struggles embraced by the movement are identified in the definition of environmental injustice included in the document:

> […] the mechanisms by which societies, whose members are unequal from economic and social perspectives, place the biggest burden of the environmental harms accompanying development on disempowered lower income populations, poor urban zones, racially discriminated, traditional ethnic groups, and blue-collar groups. In a few words, the burdens are placed on the most vulnerable and marginalized populations.[206]

Although not listing principles, the Brazilian Declaration states the main practices of environmental justice. The first three practices are largely aligned with the US Principles of Environmental Justice and the concerns identified in the UK. These are: (1) the fair distribution of environmental and social risks, burdens and benefits of planning decision-making, and developments, regardless of race, income and ethnicity; (2) equal access to natural resources; and (3) access to information and participation in the environmental decision-making process.[207] The fourth practice makes clear the concern with socio-environmental conflicts arising from the disputes surrounding the development model,[208] making a claim for social mobilisation:

> Favour the establishment of collective entities with rights, social movements and people's organizations, so as to promote the construction of alternative development models that ensure that access to environmental resources is democratic and the use therefore is suitable.[209]

The contribution of researchers and scholars played a relevant role in connecting international experiences to the local environmentalist movement, and in developing

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[204] Acselrad (n 169) 91.

[205] Porto (n 183) 102.

[206] FASE, 'Rede Brasileira de Justiça Ambiental' <http://www.justicaambiental.org.br>.

[207] ibid.

[208] For an analysis of social perception and institutional mechanisms of environmental conflicts see John Hannigan, *Environmental Sociology* (Routledge 2014).

[209] FASE (n 206).

initial empirical research, as was the case in the US and the UK. Despite such involvement, however, the research regarding justice indicators is still poorly explored in comparison to these two other jurisdictions. In this regard, a few attempts have been directed towards demonstrating, through socio-spatial research and impact assessment, the coincidence between environmentally degraded areas and low-income population settlements, in particular urban areas.[210] Studies have analysed the socio-demographic profile of communities that are situated in sites under imminent environmental risk in the cities (usually close to water sources or contaminated fields).[211] They suggest that, in general, there is a direct relation between poverty and a disproportionate exposure to environmental hazards as a result of the unequal urbanisation process. This means that the main locus of environmental injustice is the urban space in Brazil,[212] where urban-environmental risks are tangled up with poverty and social injustice. In conclusion, the most influential factor on the unequal distribution of environmental risk seems to be social injustice circumstances.

Finally, the merging of the environmental movement and movements for social justice agendas in Brazil has brought about the enactment of progressive laws, in particular from the promulgation of the 1988 Federal Constitution.[213] The constitution-making process is the greatest example, considering that the constitutional chapters on the National Environmental Policy (article 225) and the National Urban Policy (articles 182 and 183) are a result of social mobilisation. Many of the principles integrated into these chapters resulted from Popular Amendments proposed by the Urban Reform Movement and environmental activist groups[214] (to be explored in Chapter 6).

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[210] H Acselrad, C Campanello do Amaral Mello and G Das Neves Bezerra, *O Que é Justiça Ambiental* (Rio de Janeiro: Garamond 2008) 47.

[211] See Haroldo da Gama Torres and Eduardo Cesar Marques, 'Reflexões Sobre a Hiperperiferia: Novas E Velhas Faces Da Pobreza No Entorno Municipal' [2011] Revista Brasileira de Estudos Urbanos e Regionais 49. Marcio Pochmann and others, *Atlas Da Exclusão Social No Brasil: Exclusão No Mundo* (Cortez 2004). Humberto Prates da Fonseca Alves and Haroldo da Gama Torres, 'Vulnerabilidade Socioambiental Na Cidade de São Paulo: Uma Análise de Famílias E Domicílios Em Situação de Pobreza E Risco Ambiental' (2006) 20 Rev Sao Paulo em Perspectiva 44.

[212] Acselrad, do Amaral Mello and Bezerra (n 210) 50.

[213] Brazilian authors have called this 'socioambientalism', with regards to considering social values, cultural, economic and political aspects within the environmental legislation. See C Marés, 'Introdução Ao Direito Socioambiental' in A Lima (ed), *O Direito para o Brasil Socioambiental* (Sérgio Antonio Fabris Editor 2002).

[214] Fernandes (n 188) 303.

There is a series of constitutional provisions recognising collective rights regarding the natural environment (article 225), the built environment (article 182), sustainable development (article 225), culture (article 216), and ethnic groups (article 231). When interpreting these provisions systematically, the concept and breadth of the right to a healthy environment in the 1988 Federal Constitution assumes wide normativity.[215] Moreover, procedural justice guarantees have been recognised through additional legal changes in environmental and urban statutory provisions.[216] Access to information is a constitutional guarantee (article 5, XIV, XXI, XXII) and a duty of the public administration (article 37), as well as an environmental policy target (Law 6938/1981), and the publicity of impact assessments is mandatory (article 225, §1, IV, Federal Constitution). In 2003, inspired by the Aarhus Convention, Law 10650/2003 was enacted regarding access to information held by the environmental agencies. The participatory model in both environmental and urban legal orders is ensured through several mechanisms, mainly representative councils, consultations, public hearings, and environmental and neighbourhood impact reports. There are also administrative and judicial mechanisms for enforcing such guarantees (Law 7347/1985).

When it comes to social justice concerns, the integration of distributional criteria within the process of policy and impact assessment is still incipient. Moreover, there is no statutory definition for environmental justice, nor is the concept explicitly included in the legislation. In general terms, distributional concerns can be identified in a vague, unarticulated way: (i) in the set of criteria for the elaboration of environmental assessment, when establishing the mandatory analysis of social burdens and benefits (Section 6.3); and (ii) in the statutory directives for urban policy-making regarding the legal duty to promote the fair distribution of positive and negative urban development impacts resulting from the urbanisation process, as well as the necessity to take into account the special needs and interests of all social stakeholders (see Section 6.4).

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[215] Fernanda de Salles Cavedon and Ricardo Stanziola Vieira, 'Brazilian "Socioambientalismo" and Environmental Justice' in Jamie Benedickson and others (eds), *Environmental Law and Sustainability after Rio* (Edward Elgar 2011).

[216] Especially in the National Environmental Policy (Law 6938/1981) and in Law 10,257/2001.

This brief analysis shows that significant progress has been made towards an inclusive and participatory legal environmental and urban order. Nonetheless, as a conclusion, I argue that the legal reforms and institutional changes that have been put in place in Brazil are not necessarily an achievement of environmental justice rhetoric. In fact, they are a result of a continuous process of social mobilisation, in which different socio-economic and political struggles have been framed under merging agendas. In such a context, the environmental justice approach has been recently articulated in order to rephrase the claims and guide legislative and policy improvements, which still demands the formulation of clearer principles and consistent conceptual boundaries. Nevertheless, the environmental justice concept has not yet been widely and fully incorporated into legislative and regulatory frameworks; neither has it been used as a legal argument for judicial claims.

2.4 Conclusion: Connexions, Context and Delivery

There are common grounds and values underpinning claims for environmental justice. With this respect, Schlosberg argues that there is room for claiming a 'unit on notions of environmental justice',[217] which is threefold, encompassing as core elements (a) distributional justice, (b) recognition, and (c) political participation.[218] In this sense, the analysis of the main conceptual guidelines for defining an environmental justice approach in the jurisdictions investigated (Executive Order 12898/1994 and EPA's Interim Guidance in the US; research reports and executive policy statements in the UK; the Environmental Justice Network Declaration in Brazil) reveals the common dimensions advocated (see Table 1). Firstly, the social justice dimension is articulated mainly in terms of intra-generational justice, involving demands for fair access to natural resources, distributional concerns regarding environmental impacts, and elimination of discrimination. Secondly, the procedural justice dimension is stressed through claims for participatory rights in policy- and decision-making and access to information. Finally, although not explicitly stated in particular in the UK and

[217] David Schlosberg, 'Reconceiving Environmental Justice: Global Movements and Political Theories' (2004) 13 Environmental politics 517.

[218] David Schlosberg, *Environmental Justice and the New Pluralism: The Challenge of Difference for Environmentalism* (OUP Oxford 1999) 10.

Brazilian documents, a third dimension is identified when autonomy, self-determination and cultural diversity are debated: recognition.

However, despite of the existing connexions, the perception of environmental injustices is contextualized, as observed by Ebbesson, [219] depending on the specificities of each jurisdiction. As a result, each jurisdiction has developed particular defining features. In the US, the key feature is the influence of the civil rights movement and environmental racism, although addressing socio-economic issues later on. The obligations under EU law have played a leading role in the debate in the UK, especially with respect to the emphasis on access to justice concerns; moreover, the linkage with the sustainable development concept has been identified as the main governmental strategy. In Brazil, socio-economic concerns have underpinned the debate, as a result of struggles for social justice and of the challenges of experiencing the sustainable development discourse from a southern perspective.

These context-specific aspects have forged distinct policy and legislative responses in terms of delivering environmental justice. The USA and the UK have ben successful in articulating the concept within environmental policy statements, being environmental justice an aim for government action. Regarding legislative changes, the UK has developed more significant achievements; whereas the US has struggled to translate the Executive Order dispositions into concrete legislative outcomes. Moreover, the enforcement through litigation has represented a key challenge in both contexts. The existing case law on the issue does not raise explicitly environmental justice concept nor addresses distributional issues central place, and the traditional litigation strategies appear to be more effective.

The scenario in Brazil differs from the USA and the UK. The environmental justice discourse in Brazil has developed in the context of the internationalization of socio-environmental struggles accompanying the internationalization of capital in developing countries ('exportation of risks').[220] However, it assumes a localized meaning and embraces particular scope as a result of the national socio-economic and

[219] Jonas Ebbesson, 'Introduction: Dimensions of Justice in Environmental Law' in Jonas Ebbesson and Phoebe Okowa (eds), *Environmental Law and Justice in Context* (CUP 2009) 2.
[220] Ulrich Beck, *Ecological Politics in an Age of Risk* (John Wiley & Sons 2015).

political circumstances. This results mostly from a historical model of development, which concentrates economic and political power, rendering socially discriminated groups more exposed to environmental risks.[221] Furthermore, it is a consequence of understanding the strategic interface between social justice and environmental protection,[222] evolving from the overlapping of environmental and social risks being transferred into poor communities, as well as of the unequal access to environmental resources and decision-making.[223]

Importantly, it cannot be said that there is an environmental justice framework in terms of policy guidance and environmental regulation in Brazil. Despite the progress of the social movements in merging environmental and social claims under the environmental justice frame, as well as the developments in environmental law, it is not properly articulated as a normative concept in policy and legislative contexts. The environmental provisions, constitutional and statutory, stating the duty of the Brazilian state of acting based on justice criteria are approached fragmentally, which represents uncertainty and ambiguity when it comes to enforcement and effectiveness.

However, in spite of the criticism that might exist in the US and UK with regard to the vagueness/lack of enforcement of policy statements, as well as the persisting difficulties of the environmental justice litigation, the main point argued in this chapter is that this is of great relevance to Brazil to better develop environmental justice as a conceptual tool. It serves as a reference point as to which law and policy responsiveness to environmental justice have matured. Firstly, for the incorporation of environmental justice as a broader policy objective, which have implications in terms of guidance to be observed for policy- and rule-making and law enforcement. Secondly, for the enhancement of procedural aspects that may increase the likelihood of distributional substantive outcomes in environmental and planning decision-making processes. Nevertheless, a narrower, contextualized, and thematically specific concept of environmental justice is needed to allow for it to be applied as a normative, conceptual evaluative tool in assessing legislative responses and elaborating EA criteria, what is explored in Chapter 3.

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[221] Porto (n 183) 102.
[222] Acselrad (n 169) 93.
[223] Acselrad, do Amaral Mello and Bezerra (n 210) 73.

Table 1 Environmental Justice Claims

ENVIRONMENTAL JUSTICE CLAIMS					
CLAIMS		**Brazil**	**USA 1991 Principles**	**USA E.O. and EPA's Interim Guidance**	**UK**
SOCIAL JUSTICE	Intergenerational equity	∅	√	⊗	√
	Intragenerational equity:				
	a. fair access to natural resources	√	√	√	√
	b. environmental impacts	√	√	√	√
	c. eliminating discrimination	√	√	√	√
	d. right to compensation	∅	√	√	∅
ECOLOGICAL JUSTICE	Nature intrinsic worth	⊗	√	⊗	⊗
	Interdependence of all species	⊗	√	⊗	⊗
PROCEDURAL JUSTICE	Participatory rights in policy-making process	√	√	√	√
	Right to information	√	∅	√	√
	Informed consent	∅	√	∅	∅
RECOGNITION	Autonomy/self-determination	∅	√	∅	√
	Cultural diversity	∅	√	∅	∅

√ = Explicitly stated
∅ = Not explicitly stated, but comprised
⊗ = Not mentioned

Table 2 Environmental Justice Law and Policy Developments

	POLICY DEVELOPMENTS		LEGAL DEVELOPMENTS	
	Policy/Guidance	**Profile**	**Legal strategies**	**Profile**
Brazil	None	-	Constitutional rights	Medium
			Existing law (access to information, participation)	Medium
			Litigation (on the grounds of human rights and constitutional guarantees)	Medium
USA	Executive Order 1994	Medium	Title VI Civil Rights Act 1964	Medium
	Accompanying Memorandum 1994	Medium	Emergency Planning and Community Right to Know Act	Medium
	EPA's Interim Guidance 1998	Medium	Existing law (permitting, environmental review)	Low
	EPA's Interim Guidance 2010		Litigation (on the grounds of equal protection clause, Title VI, tort)	Low
	EPA Env Justice Plan 2014	Low		
UK	Policy statements	Low	Existing law (access to information, access to justice, participation, EA)	Low
	Sustainable Development Strategy (2005)	Low	Litigation (on the grounds of tort law and human rights)	Low
	Planning system on sustainable development (2005)	Low		
	Environmental Justice Fund for Scotland	Medium		

CHAPTER 3
SITUATING JUSTICE: EXPANDING ENVIRONMENTAL JUSTICE TOWARDS A NOTION OF URBAN-ENVIRONMENTAL JUSTICE

3.1 Introduction

Having explored the political dimension of the notion of environmental justice through the identification of law and policy responsiveness to contextual claims, I now examine its theoretical basis and diverse formulations. The many strands of environmental studies, developed within law and policy, political ecology and ethics, have intensively engaged with theoretical work on justice developed in political philosophy. This implies an effort to theorize environmental justice in order to address different interpretations of what is just in specific circumstances and according to corresponding driving values. The key values at stake are represented by the following questions: (i) who constitutes the 'community' of justice (humankind, ecosystems, present and future generations?); (ii) what kind of justice is being pursued (distributive, redistributive, procedural?); (iii) what is the principle of justice at the core of an issue (equality, need, entitlement, proportionality?); and, finally, (iv) who is responsible (government, community, individuals?).

As explored in detail in the specialised literature reviewed in this Chapter, environmental justice as a field of scholarship has been influenced strongly by liberal conceptions of distributive justice, in particular Rawls's idea of 'justice as fairness'. Nevertheless, scholarship has elaborated on this theory and also incorporated critiques of liberal theories and claims for contextualization, as well as concerns about environmental ethics. These evolving perspectives have allowed balancing the emphasis on individual liberties and fairness of procedure (impartiality/proceduralism) with collective interest and matters of substance[224] (substance/outcome)[225] in terms of understanding what environmental and social justice represent in policy and decision-making. Also, they have clarified, from a

[224] Campbell, 'Just Planning The Art of Situated Ethical Judgment' (n 6) 106.
[225] Dobson (n 120) 63.

theoretical perspective, how universal values are intertwined with particularities in contextual settings (universalism v. particularism).[226]

Considering this expansion of theories of justice to accommodate environmental justice, this Chapter draws upon a general account of key theoretical debates to create a convergence between three complex conceptual frames - distributive, environmental and territorial justice – and outlines a notion of urban-environmental justice. The thesis' notion of urban-environmental justice is presented in the form of a matrix of dimensions-themes-subthemes which emphasizes a distributive justice agenda connected closely to the urban context and with profound implications for substantive and procedural rights (see Table 3 at the end of the Chapter). This will provide the foundations for a grounded, thematically specific, approach to justice in urban-environmental decision-making, having an impact upon normative guidance and decision-making processes. This practical focus frames the case study analysis, set out in Chapter 6.

To construct the matrix, the Chapter starts by theorizing approaches to environmental justice focusing on how it progresses from, collides and cooperates with notions of distributive justice. Then, it analyses plural theoretical discourses working within an expanded form of environmental justice, such as intergenerational justice, global justice, ecological justice, and the sustainability rhetoric. Finally, it relates these understandings of environmental justice to literature on spatial justice and urban sustainability. Importantly, the Chapter does not provide an exhaustive political philosophy perspective on theories of justice. Other works have scrutinized these theoretical foundations and developed criteria by which justice can be judged, as well as setting out objections to the leading theories, from both theoretical and practical perspectives.[227] Instead, in this Chapter, theoretical formulations are considered only with the purpose of clarifying the positions that underpin developments in environmental justice literature.

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[226] See: Onora O'Neill, 'Political Liberalism and Public Reason: A Critical Notice of John Rawls, Political Liberalism' (1997) 106 The Philosophical Review 411.

[227] For an overview of key literature, see Julian Lamont and Christi Favor, 'Distributive Justice' in Edward N Zalta (ed), *Stanford Encyclopedia of Philosophy* (2013) <http://plato.stanford.edu/archives/sum2016/entries/justice-distributive/>.

3.2 Bridging Core Debates on Justice and Environmental Justice

3.2.1 Theorizing approaches to calls for distribution, participation and recognition

Since the rise of the environmental justice movement, there have been proposals for categorising the different concerns embodied in the notion of environmental justice under philosophically informed discourses. This reflects an effort towards identifying meanings and normative implications to environmental governance and decision-making. Classifications have pointed to varying 'taxonomies'[228] of multi-fold combinations of notions of distributive justice, procedural justice, corrective justice, and recognition.[229] Affiliation to one or another well established theoretical tradition determines orientation on what justice entails in this field of environmental justice in an urban context.

As seen in Chapter 2, when socio-economic claims are translated into a conceptual framework, key distributive concerns emphasize claims for consideration of fair distribution of environmental resources (benefits) and of environmental risks (burdens) when assessing the outcomes of environmental policies (questioning who benefits and to what extent).[230] This comprises a strong procedural aspect, for distribution is also seen as a result of just process, providing equal opportunities are available in institutional decision-making processes (equal treatment).[231] In these terms, liberal distributive justice theories have provided the main theoretical guidance

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[228] Robert R Kuehn, 'A Taxonomy of Environmental Justice' (2000) 30 Environmental Law Reporter 10681.

[229] For example: Manaster identifies distributive, corrective and procedural justice. Kenneth A Manaster, *Environmental Protection and Justice: Readings and Commentary on Environmental Law and Practice* (Anderson Publishing Company (OH) 1995). Kaswan opts for distributive and political justice. Alice Kaswan, 'Environmental Justice: Bridging the Gap between Environmental Laws and "Justice"' (1997) 47 American University Law Review 221. Taylor highlights distributive and corrective justice. Taylor, 'The Rise of the Environmental Justice Paradigm' (n 82). Kuehn includes distributive, procedural, corrective and social justice. Kuehn (n 228). Schlosberg talks about social and procedural justice and recognition. Schlosberg, *Environmental Justice and the New Pluralism* (n 218).

[230] Ole W Pedersen, 'Environmental Justice in the UK: Uncertainty, Ambiguity and the Law' (2011) *Legal Studies* 31 (2) 279, 283.

[231] Schlosberg, *Environmental Justice and the New Pluralism* (n 218) 10.

once they encapsulate exactly the argument in favour of distributive mechanisms and democratic institutions.

Rawls's theory of justice as fairness is the most influential formulation,[232] offering a model for designing fair institutional structures that shape fundamental rights and duties and determine the division of advantages from social cooperation through democratic decision making.[233] The emphasis is therefore on ensuring fair process through which decisions are made, and which becomes the measure for fair outcomes.[234] Suffice it to note here that Rawls's hypothetical assumption is that members of society are equipped with individual freedoms and equal rights, which allow all to access freely the public reasoning and systems of justice that ensure equal distribution of social goods (liberty and rights).[235] Hence, the distribution principle is grounded in moral equality: priority for equal rights and liberties, where social and economic inequalities are to be accepted only under conditions of equal opportunities and to the greatest benefit of the least advantaged ('difference principle').[236]

However, Rawls' theory of justice has not been immune to criticism, which is also relevant for an environmental justice critique. One of the key criticisms is that Rawls' liberal theory does not incorporate context and social difference (race, ethnicity, class, gender, religion, and culture) in the meaning of justice. This is because it emphasizes individual autonomy and universal negative or liberty rights, assuming that all have the same opportunities to exercise liberty;[237] therefore, it does not consider this is

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[232] In his foundational work (1973), Rawls affirms that natural resources are not part of the distribution of primary social goods. John Rawls, *A Theory of Justice* (Harvard University Press 1973) Ch V. Later (1996), he addresses in general (but limited terms) terms the possibility of extending his theory to environmental questions. John Rawls, *Political Liberalism* (Columbia University Press 1996) 36.

[233] Rawls, *Political Liberalism* (n 232) 258.

[234] Campbell, 'Just Planning The Art of Situated Ethical Judgment' (n 6) 94.

[235] Central are the 'original position' and the 'veil of ignorance', through which Rawls justify the appropriate choice for rules of justice that are acceptable for everyone, 'once no one is to know their individual future fate'. Rawls, *Political Liberalism* (n 232) 21 and 129. Also, the 'maxim rule' plays a relevant procedural role, which determines that individuals in the original position would favour principles that make as good as possible the worst status that could possible be assigned to them. ibid 153. Rawls classifies the primary social goods as rights and liberties; opportunities and powers; income and wealth. ibid 92.

[236] Rawls, *Political Liberalism* (n 232) 291.

[237] O'Neill (n 226).

constrained in circumstances of socio-economic inequality.[238] Also, it prioritises the ideal of 'just institutions' in abstract terms,[239] and, consequently, this procedural perspective is distanced from value considerations (justice is concerned with deliberation, which is in the public realm, with the state remaining neutral in relation to different conceptions of the good life, which is limited to the private sphere). Responses to such critiques vary, and, combined, they offer building blocks for an understanding of justice that is plural and contextual.

For instance, communitarian and multiculturalist authors - with some variation in argumentation - share the understanding that conceptions of goods are culturally and contextually built within the social context of a particular community, as well as processes of identity formation. Therefore, they derive distributive justice from these social meanings and communal values and tie it up with obligations within communities.[240] Notwithstanding, this is also a controversial position: emphasizing that justice obligations are constrained to citizens within the same community (community of shared experience) could reproduce internal patterns of disadvantage and exclude marginalized individuals or groups.[241]

Authors such as Sen and Nussbaum criticise Rawls' theory by proposing instead a 'capabilities approach'. Besides counter arguing the abstraction of general principles of justice from social context, they challenge moral equity as the normative orientation for distributive justice to emphasize recognition of human dignity as a central principle of social justice. These ideas relate to a human rights approach, for capabilities represent minimum human entitlements to be respected and implemented by governments.[242] Hence, it focuses on the relevance, not only of liberty rights but also of positive or moral rights (access to goods and services) and therefore on defining obligations placed on the state towards providing the basis for their

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[238] Amartya Sen, *The Idea of Justice* (Penguin Books 2010) 40.

[239] ibid 5–8.

[240] See Michael J Sandel, *Liberalism and the Limits of Justice* (2nd edn, CUP 1998). Charles Taylor, 'The Politics of Recognition' in Amy Gutmann (ed), *Multiculturalism: Examining the politics of recognition* (Princeton University Press 1994). Michael Walzer, *Spheres of Justice: A Defense of Pluralism and Equality* (Basic Books 2008). Will Kymlicka, *Contemporary Political Philosophy: An Introduction* (OUP 2002).

[241] Campbell, 'Just Planning The Art of Situated Ethical Judgment' (n 6) 100.

[242] Martha C Nussbaum, *Frontiers of Justice: Disability, Nationality, Species Membership* (Harvard University Press 2007) 70.

realization. While Sen associates capabilities to conditions prioritizing the development of the individual,[243] Nussbaum articulates her understanding of capabilities as 'what people are actually able to do and to be, in a way informed by an intuitive idea of a life that is worthy of dignity of the human being'.[244] Nussbaum goes further to articulate a list of capabilities, which would work as core elements defining the idea of human dignity as well as shaping the basic content of social justice as political goal.[245]

Nevertheless, Young's work on politics of difference is the main body of literature that takes into account that distributional injustice is based on social differentiation (cultural, symbolic and institutional), and hence not fundamentally derived from the distribution of material goods.[246] According to her, social difference based on oppression (institutional constrain on self-development) and domination (institutional constrain on self-determination) results in degradation and devaluation of individual and communities at cultural and political levels, affecting conditions for participation in decision processes related to access to goods, and, therefore, distribution patterns.[247] Then, alongside just distribution of goods and opportunities, social justice must include recognition of oppressed groups' shared identity[248] and, consequently, ensure representation and effective participation in decision-making.[249]

Drawing on politics of difference, Fraser develops a particular understanding of a bivalent approach to social justice based on both claims for distribution and recognition.[250] She makes a distinction between politics of redistribution and politics

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[243] Sen (n 238) 106.

[244] Nussbaum (n 242) 70.

[245] ibid 75. The list of capabilities encompasses: life; bodily health; bodily integrity; senses, imagination, and thought; emotions; practical reason; affiliation; coexistence with other species; control over one's environment (political and material). ibid 76–78.

[246] Iris Marion Young, *Justice and the Politics of Difference* (Princeton University Press 2011) 18.

[247] ibid 34.Young develops these concepts further in Chapter 2, analyzing oppression through its 'five faces': exploitation, marginalization, powerlessness, cultural imperialism and violence. ibid 68ff.

[248] Young (n 246) 33.

[249] ibid 183.

[250] Interestingly, the debate is polarized into two competing theoretical approaches to recognition. Fraser affiliates to a moral conception of justice, adopting the social status category for recognition and developing a theory focused on social relations and institutions' structures, and it is for this reason that she receives attention here. Honneth, in his turn, adopts an ethical conception of justice, associating recognition with identity formation and, therefore, with the psychological necessity of receiving recognition from others. He is concerned with social subjects, not institutions, deriving three principles

of recognition as two distinct paradigms of justice (with specific dynamics and remedies). Politics of redistribution is associated with claims for distributive justice remedies against socio-economic injustices rooted in the political-economic structure of the society. Politics of recognition is related to mobilization groups that aim to affirm group differences against injustices rooted in cultural domination, non-recognition, or disrespect (nationality, ethnicity, race, gender, and sexuality), once marginalized not only because of their socio-economic status, but also because of their socio-cultural identity.[251] Nevertheless, Fraser understands that both categories (socio-economic and symbolic-cultural) are fundamental and interconnected in a dual system of justice.[252] Therefore, the social justice criterion would be participatory equality, in the sense that all subjects should be 'entitled to the same degree of chances to participate in societal life' (parity principle). This would be achieved by a combination of economic and cultural justice, considering the two main claims for justice, distribution (economic aspect) and recognition (cultural aspect).[253]

Such an aspect is relevant for environmental justice struggles once it is clear that social and cultural disrespect experienced by specific communities form the basis of environmental justice political manifestations and claims. Therefore, discrimination suffered by specific groups in terms of accessing environmental decision-making or unevenly experiencing the effect of environmental burdens and harms would be the result not only of socio-economic injustices (social gap) but also of the lack of recognition of their cultural backgrounds (identity and ways of life) as well as in terms of equal treatment in law (violation of human rights). Recognition theory, in this sense, contributes to theoretical debate about environmental justice because it does not limit it to distributional analysis. It also contributes to practical approaches,

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of justice which represent dimensions of social recognition: need, equality and merit. For a detailed analysis of the reservations they make about one another, see Nancy Fraser and Axel Honneth, *Redistribution or Recognition?: A Political-Philosophical Exchange* (Verso 2003). For Honneth perspective, see also Axel Honneth, *The Struggle for Recognition: The Moral Grammar of Social Conflicts* (MIT 1996). Axel Honneth, 'Recognition and Justice: Outline of a Plural Theory of Justice' (2004) 47 Acta Sociologica 351.

[251]Nancy Fraser, 'From Redistribution to Recognition? Dilemmas of Justice in a "post-Socialist" Age' in Anne Phillips (ed), *Feminism and Politics* (OUP 1998) 432–445. The author uses gender and race issues as examples of the complexity of intersecting struggles against multiple injustices (socio-economic and cultural) when social movements try to pursue both remedies simultaneously. ibid 433.

[252] Nancy Fraser, 'Social Justice in the Age of Identity Politics: Redistribution, Recognition, and Participation' in Nancy Fraser and Axel Honneth (eds), *Redistribution or Recognition? A Political Philosophy Exchange* (Verso 2003) 49 and 85.

[253] ibid 83.

once different measures are required to deal with claims for equality and claims for enhancing social integration through recognition processes.[254] Notwithstanding, this is not a position satisfactorily embraced generally by environmental justice theory.[255]

Amongst authors who acknowledge that a distributive theoretical approach *per se* does not fully encapsulate the various meanings of socio-environmental claims, Taylor and Schlosberg have highlighted recognition as an element.[256] Taylor relates struggles for environmental justice to the development of uneven power relations and to political, economic and cultural domination reflected upon the opportunities of access to decision-making when it comes to distribution of resources and burdens.[257] She then identifies claims for autonomy as a component part of the environmental justice movement, which includes demands for sovereignty, self-determination, and respect for cultural diversity, and are linked to people's 'right to determine their own political, economic and cultural future'.[258] For Schlosberg, the call for environmental justice 'focuses on how the distribution of environmental risks mirrors the inequity in socio-economic and cultural status'.[259] Therefore, embracing Young and Fraser's critiques of liberal theories, he advocates a concept of justice with multiple and integrated meanings, encompassing recognition of cultural identity and participatory rights alongside distribution of goods and benefits.[260]

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[254] The argument of recognition as a distinct category of justice has been criticized: the main objection is that recognition can be incorporated into Rawls's theory, as an inherent precondition to distributive justice. Recognition and respect are implicit for those who enter into the original position; and self-respect may be viewed as a primary good. For further analysis, see David Miller, 'Social Justice and Environmental Goods' in Andrew Dobson (ed), *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice* (OUP 1999).

[255] David Schlosberg, 'Reconceiving Environmental Justice: Global Movements and Political Theories' (2004) 13 Environmental Politics 517, 530–534.

[256] For other critiques of distributional thinking in the environmental justice literature, see, for example, Karen J Warren, 'Environmental Justice: Some Ecofeminist Worries about a Distributive Model' (1999) 21 Environmental Ethics 151. Audrey Kobayashi and Brian Ray, 'Civil Risk and Landscapes of Marginality in Canada: A Pluralist Approach to Social Justice' (2000) 44 The Canadian Geographer 401.

[257] Taylor, 'The Rise of the Environmental Justice Paradigm' (n 82) 540–542.

[258] ibid 535–536.

[259] Schlosberg, 'Reconceiving Environmental Justice' (n 255) 522–523.

[260] ibid 536. Schlosberg mentions Wenz's argument in favour of a pluralistic theory of justice, allowing context-specific interpretations based on principles featured in different theories. Schlosberg associates such an analysis to William James's pluralistic philosophy, which argues that there is no need for universalism or uniformity. ibid 533–535.

3.2.2 Expanding Environmental Justice: The 'Specialization' of the Discourse

The interpretation of environmental justice has been expanded so that the concept can be applied to different contexts and particular problems. As a result, a plural, complex rhetoric has been developed in support of factoring equity discourse into temporally, geographically and thematically enlarged environmental concerns. However, difficulties of applying liberal theories to circumstances they were not conceived for are also apparent in this particular field (e.g. beyond the boundaries of national states and to enlarged communities of justice). Most importantly, policy and legislative strategies are demanded to respond to these thematic conceptions, making disputes over notions of justice also a matter of legitimacy and effectiveness of environmental law as a whole.[261] Considering this, this section seeks to outline the main developments focusing particularly on identifying how distinct, nuanced layers are added to the definition of environmental justice which can have implications for the normative framework within which the thesis operates.

3.2.2.1 Temporally expanded concerns: intergenerational justice

Responsibility towards future generations is at the heart of rationales for a body of environmental law, being encapsulated in the concept of sustainable development.[262] The notion of justice plays a central role for the debate surrounds the implications of distributive theories in justifying the nature and content of corresponding obligations. This, however, has proven to be a complex, controversial task, not only theoretically but also practically. Practical issues are mainly related to the means by which to ensure rights for future generations, and to the fact that some in the present are more responsible than others for current decisions with implications to the future.[263] Moreover, there is criticism on the grounds that the definition of the recipients of

[261] Ebbesson (n 219) 3.

[262] Edith Brown Weiss, 'In Fairness to Future Generations and Sustainable Development' (1992) 8 Am. UJ Int'l L. & Pol'y 19, 19.

[263] Edith Brown Weiss, 'Our Rights and Obligations to Future Generations for the Environment' (1990) 84 The American Journal of International Law 198. Jutta Brunnée, 'Climate Change, Global Environmental Justice and International Law' in Jonas Ebbesson and Phoebe Okowa (eds), *Environmental Law and Justice in Context* (CUP 2009).

distributive justice is usually limited to future human individuals or, at most, community rights, with no extension of the community of justice to non-humans.[264]

Amongst early scholarship on intergenerational justice, Weiss, for instance, analyses the relationship between generations on the basis of the notion of stewardship and human rights regimes, developing a set of principles that orient the content of future generations' rights while conditioning the behaviour of present generation. This includes conserving 'options' (we owe to future generations an environment capable of sustaining life and sufficient resources to enable them to achieve their own goals), of 'quality' (to pass on environmental conditions no worse than received), and 'access' (equal right to access resources).[265] Wissenburg, in turn, advocates the compatibility of liberal theories with intergenerational justice concerns based on Rawls's 'saving principle', according to which such a relationship implies considerations of care rather than justice, based on intuitive or natural sentiments of responsibility/solidarity/care for descendants, in particular for proximate generations.[266] Hence, he develops what he calls 'principle of restraint', referring to a commitment to avoid destroying goods in cases where they are irreplaceable, as well as justifying compensation measures.[267]

Barry, by contrast, emphasizes that ensuring justice for future generations depends on strengthening distributive justice for the present generation. This highlights that not all of the present are equally responsible for environmental degradation at the same level and therefore do not bear the same obligations towards caring for future generations.[268] Also, dissenting from mainstream understandings, Barry criticizes the concept of sustainable development as a medium for interpreting obligations towards future generations, once it fashions '[…] a conception of progress in which social

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[264] John Barry, 'Green Politics and Intergenerational Justice: Posterity, Progress and the Environment' in Ben Fairweather and others (eds), *Environmental Futures* (Macmillan 1999) 59.

[265] Weiss (n 263) 200–202. This is in accordance with the concept of sustainable development adopted by the Brundtland Report (1987).

[266] Rawls reformulates this account considering criticism of his first work (1973) to include the ignorance of those in the original position about the generation they would belong to. Rawls, *Political Liberalism* (n 232) 274.

[267] Marcel Wissenburg, 'An Extension of the Rawlsian Savings Principle to Liberal Theories of Justice in General' in Andrew Dobson (ed), *Fairness and Futurity: Essays on Environmental Sustainability and Environmental Justice* (OUP 1999) 193.

[268] Barry, 'Green Politics and Intergenerational Justice' (n 264) 69.

development is still largely within terms of production and consumption of good and services'. He proposes the idea of development associated with that of 'progress' (meaning that 'the future will be better that the present'), but emphasizing that what progress entails should be determined democratically through increasing human autonomy and self-determination (of individuals and groups).[269]

Importantly, despite differences, the intergenerational justice approach offers grounds for placing responsibilities on governments towards protection of ecological processes and risk management either through implementation of policies or through controlling private initiative. Consequently, it can also allow for public interest litigation. However, it arguably remains within the constraints of sustainable development rhetoric. In this regard, the definition of the content of corresponding obligations reflects debates on weak and strong sustainability.

3.2.2.2 Geographically expanded concerns: global environmental justice

The geographical expansion of justice concerns in relation to the environment has raised theoretical struggles which are conventionally shared within a larger global justice framework. This encompasses the scope and limits of applying moral arguments designed for individuals to nation-states acting collectively in a global scale.[270] Most importantly, though, it has also directly influenced international environmental law developments, and this is of particular interest. The use of fairness rhetoric in international environmental negotiations embodies discursive disputes in the context of the North-South relationship.[271] From sustainable development debates,[272] to depletion of the ozone layer,[273] poverty and access to resources,[274]

[269] ibid 66–68.

[270] For an overview of the scholarship, see Thomas Nagel, 'The Problem of Global Justice' (2005) 33 Philosophy & Public Affairs 113.

[271] Dinah Shelton, 'Describing the Elephant: International Justice and Environmental Law' in Jonas Ebbesson and Phoebe Okowa (eds), *Environmental Law and Justice in Context* (CUP 2009) 68.

[272] Article 7 of 1992 Rio Declaration.

[273] Karin Mickelson, 'Competing Narratives of Justice in North—South Environmental Relations: The Case of Ozone Layer Depletion' in Jonas Ebbesson and Phoebe Okowa (eds), *Environmental Law and Justice in Context* (2009) 297.

[274] Martinez-Alier (n 94).

sovereignty,[275] biodiversity,[276] climate change,[277] and corporate activities,[278] the justice frame has been applied to a global scale, drawing on arguments of historical responsibility for environmental harms and claims of developing countries for their right to development.

The principle of common but differentiated responsibilities has become the main medium for justice rhetoric in multilateral environmental agreements.[279] It conveys that states' contribution to environmental problems is differentiated (historical responsibility), and also is their economic and technological capacity to tackle solutions (respective capabilities).[280] Therefore, the principle invokes the justice argument in order to justify differentiated responsibilities, in terms of mediating the allocation of benefits and burdens, as well as the costs of mitigation measures through the transference of financial and technological resources (both distributive and corrective justice dimensions).[281] Notwithstanding, the content of such obligations and the constraints of their binding nature remain disputable in all the fields.[282]

Notably, however, environmental global justice is tied up with local environmental justice concerns because poor and minority populations are likely to be disproportionately affected by global processes. Consequently, governance scales and structures to tackle environmental inequality shall operate equally at global, national and local levels. This is particularly striking, for example, in climate change debates, which is of interest to the subject of this thesis. In this regard, mitigation measures triggering distributive justice at the global scale (on the grounds of historic

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[275] André Nollkaemper, 'Sovereignty and Environmental Justice in International Law' in Jonas Ebbesson and Phoebe Okowa (eds), *Environmental Law and Justice in Context* (CUP 2009).

[276] UN Convention on Biological Diversity.

[277] Brunnée (n 263).

[278] Jonas Ebbesson, 'Piercing the State Veil in Pursuit of Environmental Justice' in Jonas Ebbesson and Phoebe Okowa (eds), *Environmental Law and Justice in Context* (CUP 2009). Hans Christian Bugge, 'The Polluter Pays Principle: Dilemmas of Justice in National and International Contexts' in Jonas Ebbesson and Phoebe Okowa (eds), *Environmental Law and Justice in Context* (CUP 2009).

[279] Christopher D Stone, 'Common but Differentiated Responsibilities in International Law' (2004) 98 American Journal of International Law 276, 276.

[280] Mickelson highlights that such a consensus can be related to understandings built on the negotiations of 1967 Montreal Protocol on Substances that Deplete the Ozone Layer, drawing on approach developed by the South. Mickelson (n 273) 297.

[281] Shelton (n 271) 68.

[282] Stone (n 279) 277. Brunnée (n 263) 325–326.

responsibility and burden-sharing) and at the national scale (in terms of impacts of domestic emission mitigation commitments) are a much-explored aspect. Alongside debates on under the UNFCCC regime on determining who pays the cost and through what mechanisms, there is also extensive consideration of the (in)adequacy of a justice frame itself for justifying and orienting climate change mitigation strategies.[283]

Nonetheless, adaption is mainly linked to adoption of action at the local scale. In this respect, Adger emphasizes that adaptation is closely related to the spatial distribution of impacts and social distribution of adaptive capacity to be managed locally, at the level of the climate-impacted natural resource of livelihood (not forgetting adaptation towards threats to non-human species, which is a universal matter). Hence, there is a clear role for regulatory initiatives in climate change adaptation particularly at the local level in terms of how to promote 'equality to adapt' in order to minimize the impacts of climate change on the most vulnerable parts of society.[284] Here, EA can play a key role if capable of promoting assessment of climate change-related vulnerability and adaption measures within development consent.[285] This will be examined further in Section 4.3.1.1.

3.2.2.3 Expanding the community of justice: ecological

When debating whether the community of justice should be expanded to include nonhuman nature, environmental justice theorists have drawn upon ways of rendering environmental ethics approach and liberal theories of justice compatible. This is a disputable debate on the moral status of nonhuman nature (e.g. whether enjoying intrinsic value or (un) equal moral worth), in terms of what are the broader values to be considered in environmental decision-making, as well as how to establish criteria for weighing up and possibly trading off competing interests.

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[283] For an informed account of climate change distributive implications, from liberal to communitarian responses, see Ch 1 in Eric A Posner and David Weisbach, *Climate Change Justice* (Princeton University Press 2010). See also ibid Ch 4 and Ch 5. See also Eric A Posner and Cass R Sunstein, 'Climate Change Justice' (2008) 96 Georgetown Law Journal 1565.

[284] W Neil Adger, 'Scales of Governance and Environmental Justice for Adaptation and Mitigation of Climate Change' (2001) 13 Journal of International Development 921. See also W Neil Adger, *Fairness in Adaptation to Climate Change* (MIT 2006).

[285] Ethan Strell, 'Environmental Impact Statements Beginning to Address Climate Resiliency' (2014) 25 Environmental Law in New York 1.

Some argue for accommodating nonhuman interest within the boundaries of liberal theories. Drawing on Rawls's distinction between public reasoning (moral agents agreeing on a conception of good, which is part of basic constitutional principles)[286] and comprehensive ideals (issues that are not a question of justice but that can be subject to deliberation thorough democratic processes), Bell offers the concept of 'liberal ecologism'.[287] Although duties to nonhuman nature are not a question of justice (and hence are excluded from constitutional debate),[288] liberal states can legitimately promote policies for ecological or ecocentric reasons considering that they have been endorsed through democratic processes[289] (therefore dependent on majority support).[290] Consequently, only humans are moral agents and, therefore, entitled to citizenship, while nature is only worthy of moral consideration and entitled to protection,[291] to be promoted under stewardship schemes.[292]

Others elaborate on liberal theories to further justify including nonhuman nature within the community of justice, presenting a different standing point. Amongst them, distinct positions express different understandings about the identification of recipients of justice,[293] as well as the principle of distributive justice to be applied.[294] In this field, Baxter includes in his account of ecological justice the distribution of benefits and burdens not only among human beings but also the rest of the natural

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[286] Rawls, *A Theory of Justice* (n 232) 505.

[287] Derek R Bell, 'Political Liberalism and Ecological Justice' (2006) 28 Analysis & Kritik 206, 207.

[288] Rawls, *Political Liberalism* (n 232) 246–247.

[289] Bell (n 287) 215.

[290] Derek Bell, 'How Can Political Liberals Be Environmentalists?' (2002) 50 Political Studies 703, 721. A similar argument is put forward by Barry in John Barry, 'Greening Liberal Democracy: Practice, Theory and Political Economy' in John Barry and Marcel Wissenburg (eds), *Sustaining Liberal Democracy: Ecological Challenges and Opportunities* (Palgrave Macmillan 2001).

[291] Bell (n 287) 219–220.

[292] Rawls, *Political Liberalism* (n 232) 247.

[293] For Baxter, for example, both species and individual specimens are recipients of ecological justice. Brian Baxter, *A Theory of Ecological Justice* (Routledge 2004). For Taylor, this includes any 'entity having a good of its own', what encompass animals and plants. Paul W Taylor, *Respect for Nature: A Theory of Environmental Ethics* (Princeton University Press 1986). For Johnson, this includes also the interests of ecosystems. Lawrence E Johnson, *A Morally Deep World: An Essay on Moral Significance and Environmental Ethics* (CUP 1993).

[294] There is some dispute between biospherical egalitarianism (equal consideration of each member of the community) and the argument of the intrinsic value (unequal moral worth). For a comparative analysis of the diverse discourses, see: Dobson (n 120) 63.

world. Being all living entities worth of moral consideration[295] (although on the grounds of different moral weights),[296] their welfare interests shall be ensured. Hence, they are recipients of distributive justice in terms of their fair share of environmental resources (primary goods), which implies 'not to deprive them without good moral reason of the environmental basis of their continued existence and ability to reproduce themselves' (right of access and to use).[297] Therefore, contrary to Bell, Baxter argues that institutional arrangements must be made through constitutional provisions,[298] including, for example, guardianship.[299]

Other approaches express concern for involving nature interests in democratic processes and discourses. Eckersley, for example, drawing on Habermas's discursive democracy, identifies a form of trusteeship held by humans for nature to explain how non-human nature's speech would be represented, as well as uses the precautionary principle as a tool for ensuring that ecological concerns would be considered within decision-making processes.[300] In a different way, Schlosberg expands his three-fold conception of justice towards recognition to nature, which might be supported by either nature's intrinsic value or human self-interest and argues for the widening of

[295] Baxter (n 293) 51–56. Baxter builds his argument criticizing authors who advocate moral status only to individual sentient animals. See: David DeGrazia, *Taking Animals Seriously: Mental Life and Moral Status* (Cambridge University Press 1996). Peter Singer, *Animal Liberation* (2nd edn, Pimlico 1995).

[296] The author does not consider different species should rank as moral equals with each other, attaching different moral weights to different kinds of organism and referring to basic welfare interests as criteria for conflict resolution. With respect to 'merely living', the attribution to claims in ecological justice lies on the populations; whereas attributing such claims to populations or individuals in the case of sentient shall consider how individualized they are. Baxter (n 293) 129–135.

[297] ibid 86 and 139.

[298] ibid 101. When it comes to possible models for those arrangements, the author suggests an elected guardianship body, but refers also to other solutions. For an analysis of ideal forms of institutional arrangements which should be aimed at in order to pursue the goal of ecological justice, see ibid 163ff.

[299] Baxter (n 293) 163ff. Low and Gleeson also give an account of ecological justice that expands moral rules to nonhuman nature although attributing it distinct moral value. However, the principles they introduce do not consider distributive aspects. They are: a) 'every natural entity is entitled to enjoy the fullness of it's own form of life' and b) 'all life forms are mutually dependent and dependent on non-life forms'. Then, they create conflict-resolution rules when conflicting values are in place: a) life has moral precedence over non-life; b) individualised life forms take moral precedence over life forms that exists only as communities; c) humans take precedence over other life forms. Brendan Gleeson and Nicholas Low, *Justice, Society and Nature: An Exploration of Political Ecology* (Routledge 2002) 156–157.

[300] Robyn Eckersley, *The Green State: Rethinking Democracy and Sovereignty* (MIT Press 2004) 130–135.

public standing throughout different social groups within environmental decision-making. [301]

To sum up, it turns out that notwithstanding the sophisticated nature of the arguments or the guiding theoretical traditions, distinct approaches to a notion of ecological justice, based on identifying moral responsibilities towards nonhuman nature, suggest similar institutional arrangements. These include stewardship or guardianship structures and the expansion of standing rules for contesting decisions involving nonhuman welfare. This is also the solution addressed by proposals towards assigning rights to nature,[302] although its relevance and practical implications to environmental law structures and institutions remains a cloudy issue.

3.2.2.4 Returning to the sustainability frame

Despite efforts to approximate liberal theories and environmental ethics with the purpose of justifying institutional arrangements to accommodate ecocentric concerns, there remains scepticism. Authors such as Dobson and Bosselmann, for example, conclude that liberal theories and a notion of ecological justice are not always compatible. This is for considering that liberalism is essentially anthropocentric and reinforces individualism, [303] resulting only in 'contingently green policy'. [304] Bosselmann also criticises environmental ethics for its inconsistency with democratic processes.[305] These authors therefore return to the frame of sustainability as main conceptual tool, offering their own understandings over its meaning and interplay with distributive justice.

Dobson presents a useful and comprehensive account of the theoretical/conceptual relationship between environmental sustainability and social justice through building

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[301] David Schlosberg, *Defining Environmental Justice: Theories, Movements, and Nature* (OUP 2009).

[302] See, for example, Peter Burdon, *Exploring Wild Law: The Philosophy of Earth Jurisprudence* (Wakefield Press 2011). For potential normative approaches, see The Earth Charter; Declaration of the Rights of Mother Earth.

[303] Dobson (n 120) 240.

[304] Klaus Bosselmann, 'Ecological Justice and Law' in Ben Richardson and Shepard Wood (eds), *Environmental Law for Sustainability: A Critical Reader* (Hart 2006) 144.

[305] ibid 130–131.

a typology of the multiple meanings assigned to each term and the varying ways they relate to each other.[306] He concludes, however, that this relationship is 'fundamentally a contingent one', rather than necessary, considering that social justice agenda (distributional aims) will not always be designed to encompass environmental sustainability goals (nature preservation).[307] In his understanding of sustainability, sustainable development represents a dimension mainly concerned with maintaining or increasing human welfare, whereas environmental sustainability is related to the maintenance of critical natural capital. Therefore, the latter would account for a preferable framework for allowing mainstreaming other motivations than human interest and for a potentially broader community of justice.[308]

In his account of the debate, Bosselmann proposes an understanding of ecological justice departing from a notion of sustainability that includes concern for nonhuman nature (interspecies justice) alongside inter- and intragenerational justice. Although still remaining an anthropocentric conception,[309] it would reinforce the ecological sustainability dimension of the concept for firmly including recognition of the intrinsic value of 'nonhuman others' (critiquing weak sustainability approaches).[310] This has practical implications for emphasizing the need to take into account ecological integrity into the formulation and development of policy and legal tools.[311]

By contrast, Agyeman and others[312] build upon the UK's responsiveness to environmental justice claims (see Section 2.2) and opt for a notion of sustainability that expresses the linkage between justice and the environment through emphasizing

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[306] Dobson classifies three conceptions of sustainability based on the type of capital they seek to sustain (critical natural capital, biodiversity, nature's value). Dobson (n 120) 39. He then classifies theories of justice according to key questions they address, mainly theory's structure (impartiality v. substantiveness; procedural v. consequentialist; universalism v. particularism); what is distributed (environmental goods and bads; benefits and burdens; primary goods; preconditional goods); distributive principle (needs; desert; entitlement; equality; utility; to the benefit of the least advantage; multiple principles). ibid 63.

[307] Dobson (n 120) 240.

[308] ibid 60–61.

[309] Bosselmann (n 304) 155.

[310] ibid 131.

[311] The author mentions as examples of ecosystemic approaches to law-making the Convention on Biological Diversity (1992), Protocol on Environmental Protection amending the 1959 Artic Treaty (1991), World Charter for Nature (1998), the Earth Charter (2000). ibid 161–162.

[312] Julian Agyeman, Robert D Bullard and Bob Evans, 'Exploring the Nexus: Bringing Together Sustainability, Environmental Justice and Equity' (2002) 6 Space and Polity 77, 78.

social justice as key element. 'Just-sustainability', as they call it, should then result in sustainability policy and legislation agendas which clearly encompass equity claims as a means of fostering environmental protection.[313] The authors also highlight the relevance of discussing a rights approach alongside equity and sustainability dimensions, which includes consideration of both substantive (right to a clean and healthy environment) and procedural rights (access to justice, access to information and participation).[314] In this respect, although procedural rights are already implied in legislation implementing the Aarhus Convention framework, the justiciability of a fundamental right to a clean and healthy environment is still controversial in EU Law.[315] For an example of a rights-based approach to environmental protection, see Section 5.2 on Brazil.

Approaching environmental justice from a sustainability perspective seems to be pragmatic for operating within an existing and well-established conceptual framework, one which does not rely solely on moral considerations. Notwithstanding, such an approach remains linked to mainstream legal and political responses, and therefore vulnerable to current critiques addressed to sustainable development discourses. These include the conceptual ambiguity and the tension between strong and weak sustainability, which does not necessary leads to ensuring strong consideration either of ecocentric values or distributional aspects.

3.3 Defining Environmental Justice in the Context of Urban-Environmental Decision-making

3.3.1 Thinking about justice geographically in the urban locus

Planning has also long engaged with theories of justice,[316] as a means of opposing an emphasis on efficiency and cost-benefit analysis.[317] Notions of justice related to

[313] ibid. See also Agyeman (n 92). Agyeman and Evans (n 114).

[314] Agyeman, Bullard and Evans (n 312) 85.

[315] Ludwig Krämer, 'The Environmental Complaint in EU Law' (2009) 6 Journal for European Environmental & Planning Law 13.

[316] Campbell and Marshall (n 7).

[317] Gordon H Pirie, 'On Spatial Justice' (1983) 15 Environment and Planning A 465, 469.

procedural concerns have been more prominent, which have informed communicative theories (in particular in the 1960s and 1970s) and resulted in the institutionalization of participatory mechanism (e.g. consultation, referendums, and representative local councils).[318] Questions of substance have been brought to the fore, highlighting the relevance of policy and decision-making being informed by judgements based on values and principles.[319] Consequently, calls for substantive equity and diversity also challenge the unequal distribution of benefits and burdens of planning decisions;[320] as in environmental justice debates, the notions of justice at the core of the most influential formulations vary, and not always result in practical normative frameworks.

In this field, debates about justice are underpinned by disputes over the nature of space (focusing mainly on the effects of capitalism and neoliberal urban reforms) and spatial implications of socio-economic and environmental processes (how social justice and space interact through decision-making and institutional arrangements). This implies a 'geography of injustice', as noted by Smith,[321] and raises questions about what drives intervention in land and property and what social rights entail in the urban context. Therefore, alongside the influence of liberal theories of justice and politics of difference, the basis for theorizing territorial aspects of justice is also formed by Marxists interpretations of space as a social product. It is the so-called 'spatial turn' in both law and geography scholarship dealing with urban questions.[322] This derives mainly from Lefebvre's and Harvey's works, both of whom acknowledge space as socially produced and therefore relational: space is constantly shaped by social processes and, concomitantly, spatial forms condition social life.[323]

Lefebvre's formulation assumes a prominent position. He explains such an entangled relationship by interpreting space as 'product-produced', as 'product-producer', and

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[318] Fainstein (n 7) 28–30.

[319] Campbell, 'Just Planning' (n 7) 92.

[320] Fainstein (n 7) 67–76.

[321] David M Smith, *Geography and Social Justice* (Blackwell 1994).

[322] See: Barney Warf and Santa Arias (eds), *The Spatial Turn: Interdisciplinary Perspectives* (Routledge 2008). Nicholas Blomley, David Delaney and Richard T Ford (eds), *Legal Geographies Reader* (Blackwell Oxford 2001).

[323] Henri Lefebvre, *The Production of Space* (Donald Nicholson-Smith tr, Blackwell 1991) 25. David Harvey, *Social Justice and the City* (University of Georgia Press 2008) 25.

as 'product-medium'.[324] Hence, both material and symbolic meanings of space are socially constructed through social relations derived from the struggle between heterogeneous groups through participation, social interaction and exchange.[325] Also, his idea of 'the right to the city' is particularly influential. He highlights two key aspects for a fair urban space: first equitable access to and use of public spaces (what he calls 'right to appropriation', considering the 'use value' rather than the 'capital value'), and, second, the central role of city inhabitants in decision-making impacting on the production of space ('right to participate'). However, as noted by Purcell, despite having largely informed research and political responses, Lefebvre's right to city remains highly theoretical and abstract,[326] and therefore efforts to devise new strategies growing out of such an open-ended notion call for grounded interpretations of what the right to city entails, as I discuss further below.

From a Marxist and critical geography perspective, Harvey's contribution relates particularly to his call for a contextualized and relational understanding of social justice, situated in human practice and dependent upon social position and historical and geographical context, rather than an abstract conceptual approach such as proposed by liberal arguments.[327] In this sense, the meaning of distributive mechanisms of income and of mode of production, as well as the concept of social justice itself, is determined according to varying social conditions.[328] Harvey focuses on how principles of social justice relate to the territorial allocation of resources and burdens and urban planning principles and practices, and how these are key to the notion of territorial distributive justice. He formulates social justice as 'just distribution just arrived at',[329] suggesting as the basis for distribution a three-fold set of criteria comprised of need, contribution to the common good, and merit.[330] Harvey then concludes that 'the spatial organization and pattern of a regional investment should be such as to fulfil the needs of the population' and that 'deviation in the

[324] Lefebvre (n 323) 34.

[325] Particularly, struggles between 'representations of space' conceived by hegemonic groups, and 'representational spaces' experienced by non-hegemonic groups. ibid 67.

[326] Purcell, 'Excavating Lefebvre' (n 76).

[327] Harvey, *Social Justice and the City* (n 323) 15.

[328] ibid 294–295.

[329] ibid 98.

[330] ibid 100.

pattern of territorial investment may be tolerated if they are designed to overcome specific environmental difficulties'.[331]

Fainstein introduces an insightful example of urban theory of justice which associates these different theoretical perspectives (combining Rawls's difference principle with Lefebvre's and Harvey's formulations and politics of difference).[332] As Schlosberg proposes in the environmental justice debate, Fainstein also advocates a three-fold concept of justice based on equity, democracy, and diversity. However, she gives central attention to a substantive concept of justice based on equity for understanding that emphasis on procedural aspects only 'works properly in situations of equal opportunity'.[333] This requires that distributional outcomes of decision-making be measured in terms of favouring the less well-off not only economically but also politically, socially and spatially.[334] She complements this by combining Nussbaum's capabilities approach with the purpose to define content.[335] Fainstein concludes:

> Judgements would be based on whether their gestation was in accord with democratic norms, whether their distributional outcomes enhanced the capabilities of the relatively disadvantaged, and whether groups defined relationally achieved recognition from each other. […] Applying the difference principle amplified by the capabilities approach, such that our concern extends beyond primary goods, we should opt for that alternative that improves the lot of the relatively disadvantaged or minimally does not harm them.[336]

Fainstein then derives a normative framework encompassing a set of principles for evaluating urban policies and institutions towards just-orientated intervention at the local level.[337] Accordingly, equity-driven norms include affordable housing policy,

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[331] ibid 107–108 and 116. Drawing on Young's work, Harvey offers a list of general just-driven norms: non-exploitation of labour power, elimination of forms of marginalization of social groups' access to political power and self-expression, elimination of cultural imperialism, humane forms of social control, and mitigation of the adverse ecological impacts of social projects. David Harvey, *Spaces of Hope*, vol 7 (University of California Press 2000) 400.

[332] Fainstein (n 7) 37.

[333] ibid 28.

[334] ibid 36.

[335] ibid 54–56.

[336] ibid 54–55.

[337] Fainstein clarifies that she is proposing 'non-reformist reforms' towards 'incremental changes', unlike authors such as Harvey, who argues for the impossibility of justice in cities within global capitalism and therefore argue for revolutionary change. Additionally, she is concerned with the

no involuntary relocation, and the requirement that major projects should provide direct benefits to low-income population. Diversity, which means non-discrimination based on gender or ethnicity, for instance, should be enhanced through accessible public space, zoning for inclusion, mixed land uses, and wider access to opportunity by vulnerable groups. Finally, democracy takes an instrumental role, for consultation processes and representation by advocates enhances broad participation of diverse interests in decision-making.[338]

Such a combined approach of distributive analysis and recognition of difference is also the target of criticism. Based on Lefebvre's and Harvey's relational conceptions of space and its social production and representation, as well as Young's politics of difference, Stanley posits that the analytic focus of justice should shift from distribution to difference.[339] According to her, this would shed light on how mechanisms of production and representation of space contribute to the creation and maintenance of social exclusion and difference arising from dominant authority and power, and therefore to 'the making, normalization, and disqualification of meaning in environmental justice' as well.[340] Stanley, nevertheless, does not provide answers about how to translate such a theoretical and conceptual analysis into practice.

Importantly, there is also an effort to factor a more sophisticated notion of 'spatial justice'. This derives from criticism of current approaches that, for remaining attached to liberal social justice conceptions, would be constrained to denote merely 'concept context' instead of offering 'concept content', as described by Pirie;[341] that is to say,

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achievement of the just rather than the good, which brings her work closer to Sen's and Nussbaum's understandings of justice. ibid 170.

[338] ibid 172–174. For a similar list of planning and policy guiding based on 'planning for distribution', 'planning for recognition', and planning for encounter', see: Ruth Fincher and Kurt Iveson, *Planning and Diversity in the City: Redistribution, Recognition and Encounter* (Palgrave Macmillan 2008). Also, Arnold offers similar practical orientation when considering opportunities for factoring environmental justice into land use planning, indicating the necessary coordination with plans in terms of substance (allowed uses) and process (access to information and participation), with assessment of impacts on health and safety of residents as well as on community character, observation of non-conformance rules (that can result in public nuisance), and mechanisms such as conditional uses, performance zoning (standards) and buffer zones. Craig Anthony Arnold, 'Land Use Regulation and Environmental Justice' (2000) 30 Environmental Law Raporter 10395.

[339] Anna Stanley, 'Just Space or Spatial Justice? Difference, Discourse, and Environmental Justice' (2009) 14 Local Environment 999, 1001. The author particularly mentions Schlosberg regarding environmental justice scholarship, but it is also the case of Fainstein in the urban geography field.

[340] ibid 1003–1004.

[341] Pirie (n 317) 470.

remaining a 'geographically informed version of social justice' (territorial social justice).[342] However, spatial justice is also a disputable concept. For instance, whereas Pirie (in urban geography) turns to reinforce a notion of space contextualized as a social product (referring to Lefevbre's and Harvey's theories),[343] Philippopoulos-Mihalopoulos (writing at the intersection of law and geography) engages with philosophical discourse of emplacement and embodied ethics.[344] Others debate the nature of the causal relations between social and spatial injustices. In this respect, Soja posits that causes of social injustices always have spatial aspects at their core (which are not merely a subcategory of the former); therefore, strategies to tackle social injustice should focus on spatial impacts.[345] By contrast, Marcuse understands that spatial injustice is part of broader processes of social injustice (socio-economic and politic struggles) and should be addressed accordingly.[346] The focus on theory means that none of these authors, however, offers a sufficiently elaborated conceptual framework that could lead to shaping guidelines and practices.

Orientation for a grounded and practical perspective can be found in law and geography scholarship, for justice is also a medium for examining how law shapes and legitimizes spatial and social order, within processes of 'spatializing law' and 'legalizing space', as suggested by Blomley.[347] In this regard, Mitchell debates social justice in the urban context by exploring its linkages with Lefevbre's idea of the right

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[342] Andreas Philippopoulos-Mihalopoulos, 'Spatial Justice: Law and the Geography of Withdrawal' (2010) 6 International Journal of Law in Context 201, 206. Andreas Philippopoulos-Mihalopoulos, 'Law's Spatial Turn: Geography, Justice and a Certain Fear of Space' (2011) 7 Law, Culture and the Humanities 187, 189.

[343] Pirie (n 317) 469.

[344] In his words: '[…] This means that spatial justice is the ultimate expression of the claim to one's unique spatial position which by necessity excludes all others: the fact that only one body can occupy a specific space at any specific moment is the phenomenological basis of spatial conflicts. […] Spatial justice is an exigent ethical exercise that demands a radical gesture of withdrawal: to withdraw before the claim of the other is what spatial justice demands'. Philippopoulos-Mihalopoulos, 'Spatial Justice' (n 342) 202. I suggest reducing this quote to the bare minimum.

[345] Edward Soja, 'The City and Spatial Justice' in Bernard Bret and others (eds), *Justices et Injustices Spatiales*, vol 1 (Presses Universitaires de Paris Ouest 2010) 60–62. See also Edward Soja, *Seeking Spatial Justice*, vol 16 (University of Minnesota Press Minneapolis 2010).

[346] Peter Marcuse, 'Spatial Justice: Derivative but Causal of Social Justice' in Bernard Bret and others (eds), *Justices et Injustices Spatiales* (Presses Universitaires de Paris Ouest 2010) 88–90. See also Peter Marcuse, 'From Critical Urban Theory to the Right to the City' (2009) 13 City 185.

[347] Nicholas Blomley, 'Form What? To so What? Law and Geography in Retrospect' in Jane Holder and Carolyn Harrison (eds), *Law and Geography: Current Legal Issues*, vol 5 (OUP 2003) 27.

to the city and access to public spaces,[348] reinforcing the relevance of the rights discourse to foster social change.[349] Mitchell identifies claims for rights as part of the process of producing space, for social struggles between different interests shaping the creation of abstract and differentiated spaces (Lefebvre's categories) reflect upon law and policy when institutionalized.[350] Also, he relates public space to representation, in accordance with Young and Fraser. In this respect, planning of and accessibility to public spaces would lead to 'the ability of various groups to represent themselves'.[351] Hence, Mitchell identifies the public space as the space where social struggles are placed and, consequently, where social justice discourse is structured,[352] or 'the space of justice'.[353] The development of the idea of the right to the city into a consistent rights-based approach will be further addressed in Chapter 5, with regards to Brazilian law.

3.3.2 Urban sustainability

The search for a situated notion of urban-environmental justice implies giving some account of urban sustainability. This is relevant in order to consider the role of environmental justice in mainstreaming distributive issues into sustainability efforts fit for the urban context. The difficulty is that, like sustainable development,[354] urban

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[348] Don Mitchell, *The Right to the City: Social Justice and the Fight for Public Space* (Guilford Press 2003) 18.

[349] ibid 25. See also: Nicholas K Blomley, *Law, Space, and the Geographies of Power* (Guilford Press New York 1994).

[350] Mitchell, *The Right to the City* (n 348) 29.

[351] 'What makes a space public – a space in which the cry and demand for the right to the city can be seen and heard – is often not its preordained publicness. Rather, it is when, to fulfill a pressing need, some group or another takes space and through its actions makes it public. The very act of representing one's group to a larger public creates a space for representation'. [I wouldn't suggest using footnotes for quotes] ibid 34–35. See also: Don Mitchell, 'Political Violence, Order, and the Legal Construction of Public Space: Power and the Public Forum Doctrine' (1996) 17 Urban Geography 152. Don Mitchell, 'The Annihilation of Space by Law: The Roots and Implications of Anti-Homeless Laws in the United States' (1997) 29 Antipode 303.

[352] Mitchell, *The Right to the City* (n 348) 233.

[353] ibid 235.

[354] There is no need to replicate the vast debate on sustainable development. For key references in international documents, see: (1) 1972 Stockholm Declaration, Annex I, II, 4; 8; 14; (2) 1972 Club of Rome's Limits to Growth Report; (3) 1986 Declaration on the Right to Development (UN General Assembly Resolution 41/128); (4) 1987 Brundtland Report ('Our Common Future'); (5) 1992 Rio Declaration (principle 4); (6) 2002 Johannesburg Declaration (Rio + 10). For an overview of the most recognizable modeling to sustainable development (such as the 'three ring circus', the 'Russian dolls', the 'concentric circles', as well as ecocentric and technocentric approaches), see Roger Levett, 'Tools,

sustainability is addressed under a wide range of theoretical, technical and policy perspectives, remaining open for interpretation and therefore leading to constrained implementation. This is testimony, as noted by Allen, that interpreting urban sustainability is a normative and political task, and therefore biased by and dependant upon understandings of nature, society, equality and power, as well as science and development goals.[355] A number of formulations are explored within political ecology studies (mainly on the impacts of industrialisation-urbanisation and of globalisation on urban governance and livelihoods),[356] urban ecology (experimenting with notions of carrying capacity and ecological footprint)[357] and economics (largely interested in measuring urban systems performance).[358] Moreover, while international documents elaborate on general principles and guidelines, policy statements usually emphasize standards and indicators. In such a complex setting, this section seeks to address, particularly, elements capable of shaping an urban sustainability normative dimension to inform legal and regulatory frameworks.

This analysis departs from scanning international debates, which have long incorporated concerns with increasing world urbanization and consequent socio-spatial segregation and environmental degradation by linking healthy living conditions in human settlements to the realisation of human rights (civil, economic, social, cultural and environmental rights).[359] However, it is particularly from the 1990s debates on development and sustainability that the building of a consistent policy framework for sustainable urban development was consolidated. This ranges from documents deriving from the major international conferences on human

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Techniques and Processes for Municipal Environmental Management' (1997) 2 Local Environment 189.

[355] Adriana Allen, 'Managing Sustainable Urban Development: A Technical or Political Task?' in KR Gupta (ed), *Urban Development Debates in the New Millennium: Studies in Revisited Theories and Redefined Praxes* (Atlantic 2005) 20.

[356] See: Jorge E Hardoy, Diana Mitlin and David Satterthwaite, *Environmental Problems in an Urbanizing World: Finding Solutions in Cities in Africa, Asia and Latin America* (Routledge 2013).

[357] See: Mark Roseland, 'The Eco-City Approach to Sustainable Development in Urban Areas' in Dimitri Devuyst (ed), *How Green is the City* (2001). William Rees, 'Revisiting Carrying Capacity: Area-Based Indicators of Sustainability' (1996) 17 Population and Environment 195.

[358] See: I Sachs and D Silk, *Strategies for Sustainable Development* (United Nations University 1990). See also, for an account of an urban systems economics framework for assessing conditions for high performance cities: Peter Nijkamp (ed), *Sustainability of Urban Systems: A Cross-National Evolutionary Analysis of Urban Innovation* (Averbury 1990).

[359] For example: 1966 International Covenant on Economic, Social and Cultural Rights; 1966 International Covenant on Civil and Political Rights; 1989 Declaration on the Right to Development.

settlements and sustainable urban development under the United Nations (UN-Habitat framework), to the adoption of Agenda 21 (at the Rio Earth Summit, 1992), the World Development Goals, and regional and local campaign initiatives. Conversely, sustainable development discourse has increasingly influenced urban policy.

Key international documents on the topic encompass both a rights-based approach and concerns with urban-environmental and socio-economic justice issues. They refer to general underlying principles of urban sustainable development participatory urban governance and the pursuit of local sustainability and social equity in urban contexts. This includes, amongst others, preservation of biodiversity and ecosystems, resource management, realisation of peoples' basic needs, employment and income generation, poverty reduction, cultural diversity and non-discrimination, equal access to resources and infrastructure (housing, land, water, sanitation and waste management), energy and transport efficiency.[360] More recently, the Post-2015 Sustainable Development Agenda (September 2015, New York) also recognised the need for an urban sustainable goal within the new 17 sustainable development goals to be achieved by 2030.[361] Goal 11 targets 'mak[ing] cities and human settlements inclusive, safe, resilient and sustainable', and adds mitigation and adaptation to climate change and resilience to disasters within main strategies.[362]

However, the set of general goals and commitments addressed in these statements of intention do not clarify fully what legal aspects a notion of urban sustainability entails. Some critical appraisal is demanded. In this regard, authors such as Campbell[363] and Allen[364] have shed light on the hidden contradictions of urban sustainability as a policy agenda. They suggest that the inherent tensions between urban sustainability's multiple-dimensional yet competing goals must be taken into

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[360] See: Vancouver Declaration on Human Settlements (First UN Conference on Human Settlements - Habitat I -, Vancouver, 1976); Agenda 21 (1992); Agenda Habitat (Second UN Conference on Human Settlements - Habitat II -, Istanbul, 1996); Declaration on Cities and other Human Settlements in the New Millennium[360] (Istanbul + 5, New York, 2001).

[361] Available at <https://sustainabledevelopment.un.org/post2015/transformingourworld> accessed 12 October 2015.

[362] This will is subject to the 'New Urban Agenda' to be discussed at the Habitat III, taking place in 2016, as part of the Post-2015 Development Agenda. General Assembly Resolution 66/207.

[363] Campbell, 'Green Cities, Growing Cities, Just Cities?' (n 8).

[364] Adriana Allen, 'Urban Sustainability under Threat: The Restructuring of the Fishing Industry in Mar Del Plata, Argentina' (2001) 11 Development in Practice 152. Allen (n 355).

consideration in the shaping of urban policies and implementation of urban and environmental planning and assessment tools. Despite using different allegories for portraying urban sustainability dimensions, they indicate similar categories of conflicting relations.

Whereas Campbell uses a 'planner's triangle' allegory (social justice, economic growth and environmental protection),[365] Allen outlines a five-dimensional notion of urban sustainability adding physical sustainability (capacity of urban infrastructure and services in relation to population and production activities) and political sustainability (decision-making processes and urban governance that regulate the interactions between the other dimensions).[366] Allen also emphasizes that achieving urban sustainability would be equally dependent on keeping urban development within the boundaries of 'the ecological capacity of the urban regional ecosystem'.[367] In this way she links urban sustainability with notions of carrying capacity and ecological footprint.

One of the main polarisations that both authors highlight consists in the 'economic-ecological' tension, relating to the stressing of natural ecosystems for the intense exploitation of resources, and therefore between economic and public interests.[368] The other consists in the 'environmental-equity'[369] or 'social-physical'[370] tension, which relates to disputes over the priority of development goals in terms of fostering social justice while ensuring environmental protection, as well as reflecting upon how the uneven distribution of risks and limited access to natural resources, services and infrastructure are mediated by socioeconomic factors. According to Allen, the former tension is largely influenced by external factors, whereas the latter reflects the tendency of decentralization of powers towards the local scale[371] (see Section 4.3.3.2 on localism). Campbell refers to a third 'growth-equity' tension to emphasize disputes over competing uses of land (for defining e.g. zoning rules, mixed uses and green

[365] Campbell, 'Green Cities, Growing Cities, Just Cities?' (n 8) 298.
[366] Allen (n 364) 155–157.
[367] ibid 156.
[368] Campbell, 'Green Cities, Growing Cities, Just Cities?' (n 8) 299. Allen (n 355) 9.
[369] Campbell, 'Green Cities, Growing Cities, Just Cities?' (n 8) 300.
[370] Allen (n 355) 9.
[371] Allen (n 364) 156.

spaces) and hence the relevance of the doctrine of social aspects of property in the urban context.[372]

Considerable attention has been also paid to the concept of sustainable community, largely within policy literature that associates urban sustainability predominantly with the social dimension of sustainable development at the local scale. For recognising community/neighbourhood as a socio-spatial construct,[373] such an approach links sustainability with dynamics of socio-spatial segregation in the urban territory, as well as with institutional scales of governance.[374] More far-reaching debates also deploy notions of social cohesion and social capital,[375] which allows for identifying components of urban sustainability that may be employed in policy action. In light of this, Dempsey et al map out five main categories referred to in the wide-ranging literature in the field:[376] (i) *social interactions* (drawing attention to how social networks and social cohesion can be influenced by the definition of land uses, planning and density); (ii) *participation*; (iii) *community stability* (inter-generational equity component – 'well-established, long-term residents'); (iv) *pride and sense of place* (related to feelings of place attachment – to the physical environment - and sense of community – feeling of belonging, of attachment to residents, social order and culture);[377] and (v) *safety and security* (levels of trust).

Consideration of these aspects within EA frameworks could greatly contribute to improving the assessment of environmental justice-related impacts upon local communities due to development consent in urban areas. This is for large-scale developments interfere seriously in social identities, livelihoods patterns and life-

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[372] Campbell, 'Green Cities, Growing Cities, Just Cities?' (n 8) 298.

[373] See: Elizabeth Burton and Lynne Mitchell, *Inclusive Urban Design: Streets for Life* (Elsevier 2006). Mike Jenks, 'Defining the Neighbourhood: Challenges for Empirical Research' (2007) 78 The Town Planning Review 153.

[374] Nicola Dempsey and others, 'The Social Dimension of Sustainable Development: Defining Urban Social Sustainability' (2011) 19 Sustainable Development 289, 291–293.

[375] See: Ray Forrest and Ade Kearns, 'Social Cohesion, Social Capital and the Neighbourhood.' (2002) 38 Urban Studies 2125. Mark Pennington and Yvonne Rydin, 'Researching Social Capital in Local Environmental Policy Contexts' (2000) 28 Policy & Politics 233. See, also, the concept of sustainable communities adopted by the European policy on social cohesion in the Bristol Accord. Available at: <http://www.espon-usespon.eu/dane/web_usespon_library_files/1248/bristol_accord.pdf> accessed 12 October 2015.

[376] Dempsey and others (n 374) 295–297.

[377] See also: Emily Talen, 'Sense of Community and Neighbourhood Form: An Assessment of the Social Doctrine of New Urbanism' (1999) 36 Urban Studies 1361.

choices, and are capable of disrupting the sustainability of communities at the neighbourhood scale.

In terms of the development of legal and policy framework design strategy, Pearsall and Pierce offer an interesting perspective to improve a distributive approach. When analysing and critically assessing urban sustainability plans in the UK, the authors conclude that, for environmental justice purposes, ensuring the presence of general social justice concerns and ecological indicators is not satisfactory if both are not, first, clearly linked to distributional and/or procedural aspects; second, not well-articulated through policy initiatives, actions strategies and indicators; and third, restrained to aggregate changes/improvements, meaning not taking into consideration distributional aspects within neighbourhoods (geographical/ spatial scale) and social groups (e.g. across race, class, gender, traditional communities).[378] Otherwise, urban sustainability strategies would remain descriptive and environmental justice would be only adhered to weakly.[379] This argument relates to broader debates within environmental law and policy: assessing sustainability targets depends on what background information is available, collected and considered, and by whom. Therefore, it implies issues regarding value judgements, uncertainty, and recognition of different perceptions and priority setting.

3.4 Conclusion

This Chapter explored how abstract theories of justice have been employed to inform approaches to environmental justice. This has proven to be a challenging task, because of the vast range of interpretations of principles of justice which have evolved in diverse fields of literatures, as explored in this Chapter - political philosophy, environmental law and ethics, and urban and legal geography. Largely, attempts to debate environmental justice theoretically have been dealt with on a liberal and distributive basis, drawing heavily on Rawls' idea of justice as fairness. But they have also incorporated critiques of distributional thinking to encompass

[378] Pearsall and Pierce (n 8) 575–577.

[379] See also: Kathryn M Davidson, 'Reporting Systems for Sustainability: What Are They Measuring?' (2011) 100 Social indicators research 351.

complex social dynamics and broader concerns. Expanded understandings include placing context (the urban locus is one such context which is of particular concern in this thesis) and recognition (social respect and diversity) at the basis of distribution arrangements, as well as encompassing obligations to the international community (international/global justice) and to future generations (intergenerational justice). Moreover, social justice has been also articulated as a critical element of the sustainability rhetoric; notwithstanding that debates about reconciling environmental justice distributional foundation with ecological justice are still unsettled.

Despite such theoretical developments there is still confusion about a firm conceptual basis for environmental justice which may be capable of offering normative guidance for decision-making in situated contexts. Different approaches lead to different policy and legislative solutions, and therefore any proposed normative framework should clearly associate itself with a specific tradition.[380] Considering that, and drawing on the varies perspectives represented in the review above, I now turn to outline the contextual, grounded, understanding of urban-environmental justice within which this thesis operates. This is not an attempt to innovate theoretically, or to offer a specific account of the content of justice principles. It is rather an effort to organise environmental justice claims and conceptual formulations in a matrix of dimensions, themes and subthemes that matter most for the urban context. This matrix emphasizes what should be considered in order to mainstream environmental justice normative goals, and therefore orient urban-environmental decision-making towards a justice-based agenda concerned with social and environmental rights.

I shall align myself with Schlosberg and Fainstein to adopt a multidimensional, three-fold concept of environmental justice, combining distributive justice, participation and recognition dimensions. This is framed by a combination of Rawls's idea of justice as fairness (fair distribution of benefits, mitigating disadvantage, democratic institutions), Fraser's politics of difference (articulation of claims for distribution and recognition) and Harvey's contextual perception (territorial social justice). Furthermore, it recognises the relevance of claims for rights (something highlighted by the capabilities approach and also by legal geography under Lefevbre's right to the

[380] Been (n 91) 1084.

city and by urban sustainability notion). I do not explore the concept of ecological justice, although I recognize intrinsic value to nature and adopt an ecological sustainability approach, and therefore include a fourth element (ecological sustainability). Hence, this remains an anthropocentric (although attenuated), liberal understanding which encompasses a rights-based approach (to emphasize social and environmental rights) and sustainability concerns.

The core dimensions and key themes of a notion of urban-environmental justice are outlined as follows (for the full matrix, see Table 3 below):

i. Socially Just (distributive justice): Fair and equal distribution of socio-environmental benefits and costs of urban development, so that no vulnerable group (whether for ethnical, racial, socioeconomic or political reason) supports disproportionate burden from implementation of policies, law enforcement and decision-making likely to result in negative impacts on the environment and human health and well-being. This includes pursuing equal treatment and alternatives that improve the status of disadvantaged (present, but also future generations), as well as realisation of social and environmental rights and right to compensation in case of disproportionate outcomes (for those directly affected).

ii. Procedurally just (participation): Due process, with equal opportunity of meaningful participation in decision-making that is likely to affect the enjoyment of rights and to promote changes in livelihoods or in the character of the affected area (related to the use of environmental resources and urban land and risk sources). This implies access to and representativeness in decision-making bodies, access to qualified information and ability to interpretation, consultation, and access to justice (on individual and collective grounds). It may also include informed-consent in the case of traditional communities (see Section 4.3.2.2).

iii. Inclusive (recognition): Non-discrimination and promotion of cultural and social diversity through self-determination and respect to social status. It also implies contemplating different types of material and symbolic

appropriation of the urban territory and its resources (culturally, historically, socially and politically). Recognition is an equality factor for qualifying and enhancing democratic mechanisms as well as the scope of impact assessment and compensation schemes.

iv. Ecologically sustainable (sustainability concerns): Management of natural resources and of the environmental impacts of urban development (e.g. demand for land and energy and generation of waste and pollution) considering the limits of urban ecosystems and the fair enforcement of environmental and health regulation.

After exploring how abstract theories of justice inform conceptual approaches to environmental justice and introducing an urban-environmental justice normative framework, a further step is required towards testing this in the context of urban-environmental decision-making processes. In this regard, the urban-environmental justice matrix here presented is further developed in Chapter 4 into a normative framework for EA in order to guide considerations on whether the legal form and practice of EA are capable of ensuring fair development consent within planning control.

Table 3 Urban-environmental justice matrix

Dimensions	Themes	Subthemes
Socially just	• Fair distribution of socio-economic and environmental benefits and costs of urban development • To the benefit of the least well-off • Minimisation of social and health impacts on the most vulnerable • Rights over natural resources and urban infrastructure (social individual and collective rights)	• Basic needs and well being • Effects on human health, clean air and ecological services • Access to urban land, open spaces, affordable housing • Provision of urban infrastructure: transport, energy, water, sanitation, leisure • Effects on local development (demographic change, income,

		employment, land market) • Major projects should provide direct benefits to local low-income population • No involuntary relocation, resettlement assistance, compensation schemes • Climate change adaptation
Procedurally just	• Equal opportunity and meaningful participation • Access to information • Access to justice • Due process • Accountability	• Consultation and public hearings (environmental and planning development plans and development consent) • Representative bodies and data production • Publicity of documents and studies • Education and consciousness building • Informed consent
Inclusive	• Non-discrimination • Promotion of social and cultural diversity • Respect to social status and self-determination	• Social status (gender, income, ethnicity, age) • Local perceptions on sustainability • Impacts on cultural and historical heritage and livelihoods • Material and symbolic appropriation of the territory and resources • Social cohesion and sense of place • Land rights • Socio-spatial segregation

		• Land-use rules favouring social mixing and diversity
Environmentally sustainable	• Management of natural resources • Carrying capacity • Enforcement of environmental health regulation	• Special protected areas and water resources within the urban system • Ecological services • Waste management • Sustainable transport and energy • Management of risk areas • Climate change mitigation

*Table 3 elaborates on elements identified in the review of literature in Chapter 2 and 3. Other sources include: Habitat Agenda, Agenda 21, World Development Goals, Pearsall and Pierce,[381] Dempsey et al,[382] Barton and Bruder,[383] and Allen.[384]

[381] Pearsall and Pierce (n 8) 575.

[382] Dempsey and others (n 374) 291.

[383] Hugh Barton and Noel Bruder, *A Guide to Local Environmental Auditing* (Routledge 2014).

[384] Allen (n 355) 15.

CHAPTER 4
JUSTICE DRIVEN ENVIRONMENTAL ASSESSMENT IN AN URBAN CONTEXT: PURSUING AND INTEGRATING PURPOSE AND VALUE

4.1 Introduction

Major negotiation meetings under the auspices of the United Nations framework took place in 2015, resulting in renewed, strong international commitments in key aspects of sustainability and environmental policy-making (although not establishing biding responsibilities in most of the cases). These were: the Sendai Framework for Action on Disaster Risk Reduction (March, in Sendai);[385] the 2030 Sustainable Development Agenda (September, in New York City); [386] the Financing for Development Conference, on international aid for the least developed countries (July, in Addis Ababa);[387] and, finally, a much anticipated new climate treaty agreed at the UNFCCC 21st Conference of Parties (December, in Paris).[388] In 2016, this flow will continue with the Habitat III Conference being held, focusing on sustainable urban development (October, Quito).[389]

EA, as a major environmental policy mechanism, constitutes a central element permeating of these debates. This is because EA shares strong linkages with all the major issues implicated – disaster risk management, sustainable development goals, project finance, climate change mitigation and adaptation, and sustainable urbanization – and, more importantly, because it is instrumental in how environmental governance strategies operate on a regional and local scale. Therefore, it is timely to reflect upon the EA legal framework with the aim of questioning the contemporary roles of environmental law and policy in face of the changed nature of environmental problems.

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385 <http://www.unisdr.org/we/coordinate/sendai-framework>.
386 <http://www.un.org/sustainabledevelopment/development-agenda/>.
387 <http://www.un.org/esa/ffd/>
388 <http://unfccc.int/2860.php>
389 <https://www.habitat3.org/>

In light of this, this Chapter focuses on one particular aspect: the relevance of remaining linkages to be made between EA and environmental justice. It seeks to investigate the legal form of EA with the purpose of interrogating whether it can assist in securing, particularly, distributive outcomes. The review carried out in Chapters 2 and 3 invites the conclusion that environmental justice has evolved from a political project on the ground to conceptual and theoretical formulations in the literature, and, further, to some valuable yet not substantial development in law and policy. This Chapter follows up on that, exploring how distributive justice concerns derived from an environmental justice frame can be mainstreamed into the legal form and practice of impact assessment processes, with a focus on EA for major urban projects.

The Chapter starts by addressing models for EA regulatory form with emphasis on debates about defining and accounting for outcomes of environmental decision-making. In this regard, inquiry placed on substantive and procedural rationales relates to the divide process-outcome in terms of justice formulations. It is suggested that, for regulatory purposes, environmental justice may offer a normative frame to inform substantive outcomes for a 'value-driven' EA[390] in the context of development consent processes. A far-reaching question is how to translate this into a coherent EA legal framework. Hence, subsequently, the focus turns to identifying key entry points in the legal form of EA to systematic analysis of distributive impacts capable of revealing patterns of unequal distribution of socio-economic and environmental benefits and burdens in an urban geographical setting. Here, the Chapter builds upon the urban-environmental justice matrix proposed in Chapter 3 to introduce a normative framework for an EA capable of mediating value into the process. This will be empirically appraised in Chapters 5 to 8 with regards to the Brazilian domestic environmental regulation and exemplified by case studies.

The thesis focuses on Brazil, but this section will engage with international literature as well as with other jurisdictions with the purpose of exploring alternatives models as they are relevant to the Brazilian case. Moreover, despite drawing also on policy

[390] Expression borrowed from Connelly and Richardson (n 85).

literature, the emphasis is on the legal and institutional frameworks implicated in the implementation of EA.

4.2 Exploring EA Regulatory Form and Normative Frames

4.2.1 What we are still looking for in EA

For the purpose of the thesis, EA is taken to mean the process of assessing likely environmental impacts (both biophysical and social) of proposed development projects or policies and identifying adequate responses, prior to approval.[391] The key elements of EA operations related to screening, scoping and public consultation inform the core of its legal framework, and will be examined in the empirical chapters. The Brazilian EA regime, the main subject topic of the thesis, is project-based, hence this is the focal interest (as examined in Chapter 6). However, the literature explored throughout this Chapter is broader including sustainability appraisal of plans, programmes and policies (SEA), which offers some ground for not neglecting the differences in scale of policy (regional or national development strategies) and project-based appraisal (local sustainability issues). [392]

Since its first legislative appearance in the US NEPA in 1969[393] - with worldwide impact[394] -, and its introduction to the EU body of environmental law in 1985,[395] EA has become one of the most relevant and diffuse environmental governance and planning tools, being practiced in nearly all countries.[396] It has also been subject of

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[391] Richard K Morgan, 'Environmental Impact Assessment: The State of the Art' (2012) 30 Impact Assessment and Project Appraisal 5, 5. Elizabeth Fisher, Bettina Lange and Eloise Scotford, *Environmental Law: Text, Cases and Materials* (OUP 2013) 845.

[392] Maria Lee, *EU Environmental Law, Governance and Decision-Making* (2nd edn, Hart 2014).

[393] NEPA, s 102(2)(c).

[394] Matthew Cashmore, 'The Role of Science in Environmental Impact Assessment: Process and Procedure versus Purpose in the Development of Theory' (2004) 24 Environmental Impact Assessment Review 403.

[395] Directive 85/337/EEC (amendments codified by Directive 2011/92/EU, subsequently amended by Directive 2014/52/EU).

[396] Morgan informs that some form of EIA was present in 191 of the 193 countries around the globe by 2012. Morgan (n 391) 6. In the same year, according to Tetlow and Hanush, more than 60 countries conducted SEA. Monica Fundingsland Tetlow and Marie Hanusch, 'Strategic Environmental Assessment: The State of the Art' (2012) 30 Impact Assessment and Project Appraisal 15.

attention by a number of international documents[397] and multilateral international organizations.[398] Furthermore, financing institutions require environmental and social assessment in the process of financing major projects, as it is the case of multilateral development banks,[399] and, more recently, of the private sector banking industry with the launching of the Equator Principles.[400]

EA has been mainly praised for constituting a suitable mechanism for integrating environmental considerations into other policies in a systematic way, in line with the demands and objectives of sustainable development.[401] Notwithstanding, it has also contributed to shape regulatory schemes broadly within public administrative law (notably related to risk assessment and the exercise of discretion)[402] and fostered debates on new governance models with enhanced public participation.[403] Over time, EA has strengthened in status (through the establishment of statutory regimes), in scope (covering broader range of impacts and methodologies), jurisdictionally (being applied to regional geographies), in judicial interpretation (growing case law), and in engaging with multiple governance levels (planning and development). It has evolved from project-level assessment to strategic assessment of plans and programmes,[404] then to sustainability appraisal[405] and to thematic-specific impact assessments[406] -

[397] See: 1992 Rio Declaration on Environment and Development (Principle 17); Agenda 21; Convention on Transboundary Environmental Impact Assessment; Convention on Wetlands of International Importance; Aarhus Convention; UN Framework Convention on Climate Change; UN Convention on the Law of the Sea; Protocol on Environmental Protection to the Antarctic Treaty.

[398] For example, OECD and UNEP recommend member states to establish EA processes. See Bill L Long, 'Reforming Environmental Regulation in OECD Countries' (OECD 1997). Hussein Habaza, Ron Bisset and Barry Sadler, *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach* (UNEP 2004).

[399] For example, the World Bank, the Inter-American Bank and the European bank for Reconstruction and Development.

[400] An initiative of the International Finance Corporation (IFC), the Equator Principles constitute a framework for assessing and managing environmental and social risks of major projects financed by private sector financial institutions. 79 institutions in 34 countries have adopted the framework up to present. Available at <http://www.equator-principles.com/> accessed 05 March 2015.

[401] Maria Lee (n 392) 164–165.

[402] Jane Holder and Donald McGillivray, 'Taking Stock' in Jane Holder and Donald McGillivray (eds), *Taking Stock of Environmental Assessment: Law, Police and Practice* (Routledge-Cavendish 2007) 1.

[403] Joanne Scott and Jane Holder, 'Law and New Environmental Governance in the European Union' in Grainne de Burca and Joanne Scott (eds), *Law and New Governance in the EU and US* (Hart 2006).

[404] Important development was the adoption of the SEA Directive by the European Community in 2001 (Directive 2001/42/EC).

[405] Alan Bond, Angus Morrison-Saunders and Jenny Pope, 'Sustainability Assessment: The State of the Art' (2012) 30 Impact Assessment and Project Appraisal 53.

either integrated to or independent of EIA and SEA or maybe lacking of mandatory legal framework (e.g. health, equality, trade, and regulatory impact assessment).

More than four decades of developments in policy, practice and theory have contributed to reassure the value of EA.[407] Nonetheless they have also affirmed its disputed nature and EA has been the focus of much critical appraisal. More specifically, research on the performance of EA has indicated some shortcomings in its the practice.[408] For instance, although fostering transformative benefits indirectly into public administration structures, it is suggested that it has failed to influence directly decision-making processes.[409] Particularly in the case of EIA, the lack of its influence in project design is questioned.[410] In terms of the role played by the different stakeholders, there is criticism of the way in which consultation is performed;[411] and, relatedly, also about the way that developers can present their proposals favourably to their interests, opening it up for bargaining and negotiation.[412] There also remain significant concerns about shortcomings in the quality of the environmental impact statements[413] (with great emphasis on the consideration of alternatives and cumulative effects)[414], as well as about challenges

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406 Pope and others see the growing specialization of different branches of impact assessment with criticism, arguing that this may weaken its potential. Jenny Pope and others, 'Advancing the Theory and Practice of Impact Assessment: Setting the Research Agenda' (2013) 41 Environmental Impact Assessment Review 1, 1.

407 Barry Sadler, 'On Evaluating the Success of EIA and SEA' in Angus Morrison-Saunders and Jos Arts (eds), *Assessing Impact: Handbook of EIA and SEA Follow-up* (Earthscan 2004).

408 For studies on EA effectiveness raising similar issues although with contextual differing aspects, see: Commission of the European Communities, 'Report on Application and Effectiveness of the EIA Directive' (DG Environment 2009). IEMA, 'The State of Environmental Impact Assessment Practice in the UK' (IEMA 2011). World Bank, 'Environmental Licensing for Hydroelectric Projects in Brazil : A Contribution to the Debate' (World Bank 2008).

409 Carys Jones and others, 'Environmental Assessment: Dominant or Dormant?' in Jane Holder and Donald McGillivray (eds), *Taking Stock of Environmental Assessment: Law, Police and Practice* (Routledge-Cavendish 2007) 31–32. Matthew Cashmore and others, 'The Interminable Issue of Effectiveness: Substantive Purposes, Outcomes and Research Challenges in the Advancement of Environmental Impact Assessment Theory' (2004) 22 Impact Assessment and Project Appraisal 295, 299–302.

410 Maria Lee (n 392) 176.

411 Maria Lee and others, 'Public Participation and Climate Change Infrastructure' (2013) 25 Journal of Environmental Law 33.

412 Jane Holder, *Environmental Assessment: The Regulation of Decision Making* (Oxford University Press 2004).

413 John Glasson, Riki Therivel and Andrew Chadwick, *Introduction to Environmental Impact Assessment* (4th edn, Routledge 2012) 319.

414 Pope and others (n 406).

for strategic assessment.[415] In addition, contextual constraints related to political tensions, institutional structures and geographical settings are debated.[416] In this respect, EA has been targeted by deregulatory agendas aiming at streamlining approval's efficiency where government and private sector see EA regime as 'barrier to development' or as an 'expensive regulatory hurdle'[417] (as explored in the case of Brazil in Chapter 5).

In such a dynamic context, adaptation of the legal form of EA is key to shaping institutional responses to changes in the nature of environmental and development problems. Recent efforts towards reforms have included, for example, attempts to increase EA effectiveness through expanding monitoring follow-up, in order to assess the results of the implementation of prevention and mitigating measures.[418] In terms of scope, specialised literature has given more attention to the interrelation between environmental and socio-economic impacts,[419] and innovative concepts have been experimented with, such as ecosystem services,[420] resilience[421] and biodiversity management[422] - which may inform a model for an 'ecological impact assessment'.[423] Increasingly, climate change mitigation and adaptation have been placed at the forefront of the debates (see Section 4.3.1 below).

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[415] Barry Sadler, 'Taking Stock of SEA' in Barry Sadler (ed), *Handbook of Strategic Environmental Assessment* (Earthscan 2011).

[416] For example, although environmental assessment regimes in developing countries are based on similar set of principles and regulatory guidance as developed ones, political and institutional constraints influence the quality and transparency of decision-making in different ways. See: Prasad Modak and Asit Biswas (eds), *Environmental Impact Assessment for Developing Countries* (Heinemann 1999).

[417] Pope and others (n 406) 7.

[418] Glasson, Therivel and Chadwick (n 413) 328–331.

[419] John Glasson, 'Socio-Economic Impacts 1: Overview and Economic Impacts' in Riki Therivel and Peter Morris (eds), *Methods of Environmental Impact Assessment* (3rd edn, Routledge 2009). Andrew Chadwick, 'Socio-Economic Impacts: Are They Still the Poor Relations in UK Environmental Statements?' (2002) 45 Journal of Environmental Planning and Management 3.

[420] Lourdes M Cooper, 'Network Analysis in CEA, Ecosystem Services Assessment and Green Space Planning' (2010) 28 Impact Assessment and Project Appraisal 269.

[421] Roel Slootweg and Mike Jones, 'Resilience Thinking Improves SEA: A Discussion Paper' (2011) 29 Impact Assessment and Project Appraisal 263.

[422] Asha Rajvanshi and others, 'Maximizing Benefits for Biodiversity: The Potential of Enhancement Strategies in Impact Assessment' (2011) 29 Impact Assessment and Project Appraisal 181.

[423] Jane Holder, 'The Prospects for Ecological Impact Assessment' in Jane Holder and Donald McGillivray (eds), *Taking Stock of Environmental Assessment: Law, Police and Practice* (Routledge-Cavendish 2007).

Notwithstanding, controversies on the understanding of its purpose, legitimacy, and efficiency remain common ground in many jurisdictions. In terms of purpose, is environmental assessment a tool for informing decision-making, for promoting a democratic decision-making, or for ensuring environmental quality? In terms of legitimacy, should decision-making be based on expert information or on political judgements and public participation? When it comes to efficiency, should environmental assessment aim at substantive outcomes, and, if so, how to judge whether it delivers? The following sections address this.

4.2.2 EA 'fit for purpose'[424]

Back in 1997, Lawrence suggested that EA theory was underdeveloped for the lack of rigour in approaching value judgements underpinning its use, calling for 'theory-building'.[425] Since then, the research agenda has increased in sophistication,[426] drawing on a number of diverse fields from science to policy, decision-making and planning theories.[427] With the great development of theoretical and scientific foundations for EA, the question of effectiveness emerges:[428] does EA deliver? This inquiry relates to the understanding of EA's regulatory nature.[429] However, this is not straightforward. First, because EA theory has been implicated in a context of changing in thinking within environmental governance, which has influenced different interpretations of the relevance of science, role of social values, and degree of stakeholder involvement.[430] Second, because EA has been used to achieve multiple

[424] Expression borrowed from literature on regulation theory, referring to assessing whether the regulatory framework in place is in line with facilitating the achievement of policy objectives effectively and efficiently. Effectiveness relates to delivering policy goals; efficiency relates to doing so at least cost. See: Robert Baldwin, Martin Cave and Martin Lodge, *Understanding Regulation: Theory, Strategy, and Practice* (OUP 2012).

[425] David P Lawrence, 'The Need for EIA Theory-Building' (1997) 17 Environmental Impact Assessment Review 79.

[426] Morgan (n 391) 5.

[427] Pope and others (n 406) 4.

[428] Cashmore and others (n 409). Barry Sadler (n 407).

[429] Matthew Cashmore, Alan Bond and Barry Sadler, 'Introduction: The Effectiveness of Impact Assessment Instruments' (2009) 27 Impact Assessment and Project Appraisal 91, 92. Carys Jones and others (n 409) 38. William Howarth, 'Substance and Procedure under the Strategic Environmental Assessment Directive and the Water Framework Directive' in Jane Holder and Donald McGillivray (eds), *Taking Stock of Environmental Assessment: Law, Police and Practice* (Routledge-Cavendish 2007).

[430] Stephen Jay and others, 'Environmental Impact Assessment: Retrospect and Prospect' (2007) 27 Environmental Impact Assessment Review 287.

policy goals, immersed in political, institutional and ethical debates,[431] what contributes to the shaping of varying particular perceptions.[432]

In general, literature points to the broad, overarching role of integrating sustainability within decision-making through proper consideration of environmental issues[433] (however problematic this may be due to the controversies surrounding the concept of sustainable development, as mentioned elsewhere). In this pursuit, EA shall perform two main overlapping regulatory goals: (i) information gathering and impact prediction, and (ii) providing opportunities for public participation. This reinforces the acknowledgement of EA's procedural nature, as an instrumental tool for informing and supporting decision-making processes, in the absence of requirements for decision-makers to adopt any particular environmental standards or to give any particular weight to environmental issues.[434] Notwithstanding, despite widespread consensus on this, the regulatory model assigned to EA varies and hence impacts differently on the scope and nature of the information provided and of participation.

The range of different existing views on models for EA outlined in Table 4 below is testimony to that. It emerges that the function of information gathering and impact prediction raises debates particularly about the influence of expert knowledge in shaping political judgements, whereas the role of allowing for participation is associated with claims for accountability and legitimacy.[435] For example, scientific-based and rationalist views of EA give high profile to expert-driven processes (either thorough scientific knowledge or bureaucratic apparatus), while participatory models give high profile for participatory rights (wider representation and input from lay public), deliberative models favour consensus-oriented processes (negotiation), and institutionalist and reflexive models emphasize mechanisms for social learning (transformative approach towards organization's behaviour change). Moreover, this

[431] Timothy O'Riordan, 'EIA from the Environmentalist's Perspective' (1990) 4 VIA 13. Carys Jones and others (n 409) 43. Cashmore, Bond and Sadler (n 429) 91.
[432] Jay and others (n 430). Robert V Barlett and Prya A Kurian, 'The Theory of Environmental Impact Assessment: Implicit Models of Policy Making' (1999) 27 Policy and Politics 415.
[433] Jane Holder (n 412). Glasson, Therivel and Chadwick (n 413).
[434] Fisher, Lange and Scotford (n 391) 846–847.
[435] See Section 4.2.1.2 below.

may be also influenced by recent trends on smart[436] and better regulation,[437] which, although claiming for improved transparency, accountability and stakeholder's engagement, seek simplification and streamlining of procedures to reduce administrative burden.[438]

Each of these approaches influences the legal form EA assumes (policy goals and procedural aspects) and, consequently, shapes corresponding legal obligations and rights.[439] This suggests questions about EA's effectiveness within the debate about the interplay between process (with a focus on whether statutory procedures are undertaken)[440] and substantive outcomes (in terms of achieving specific desirable goals) in decision-making.[441] The recognition that procedural rules influence and shape the substance of the decision and factor interests and values into the system, is explored within administrative law[442] and environmental law[443] literature alike. With regards specifically to the legal form of EA, the emphasis is on the part played by the form and scope of participation (who is allowed to participate, in which stage, under which conditions, to what extent) and the nature of the information provided (type,

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[436] See: Neil Gunningham, Peter N Grabosky and Darren Sinclair, *Smart Regulation: Designing Environmental Policy* (Oxford University Press 1998).

[437] See: Peter Hjerp and others, 'The Impact of Better Regulation on EU Environmental Policy under the Sixth Environment Action Programme' (Brussels Institute for Environmental Management 2010). See also: Kalina Arabadjieva, '"Better Regulation" in Environmental Impact Assessment: The Amended EIA Directive' (2016) 28 Journal of Environmental Law 159.

[438] Claudio M Radaelli, 'Whither Better Regulation for the Lisbon Agenda?' (2007) 14 Journal of European Public Policy 190.

[439] Fisher, Lange and Scotford (n 391) 845.

[440] Cashmore and others, when reviewing the literature on EIA's effectiveness, point out that there are reasons for the procedural aspects having received more attention than the substantive dimension of effectiveness. These would be related to the early stages of EIA developments, once NEPA was a political response to social discontent over decision tools, thus not based on theoretical or scientific foundations; as well as to the judicial interpretations of NEPA as procedural legislation. Cashmore and others (n 409) 296. Also, the Aarhus Convention in the EU context focuses on procedure rather than substantive environmental standards.

[441] For an informed notion of the distinction between process and substance rationales in this context, see: Lone Kørnøv and Wil AH Thissen, 'Rationality in Decision- and Policy-Making: Implications for Strategic Environmental Assessment' (2000) 18 Impact Assessment and Project Appraisal 191. Bo Elling, 'Rationality and Effectiveness: Does EIA/SEA Treat Them as Synonyms?' (2009) 27 Impact Assessment and Project Appraisal 121.

[442] J Jowel, 'The Legal Control of Administrative Discretion' (1977) PL 178, 216 (procedural rules as ensuring congruence between regulatory ends and the content of the decision); P Nonet, Administrative Justice (Russel Sage Foundation 1969), 170 (procedural rules create accountability for the decision); P Selznick, Law, Society and Industrial Justice (Russel Sage 1969), 30 (substantive ends consist scrutiny criteria).

[443] Fisher, Lange and Scotford (n 391) 847. Jane Holder (n 412) 239.

quality, range) in generating content for the decision.[444] I address this in Section 4.3 below.

Table 4 EA theory models

EA THEORY MODELS

Author	Perspective		Models	Purpose/Nature
Barlett and Kurian (1999)[445]	Political science		information processing	information provision
			symbolic politics	suggesting accordance with certain values
			institutionalist politics	enhancing political institutional environmental capacity in policy-making
			political economy	influencing corporate attitudes (to gain competitive advantage)
			organisational politics	influencing internal politics of organisations
			pluralist politics	opportunities for negotiation among different interests groups
Lawrence (2000)[446]	Planning theories		rationalism	technical assessment (objective and value-free; ends-means)
			pragmatism	goal-oriented; procedural integration; good practice
			socio-ecological idealism	adaptive learning; integration process-substance based on sustainability values
			political-economic mobilization	political action; community empowerment; critical socio-political process
			communication and collaboration	deliberation and consensus-seeking
Leknes (2001)[447]	Decision-making theory		rationalism	analysis of alternatives in relation to established objectives (optimum solution)
			new institutionalism	decisions are explained by organisation's values, formal routines, and regulatory framework (rule application)
			negotiation	decision-making is explained by the negotiation process and participants resources, interests alliances (compromise)
Wilkins (2003)[448]			social learning	system for producing knowledge; directing the development of social values
Benson (2003)[449]	Decision-making theory		rationalism	technical assessment (objective and value-free; ends-means)
Cashmore (2004)[450]	Science paradigm	EIA as applied science	analytical science	enhancing scientific understanding
			environmental design	informing and influencing design decisions
		EIA as civil science	information provision	informing decisions
			participation	participatory decision-making
			environmental governance	deliberative democracy
Holder (2004)[451]	Regulation theory		informational theory	information gathering
			cultural/reflexive theory	improvement of organization's learning and practice

[444] Jane Holder (n 412) 251.

[445] Barlett and Kurian (n 432).

[446] Lawrence (n 8).

[447] Einar Leknes, 'The Roles of EIA in the Decision-Making Process' (2001) 21 Environmental Impact Assessment Review 309.

[448] Hugh Wilkins, 'The Need for Subjectivity in EIA: Discourse as a Tool for Sustainable Development' (2003) 23 Environmental Impact Assessment Review 401.

[449] John F Benson, 'What Is the Alternative? Impact Assessment Tools and Sustainable Planning' (2003) 21 Impact Assessment and Project Appraisal 261.

[450] Cashmore (n 394).

[451] Jane Holder (n 412).

Glasson *et al* (2012)[452]	Agent's view	Regulator Developer Affected-groups	aid to decision-making aid to formulation of development actions vehicle for stakeholder consideration	informed and structured decision-making improved design and better relations with regulator and community better-informed and fully involved

4.2.3 From effectiveness to a value-based approach: environmental justice as a substantive agenda for EA

Although the regulatory models proposed for EA express concern with EA's effectiveness in terms of a procedural framework for sustainable development aims (within plural interpretations of the role and form of information gathering and participation in terms of a fair process), they do not necessarily attempt to accommodate interests and value differences towards ensuring outcomes considerate of distributional concerns[453] (the focus of the thesis). Thus there is lacking a substantive agenda capable of emphasizing this, an 'environmental justice value-base'[454] for EA. This is in line with public law highlighting the relevance of setting clear normative frameworks for judging administrative decisions,[455] for notions of justice offer elements for such.[456]

The role of impact assessment tools in addressing questions of environmental justice, and hence the consideration of environmental justice as a substantive agenda, is not unexplored territory. Walker points that through the potential systematic assessment of social and spatial distribution of environmental outcomes (benefits and burdens) and inclusive participation, EA, in all its forms, approximates questions of process and procedural justice to substantive outcomes and distributional justice in environmental decision-making.[457] O'Faircheallaigh considers that environmental

[452] Glasson, Therivel and Chadwick (n 413).

[453] Connelly and Richardson (n 85) 405.

[454] Connelly and Richardson (n 85).

[455] Eloise Scotford and Rachael Walsh, 'The Symbiosis of Property and English Environmental Law – Property Rights in a Public Law Context' (2013) 76 Modern Law Review 1010.

[456] See: Elizabeth Fisher, *Risk Regulation and Administrative Constitutionalism* (Hart 2007). Campbell, 'Just Planning The Art of Situated Ethical Judgment' (n 6).

[457] Walker, 'Environmental Justice, Impact Assessment and the Politics of Knowledge' (n 165) 317.

justice may 'inform and add value to the design of EIA practice'.[458] Connelly and Richardson advocate that the use of environmental justice as a 'rhetoric device' for SEA is a political normative choice to make the concern with social justice explicit (just outcomes), therefore working as a boundary for trade-off ('acceptable outcomes').[459] Jackson and Illsley affirm that sustainability appraisal can work towards 'potentially contributing to reflexive forms of governance in which normative values are more explicitly articulated and thereby a potentially more equitable set of environmental outcomes delivered'.[460] Spaul proposes an environmental justice 'adequacy test' for sustainability appraisal in the UK context.[461]

Authors seem to be in accordance that an environmental justice normative frame should be factored into all the stages of EA operations, with attention to specific dimensions particularly relevant accordingly.[462] The input of distributive evidence into the scoping stage would inform decision-making process, allowing for shading light on patters of distribution and pursuing values which protect the most vulnerable in case of conflict of interests.[463] It would also qualify the procedural dimension of EA, mainly when it comes to defining population groups likely to be affected, and therefore the range of stakeholders with chances of accessing participatory mechanisms (particularly social and politically disadvantaged groups). Finally it would influence the definition of means for redressing unequal impacts across population groups through better informed and qualified mitigation and, mainly, compensation measures.[464]

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[458] Ciaran O'Faircheallaigh, 'Public Participation and Environmental Impact Assessment: Purposes, Implications, and Lessons for Public Policy Making' (2010) 30 Environmental Impact Assessment Review 19, 10.

[459] Connelly and Richardson (n 85) 403.

[460] Tony Jackson and Barbara Illsley, 'An Analysis of the Theoretical Rationale for Using Strategic Environmental Assessment to Deliver Environmental Justice in the Light of the Scottish Environmental Assessment Act' (2007) 27 Environmental Impact Assessment Review 607.

[461] Martin Spaul, 'Sustainability Appraisal and Environmental Justice: From Policy Screening to Social Learning' [2009] Built Environment Research Group - Working Papers 1.

[462] ibid 33–38. Connelly and Richardson (n 85) 405. Jackson and Illsley (n 460) 622. Walker, 'Environmental Justice, Impact Assessment and the Politics of Knowledge' (n 165) 315.

[463] Walker, 'Environmental Justice, Impact Assessment and the Politics of Knowledge' (n 165) 315. Connelly and Richardson (n 85) 405.

[464] Walker, 'Environmental Justice, Impact Assessment and the Politics of Knowledge' (n 165) 316. Connelly and Richardson (n 85) 393.

Nevertheless, research shows that even where there have been important policy developments towards integrating environmental justice issues into EA, as it is the case of the UK[465] and the USA,[466] for example, this has not become mainstream practice. This is mainly due to the low profile given to distributional analysis, what Walker calls 'distributional deficit'.[467] Considering this, we are left with a question: how could the legal form of EA, in the regulation of its functions of information gathering and impact prediction and of allowing public participation, embrace broader distributional issues and therefore contribute to a fairer substantive outcome from an environmental justice perspective. This relates to the debate on the interplay between process and substantive outcome. This is addressed in detail in the Section below.

4.3 Environmental Justice 'Entry-points': Integrating Environmental Justice Claims via EA for Major Urban Projects

This section seeks to explore the possibilities of a coherent environmental justice framework for EA in respect of individual projects. This approach advocates the mainstreaming of core subjects into EA regulation and operation with regards to scoping and consultation phases. These refer to an enlarged status for socio-economic impacts and attention to climate change adaptation, and to meaningful public participation. Also, making EA more context-specific is said to enhance its effectiveness.[468] When setting EA for major projects in urban areas as the locus for investigation, it becomes relevant the role of EA in informing and shaping land-use rights and conflicts through development consent processes.

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[465] See: Gordon P Walker, H Fay and G Mitchell, 'Environmental Justice Impact Assessment: An Evaluation of Requirements and Tools for Distributional Analysis, A Report for Friends of the Earth England and Wales' (Friends of the Earth 2005). Gordon P Walker, 'Environmental Justice and the Distributional Deficit in Policy Appraisal in the UK' (2007) 2 045004 Environ. Res. Lett. 1. Chadwick (n 419). John Glasson and Donna Heaney, 'Socio-economic Impacts: The Poor Relations in British Environmental Impact Statements' (1993) 36 Journal of Environmental Planning and Management 335.

[466] Holifield (n 110). Robert R Kuehn, 'The Environmental Justice Implications of Quantitative Risk Assessment' [1996] U. Ill. L. Rev. 103.

[467] Walker, 'Environmental Justice and the Distributional Deficit' (n 465).

[468] Carys Jones and others (n 409).

4.3.1 The role of scoping in improving environmental justice-related outcomes

(i) Status of socio-economic impacts

A key aspect of enhancing substantive outcomes in EA for individual projects is via improving systematic analysis of distribution patterns (social, economic and environmental).[469] This relates to both the kind and range of impacts included in EA, bringing closely together matters of process and outcome in terms of knowledge production.[470]

Particularly relevant is the status of socio-economic issues within the scoping stage, which has being highlighted as one of the key aspects for the improvement of the EA agenda.[471] The inclusion of socio-economic aspects as one of the impact categories to be considered in the same single, consistent document is said to contribute not only to a more balanced view of the impacts on individuals and communities, but also to the better assessment of their interaction with biophysical impacts, as well as contributing to the improvement of project design and to a more careful consideration of trade-offs in development decisions.[472] There is also a growing body of literature on social impact assessment (SIA) as a stand-alone tool, with proclaimed potential to focus on benefiting vulnerable and disadvantaged groups affected by developments, [473] for integrating concerns with good governance, social inclusion, community engagement, social and capacity building.[474]

However, the assessment of socio-economic impacts enjoys varying status and practice. For example, initiatives in the investment sector have given it a high profile, as condition for the financing of major projects. In this regard, social performance

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[469] Walker, 'Environmental Justice, Impact Assessment and the Politics of Knowledge' (n 165) 316.

[470] Jane Holder (n 412) 251.

[471] John Glasson (n 419). Ana Maria Esteves, Daniel Franks and Frank Vanclay, 'Social Impact Assessment: The State of the Art' (2012) 30 Impact Assessment and Project Appraisal 34.

[472] Chadwick (n 419) 9. Glasson, Therivel and Chadwick (n 413) 24.

[473] Ana Maria Esteves and Mary-Anne Barclay, 'Enhancing the Benefits of Local Content: Integrating Social and Economic Impact Assessment into Procurement Strategies' (2011) 29 Impact Assessment and Project Appraisal 205, 205. Esteves, Franks and Vanclay (n 471) 34.

[474] Frank Vanclay, 'Principles for Social Impact Assessment: A Critical Comparison between the International and US Documents' (2006) 26 Environmental Impact Assessment Review 12.

standards have been proclaimed by intergovernmental organizations, such as United Nations[475] and OECD.[476] This is the case also of multilateral financial institutions (for instance, the World Bank[477] and the Inter-American Development Bank[478]). Furthermore, the Equator Principles represent an important influence in the expanding of the practice within private sector financing institutions.[479] These frameworks encompass similar criteria, with special attention to the principle of free, prior and informed consent (see Section 4.3.2), respect to human rights, commitments to local content, and access by victims to remedy, among others. Moreover, socio-economic impact assessment has been carried out even in the absence of regulatory requirements by corporations and is seen positively as a 'corporate social license to operate'.[480] This is in accordance with the strands of the global policy agenda for sustainable development financing.[481]

Notwithstanding, regulatory frameworks have been more timid in mainstreaming such impacts within EA process or recognising legal mandate for socio-economic impact assessment as an independent tool. The emphasis is usually on biophysical impacts, with socio-economic impacts mentioned in general terms as 'impacts on humans', or implicitly with the adoption of a wide concept of environment (considering biophysical, social and cultural dimensions). For example, the USA offers legislative ground for this analysis as integrated with environmental justice considerations within NEPA and state and local laws[482] (despite criticism in term of range and practice, for

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[475] UN, Guiding Principles on Business and Human Rights. Implementing the United Nations 'Protect, Respect and Remedy' Framework (2011). United Nations Human Rights Council, Resolution 17/4 of 16 June 2011.

[476] OECD, Guidelines for Multinational Enterprises (2011).

[477] World Bank, 'Operational Manual BP 4.01 - Environmental Assessment' (World Bank 1999). World Bank, 'Environmental Assessment Sourcebook' (World Bank 1991, revised April 2013). 2014 Draft Revision Environmental and Social Standards; World Bank Extractive Industries Review (2012).

[478] <http://www.iadb.org/en/topics/sustainability/environmental-social-impact-assessment,9055.html>

[479] <http://www.equator-principles.com/>

[480] Esteves and Barclay (n 473) 205. See also United Nations, Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, John Ruggie. Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, respect and Remedy' Framework (2011). United Nations Human Rights Council, Seventeenth session, Agenda item 3. UN Document A/HRC/17/31.

[481] <http://www.un.org/esa/ffd/>

[482] Based on NEPA, a set of guidelines to assist public and private sector agencies and organisations in considering social impacts in their assessments was published in the USA in 1994, where Principle 5 refers that one of the aims is to 'ensure that any environmental justice issues are fully described and analysed' with the consideration of vulnerable stakeholders' interests (see also guidelines 5.a and 5.b).

which see Section 2.2.1). Nevertheless, the profile of socio-economic impacts in the EU EIA Directive is low for it is not specifically included as one of the impact categories listed nor is there reference to the need for addressing equity issues[483] (similarly to Brazil's regime). This results in socio-economic aspects persisting as 'poor relations'[484] in environmental statutory regime and, consequently, in the practice of EA.[485]

The argument in favour of a higher profile for socio-economic impacts within EA is not without criticism though. Holder alerts that the broadening in scope of EA to encompass various categories of impacts might weaken the weight of ecological requirements when measured against social and economic aspects (e.g. employment opportunities and local economy).[486] Spaul[487] and Chadwick[488] also consider that distributional aspects themselves might result marginalised by the emphasis on economic benefits, hence allowing for trade-offs. Not forgetting time, resources and institutional constraints involved, considering that the requirements and methodology for distributional analysis are still unclear.[489]

In such a context, it is necessary to emphasize the relevance and purpose of the featuring of socio-economic aspects within policy, regulation and practice of EA. In this regard, better clarity on the nature and scoping of potential socio-economic impacts with focus on distributional aspects, as well as a higher statutory profile, has the potential to improve EA performance from an environmental justice perspective at

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Interorganisational Committee on Guidelines and Principles for Social Impact Assessment, 'Guidelines and Principles for Social Impact Assessment' (1994) 12 (2) Impact Assessment 107.

483 Chadwick (n 419) 4. In the EU EIA Directive, most of the receptors included are biophysical. The status of socio-economic impacts would be related to the inclusion of 'human-beings' as one of the receptors to be considered, as well as to the wide definition of 'environment', encompassing its human dimension (social, economic, cultural). Glasson, Therivel and Chadwick (n 413) 322. However, in the UK context, for example, planning development control should consider socio-economic factors associated with a proposed development, and thus it may be argued that there is no need for them to be included within an EIS. Also, the implementation of the EU SEA Directive by Scotland considers that SEA should contribute to environmental justice, although there is criticism of the lack of coordination with distributional justice. Jackson and Illsley (n 460).

484 Chadwick (n 419). Walker, Fay and Mitchell (n 465).

485 Glasson, Therivel and Chadwick (n 413) 323.

486 Jane Holder (n 423) 260.

487 Spaul (n 461).

488 Chadwick (n 419) 8.

489 Rhodes (n 96). Frank Vanclay and Ana Maria Esteves, *New Directions in Social Impact Assessment: Conceptual and Methodological Advances* (Edward Elgar Publishing 2011).

the two ends of the process. First, this leads to a more coherent assessment of 'significance' in the screening/scoping phases, shading light on patters of social distribution of environmental outcomes. Second, with a more considerate identification of mitigation measures to be put in place and compensation schemes that benefit the most vulnerable, which can effectively deliver social justice rather than functioning merely as conflict resolution and social acceptance.[490] This is particularly relevant in the case of major projects considered strategic in terms of policy development, with a strong economic and political component, that affect vulnerable groups with reduced representation and negotiation power (see case study in Chapter 7).

Importantly, in terms of definitional issues, socio-economic impacts are wide-ranging in scope with varying interpretations. Definitions can be narrowly construed emphasizing employment opportunities, population change, local economy, and provision of local services (quantitatively measurable impacts). They can however also include broad issues such as social and cultural structures and values of communities impacted by developments, land use patters, well-being and health, as well as considering local perceptions on development and sustainability (non-quantitatively measurable impacts).[491] Additionally, distributional analysis should be integrated,[492] leading to evidence on how impacts affect differently different groups, in special vulnerable population.[493]

This issue of the potential breadth of EA is closely related to the interplay between the political nature of the definition of socio-economic issues and public participation in the production and evaluation of evidence in EA processes, usually understood as

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[490] Walker, 'Environmental Justice, Impact Assessment and the Politics of Knowledge' (n 165) 316. See also: Patrick Field, Howard Raiffa and Lawrence Susskind, 'Risk and Justice: Rethinking the Concept of Compensation' (1996) 545 The Annals of the American Academy of Political and Social Science 156.

[491] Authors offer varying interpretations of socio-economic impacts. For instance, Glasson presents a broad, more concise list of impacts. Chadwick distinguishes between economic and social impacts. Chadwick (n 419). Spaul points to the relevance of developing a shared interpretation of local meanings of sustainability among stakeholders in order to construct collectively the understanding of the socio-environmental problem implicated. Spaul (n 461) 38.

[492] Walker, 'Environmental Justice and the Distributional Deficit' (n 465) 6.

[493] Frank Vanclay, 'International Principles For Social Impact Assessment' (2003) 21 Impact Assessment and Project Appraisal 5, 7.

expert-led, technocratic processes.[494] This is a question of politics of knowledge and of procedural justice determining outcomes in terms of distributional justice. The implication from an environmental justice perspective is the recognition that the production and evaluation of evidence is a matter of justice, and hence value judgments carried out through the process should allow for the consideration of interests of different groups affected, particularly the most vulnerable ones.[495] Therefore, the definition of the scope and interpretation of such impacts also depends on the place, scope and legitimacy of public engagement within EA regulatory framework and practice, and how it influences in the gathering and evaluation of information, to be addressed in section 4.3.2.

(ii) Climate change screening and adaptation

This section sets out the key potential of EA in enhancing climate change-resilience of projects and, in doing so, fostering environmental justice locally. This relates to both the dynamic nature of EA in responding to evolving environmental problems through improving procedural aspects (and therefore potentially affecting and shaping outcomes of decision-making under a substantive agenda) and to developments in environmental justice theory towards the notion of climate justice (see Section 3.2.2.2). As previously considered, tackling distributive justice issues in terms of climate change at the local level of governance (the focus of the thesis) is closely related to adaptation measures for the built environment. This is because adaptation efforts related to planning, buildings and infrastructure[496] shall consider spatial and social distribution of climate change-related threats and act accordingly to contribute to enhancing the situation of the most vulnerable.[497]

Addressing climate change adaptation and environmental justice inter-connectedly is particularly challenging in urban settings (of interest to the thesis) because of the

[494] Esteves, Franks and Vanclay (n 471) 35.

[495] Morgan (n 391) 8.

[496] For example, measures related to the effects of heat waves, flooding, sea level rise or intense storms affecting the maintenance and performance of buildings and infrastructure; the increase in magnitude of the project's impact on the environment; and the increase in vulnerability of the surrounding human and natural environments to the project's impacts.

[497] Adger, 'Scales of Governance and Environmental Justice for Adaptation and Mitigation of Climate Change' (n 284) 924.

existence of geographic, socio-economic and institutional constraints in cities. In this regard, the chapter on urban areas (Chapter 8)[498] of the IPCCC Fifth Assessment Report (AR5)[499] recognises the vulnerabilities of urban areas to climate change risks and the relevance of urban adaptation and resilience.[500] Given that more than half of the world's population lives in urban areas,[501] and concentrating most of the economic activities, urban climate change-related risks threaten infrastructure systems, the built environment and urban ecosystems services.[502] This is particularly problematic in low- and middle-income countries, such as Brazil, where rapid urbanisation of large cities[503] results in amplified risks for low-income communities. These are more vulnerable to disaster because of their prevalent location in informal settlements in disaster-prone areas, coupled with deficiencies in risk reducing infrastructure and adaptive capacity.[504]

This requires integrating adaptation into regulatory frameworks for governance and planning, particularly with regards to strengthening infrastructure and land-use and urban ecosystems management. In this respect, the Report identifies particularly project-level EA (EIA) as one of the assessment tools for decisions on urban adaptation, with potential to contribute to improving resilience of the built environment. First, EIA is considered useful for addressing project's risk and vulnerability to direct and indirect impacts of climate change, and hence for informing

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[498] A Revi and others, '2014: Urban Areas' in Intergovernmental Panel on Climate Change (ed), *Climate Change 2014–Impacts, Adaptation and Vulnerability: Regional Aspects. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2014) 535–612.

[499] Intergovernmental Panel on Climate Change, Fifth Assessment Report (AR5), 2014 <http://www.ipcc.ch/report/ar5/> accessed 17 April 2015.

[500] The Report's glossary defines 'resilience' when applied to urban centers as 'the ability of urban centers (and their populations, enterprises and government) and the systems on which they depend to anticipate, reduce, accommodate, or recover from the effects of a hazards event in a timely and efficient manner'. Revi and others (n 498) 547.

[501] UN DESA Population Division, 2012.

[502] AR5 Chapter 8, 538. On impacts of extreme weather on urban centres, see also: UNISDR 2009; IFRC 2010; and UNISDR 2011.

[503] Three quarters of the world's urban population and most of its large cities are in low- and middle-income countries. In Latin America, which is the most urbanized of the developing regions, 83% of the population resides in cities, and more than 20% is concentrated in the largest city of each country. UN DESA Population Division, 2012.

[504] The Report points out that the vulnerability of groups of urban dwellers is related to a set of economic, social and institutional factors, mainly age (infants and elderly people), gender, location, and lack of coping capacity. These groups face higher risks to illness, injury, mortality, damage to or loss of homes and assets, and disruption of income. Revi and others (n 498) 546.

the planning and design phases accordingly. Second, EIA can identify vulnerable populations and sensitive locations, and therefore better inform mitigation and compensation schemes, as well as advance preparedness for adverse events.[505]

Recent developments in EA theory, policy and regulation in different settings are also testimony to the increased call for the consideration of climate change impacts as relevant to inform decision-making in development consent.[506] Particularly the use of EIA to address climate change-related concerns at the project level has been strengthened both by international and multilateral organizations' documents (e.g World Bank, [507] Inter-American Development Bank, [508] OECD, [509] European Commission[510]) and domestically, through either the issuing of policy guidance or legislative changes (yet more scarcely).[511] This policy and legislative movement is two-fold. On the one hand, it acknowledges the role EIA can play in predicting and informing about the impacts of the proposed action on the environment in terms of estimated greenhouse gas emissions (mitigation). On the other hand, it implies the consideration of how changes in the environment related to climate change might impact on the project and its surroundings (resiliency and adaptation) - what Gerrard calls 'reverse environmental impact analysis'.[512]

The latter aspect is particularly relevant. By taking into consideration the effect of climate change on the project throughout the process (when describing the affected environment, assessing cumulative effects, informing design, evaluating alternatives,

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[505] ibid 579.

[506] Glasson, Therivel and Chadwick (n 413) 328.

[507] World Bank, 'Sourcebook' (n 477) Ch 2.

[508] Inter-American Development Bank, 'Analytical Framework for Climate Change Action' (2010).

[509] S Agrawala and others, 'Incorporating Climate Change Impacts and Adaptation in Environmental Impact Assessments: Opportunities and Challenges - OECD Environmental Working Paper N. 24' (OECD 2010).

[510] European Commission, 'White Paper on Adaptation to Climate Change: Towards a European Framework for Action' (2009).

[511] Wentz presents an overview of policy and legislative initiatives. She informs as examples of jurisdictions that adopted law amendments: European Union, Kitibati and Vanuatu. As examples of issuing of guidance for the interpretation of existing laws: USA federal government, Canada and Fiji. Jessica Wentz, 'Assessing Impacts of Climate Change on the Built Environment under NEPA and State EIA Laws: A Survey of Current Practices and Recommendations for Models Protocols' (Sabin Centre for Climate Change Law, Columbia Law School 2015) 11–13.

[512] Michael Gerrard, 'Reverse Environmental Impact Analysis: Effect of Climate Change on Projects' (2012) 247 New York Law Journal 1.

and determining mitigation and adaptation measures), this might influence the determination of 'significance', likelihood or severity of impacts. More importantly, it might lead to selecting more resilient alternatives, in terms of opting for developments in less vulnerable areas and project design less vulnerable to adverse impacts of climate change. In addition, it also contributes to taking into account the adaptive capacity of vulnerable communities and ecosystems and planning for risk reduction in the case of disasters.[513]

The use of EIA to foster adaptation through the consideration of climate impacts on projects, and with special attention to vulnerable communities, has been clearly included in the guidelines issued by multilateral organisations and development banks. This is the case, for instance, of the World Bank,[514] the Inter-American Development Bank,[515] and the OECD.[516] Notwithstanding, in terms of policy and regulation, there seems to be emphasis on mitigation (accounting for emissions), whereas adaptation concerns remain usually not clearly supported and reference to distributional aspects is inexistent.[517] The USA impact review laws and the EU's EA framework are particularly significant as examples of the establishing of legal obligations in this regard, offering examples of different structures for policy guidance and statutory provision respectively.

In the first example, although no explicit statutory requirements exist at the US federal level, the issuing of policy guidance by the Council on Environmental Quality (CEQ)[518] clarified the role of climate change analysis in EIA. The 'Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions'[519] states that accounting for climate change-related impacts as one of the categories of environmental issues to be addressed in environmental review is within

[513] ibid 3.

[514] World Bank, 'Sourcebook' (n 477).

[515] Inter-American Development Bank (n 508).

[516] OECD, 'Integrating Climate Change Adaptation into Development Co-Operation. Policy Guidance' (OECD 2009). Agrawala and others (n 509).

[517] Agrawala and others (n 509).

[518] CEQ was created under NEPA and has the competence to promulgate NEPA's regulations.

[519] CEQ, 'Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews, 79 Fed. Reg. 77,802' (2014). The 2014 revised draft replaced the draft released in 2010.

the scope of NEPA regulatory framework[520] (with reference to the analysis of direct, indirect, and cumulative impacts). [521] The draft guidance acknowledges the importance of both consideration of climate change-related impacts caused by (emissions)[522] and affecting a proposed project (impacts on the project and increased vulnerability of surrounding environment).[523] Moreover, it states that 'climate change effects should be considered in the analysis of projects that are designed for long-term utility and located in areas vulnerable to specific effects of climate change (such as increasing sea level or ecological change) within the project's timeframe'.[524] Similar initiatives have been put in place at the state and local levels.[525] However, CEQ guidance does not offer detailed instruction on how to conduct this analysis and practice, although increasing, is not consistent. Research reviewing the practice of federal agencies in environmental impact statements concluded that the quality and scope of climate change impact analysis vary considerably, and that despite being common accounting for emissions, they did not necessarily include consideration of effects of climate change on the project.[526]

With regards to the second example, the most recent amendment of the EU Directive on EIA[527] includes obligation towards the consideration of climate-change related

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[520] Under NEPA, federal agencies are required to prepare an environmental impact statement (EIS) for any major federal action that may significantly affect the quality of the human environment. See: 42 U.S.C. § 4332(2)(C), and 42 U.S.C. §§ 4321, et seq.

[521] Jennifer Klein and Ethan Strell, 'Legal Tools for Climate Adaptation Advocacy: NEPA' (Sabin Center for Climate Change Law 2015) 3. Katrina F Kuh, 'Impact Review, Disclosure, and Planning' in Katrina F Kuh and Michael Gerrard (eds), *The Law of Adaptation to Climate Change: United States and International Aspects* (American Bar Association 2012).

[522] The revised guidance indicates a benchmark of 25,000 metric tons of CO2 annually as a threshold for quantifying estimates of GHG emissions. CEQ (n 519) 77,827–28. Additionally, it instructs agencies to assess both direct and indirect climate change effects, including activities with 'a reasonably close causal relationship' to the federal action under analysis. ibid 77,825.

[523] CEQ (n 519) 77,825.

[524] ibid.

[525] Wentz presents the different approaches to the topic within USA state and local jurisdictions: Massachusetts is the only jurisdiction to amend EIA statutes to include the requirement for the consideration of climate-change related issues, while others have issued policies or guidance documents, such as New York State, New York City, Washington and King County, WA. Wentz (n 511) 11–12. Interestingly, New York State enacted an adaptation bill, the 'Community Risk Reduction and Resiliency Act' (Bill S6617B-2013) regarding preparedness for climate change. Available at <http://open.nysenate.gov/legislation/bill/S6617B-2013> accessed 17 April 2015.

[526] Jessica Wentz, Grant Glovin and Adrian Ang, 'Survey of Climate Change Considerations in Federal Environmental Impact Statements, 2012-2014' (Sabin Centre for Climate Change Law, Columbia Law School 2016). Strell (n 285).

[527] Directive 2014/52/EU.

impacts. The Directive's preamble refers to both the necessity 'to assess the impact of projects on climate (greenhouse gas emissions) and their vulnerability to climate change' (recital 13); and the relevance of taking into consideration disaster risk prevention and management (recital 14) in terms of the project's vulnerability and resilience (recital 15). There is reference to assessing impacts of the project on climate and project's vulnerability to disaster and to climate change in scoping (Article 3(1)(c) and (2)), screening for Annex II projects (Annex III(f)), and content of environmental reports (Annex IV(4), 5(f) and (8)).[528] Reflexes on practice are still to be appraised, for members have until 2017 to transpose the amendment domestically.

It is relevant to mention that this is attached to EU policy commitments and guidelines. The European Commission has proposed a commitment to integrate climate change-related risks and adaptation measures through EIA and SEA within its adaptation policies, recognising the importance of impact assessment for 'climate-proofing' EU policy.[529] Importantly, guidance has been issued on integrating climate change and biodiversity into EIA[530] and the SEA.[531] From a mitigation perspective, these highlight the relevance of conducting an emissions assessment, when necessary. From an adaptation perspective, the guidance recognizes the need to consider project's vulnerability to climate conditions according to the type of infrastructure, location and project's life expectancy.[532]

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[528] For criticism referring that references to climate change seem to reflect mainly a mitigation perspective, remaining assessing effects on the project timid, see Teresa P Navajas, 'Reverse Environmental Assessment Analysis for the Adaptation of Projects, Plans,and Programs to the Effects of Climate Change in the EU. Evaluation of the Proposal for an EIA Directive' (Sabin Centre for Climate Change Law, Columbia Law School 2015) 14.

[529] See: European Commission, 'White Paper on Adaptation to Climate Change: Towards a European Framework for Action' (n 510). European Commission, 'EU Strategy on Adaptation to Climate Change' (2013). European Commission, 'EU Adaptation Package' (2013). For an overview of adaptation strategies in the EU member countries, see the European Climate Adaptation Platform (CLIMATE-ADA) <http://climate-adapt.eea.europa.eu/>.

[530] European Commission, 'Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment' (2013).

[531] European Commission, 'Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment' (2013).

[532] The guidance on EIA, of special interest here, offers a detailed approach on how to incorporate key climate change considerations in all stages of EIA: screening, scoping, assessment, consultation, decision-making, and monitoring.

Notwithstanding developments in policy and regulation, with national governments and development agencies having issued guidelines on the issue recently, statutory requirements are either inexistent or timidly stated. Most importantly, references to the need to pay special attention to the amplified risks faced by vulnerable groups when analysing climate change adaptation within project assessment is usually absent, being explicitly present only in the multilateral development banks policies and frameworks. This is to say that climate change adaptation within EIA 'remains more aspirational than operational',[533] as concluded by the OECD. This may be related to difficulties in dealing with scientific uncertainty and lack of knowledge on long-term climate change effects,[534] coupled with potential burden in terms of additional time and cost in project assessment.

4.3.2 Participation in EA

(iii) Models of participation

Commitments to public participation are well establish in most environmental law regimes,[535] shaping rights-based participatory mechanisms of which EA is a strong example. Notably, this also relates to attempts to improve the legitimacy of decision-making deriving from developments in regulation strategies towards proceduralisation[536] and towards embracing deliberative democracy arguments,[537] which have influenced environmental regulation.[538] Scholarly debates on the role of public participation in environmental decision-making, and particularly in EA

[533] Agrawala and others (n 509).

[534] This is in spite of existing references to managing uncertainties in EA, mainly through recurring to a precautionary approach. See, for example, Annex IV(6) of the EU EIA Directive and Section 15 of the USA NEPA.

[535] Holder affirms it consists in the 'regulatory pillar' of environmental governance. Jane Holder (n 412) 233.

[536] See: Julia Black, 'Proceduralizing Regulation: Part I' (2000) 20 Oxford Journal of Legal Studies 597. Julia Black, 'Proceduralizing Regulation: Part II' (2001) 21 Oxford Journal of Legal Studies 33. See also, developments on 'new governance' regulation: Roderick Arthur William Rhodes, 'The New Governance: Governing without Government' (1996) 44 Political Studies 652.

[537] See: Jane Holder (n 412) 194.

[538] See: Joanne Scott, 'Flexibility, "Proceduralisation", and Environmental Governance in the EU', in Joanne Scott and G. de Búrca (eds), *Constitutional Change in the European Union* (Oxford: Hart Publishing, 2000).

regulation, range from identifying underpinning rationales and defining the goals of participation[539] to exploring the tension between lay and expert knowledge in the political *versus* technical judgment confront.[540] Equally, controversies with respect to the practical benefits of participation are not neglected.[541]

This section focuses on the normative arguments in favour of opening up EA to public participation with an interest in its correlation with the procedural justice and recognition dimensions of an environmental justice framework at the interplay between procedural control and substantive outcomes. These arguments are usually understood in terms of the divide between substantive and process rationale approaches to participation,[542] and result in the identification of multiple purposes and motives (either to improve quality, legitimacy or fairness of decisions).

Substantive approaches, in general, understand the purpose of participation in environmental decision-making as aiming at improving outcomes of decisions. The introduction into the regulatory process of different perspectives, from either third party experts or the locals/lay public (thorough a variety of mechanisms such as access to information, consultation, and public hearings) would add up to expert regulation.[543] Nevertheless, this has been argued under different rhetoric. For example, both Dryzek and Steele develop a deliberative democracy approach to public participation in environmental law.[544] However, the former looks at 'democratic pragmatism' as a discourse mechanism for improving substantive outputs and enhancing awareness (a response to 'administrative rationalism'/expert

[539] See: O'Faircheallaigh (n 458). Judith Petts, 'Public Participation and Environmental Assessment' in Judith Petts (ed), *Handbook of Environmental Impact Assessment* (Blackwell Science 1999).

[540] See: Frank Fischer, *Citizens, Experts, and the Environment : The Politics of Local Knowledge* (Duke University Press 2000). Fisher (n 456). Judith Petts and Catherine Brooks, 'Expert Conceptualisations of the Role of Lay Knowledge in Environmental Decision-Making: Challenges for Deliberative Democracy' (2006) 38 Environment and Planning A 1045. Kuehn (n 466).

[541] For example, in the contexts of EA, Holder draws attention to the fact that 'the objectification of information in developer's environmental statements means that a range of values and viewpoints are not fully represented'. Jane Holder (n 412) 184. Also, Lee and Abbot insist that a technicist approach to EA 'crowd out' public participation. Maria Lee and Carolyn Abbot, 'The Usual Suspects? Public Participation Under the Aarhus Convention' (2003) 66 Modern Law Review 80, 84.

[542] These categories (substantive and process) are explored in Barry Barton, 'Underlying Concepts and Theoretical Issues in Public Participation in Resources Development' in DN Zillman, A Lucas and G Pring (eds), *Human Rights in Natural Resource Development: Public Participation in the Sustainable Development of Mining and Energy Resources* (OUP 2002). See also Maria Lee (n 392).

[543] Fischer (n 540).

[544] On the topic, see Smith Graham, *Deliberative Democracy and the Environment* (Routledge 2003).

regulation);[545] whereas the latter develops a 'problem-solving' strategy, where collective deliberation and rational argument would result in broadening the range of alternative solutions considered.[546]

Others highlight the purpose of participation in contributing to knowledge production through promoting wider information gathering and inputs in terms value and value judgement. In this respect, according to Fischer participation results in better decisions because it would allow input from local knowledge and dispersed values, which institutions and expert-led procedures would not access otherwise.[547] In the same regard, for Lee and Abbot, this could 'determine appropriate levels of safety, distribute costs and benefits of pollution, decide between fundamental divided interests'.[548] Barry focuses on the awareness-raising and educational potential of public participation.[549] Holder explores the same motive, but elaborates on cultural regulatory theory to emphasize the long-term, transformative potential of participation in terms of social and organisational learning and behaviour changing.[550] This points to participation as potentially contributing to the internalization of environmental values and knowledge, and therefore leading to structural and organisational changes.[551]

Procedural approaches highlight the purpose of participation in terms of improving the procedural legitimacy of decision-making, and are in fact intertwined with calls

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[545] John Dryzek, *The Politics of the Earth* (OUP 1997).

[546] Jenny Steele, 'Participation and Deliberation in Environmental Law: Exploring a Problem-Solving Approach' (2001) 21 Oxford Journal of Legal Studies 415.

[547] Fischer (n 540). For an account of the argument in the regulatory theory literature, see Julia Black, 'Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a "Post-Regulatory" World' (2001) 54 Current Legal Problems 103.

[548] Lee and Abbot (n 541) 84.

[549] John Barry, 'Sustainability, Political Judgement and Citizenship' in B Doherty and M Geus (eds), *Democracy and green political thought: Sustainability, Rights and Citizenship* (Routledge 1996).

[550] Jane Holder (n 412).

[551] ibid 197. Holder associates certain theories of EA based on regulatory theories (namely information and cultural theories) to types of learning that could be promoted through participation (technical, conceptual and social). She concludes that the current stage of EA privileges technical and conceptual learning (associated to information theories and expert-led process), not yet fully promoting or encouraging social learning, related to the potential of changing behaviour and inculcating values (associated with cultural theories). ibid 201–203 and 233.

for accountability and transparency.[552] This is a key concern considering the nature of environmental decisions, where expert led decision-making (technical judgement) plays out with matters of value (political judgment)[553] in processes involving developmental policy choices and, very often, complex technicalities. An instrumental interpretation of such a function leads to understanding participation as a means to reduce conflict and seek consensus,[554] and therefore to avoid costly litigation, as well as a means to promote acceptability of decisions.[555] A normative understanding derives from considering a rights-based approach as a basis for enhancing democratic legitimacy: an individual right to participate in decision-making process is recognised as directly enforceable, resulting in public empowerment[556] and wider representativeness.[557] This already resonates in the environmental assessment legal framework, representing important grounds for judicial challenge.[558]

O'Faircheallaigh, in his classification of the ranges of public participation rationales in EA, identifies the purpose of altering distribution of power and structures of decision-making as a separate category.[559] He points out that where participation rationales are limited to 'filling information gaps', 'testing information's robustness', 'problem solving' or 'social learning' (related to the substantive rationale approach),

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552 This argument is related to responsive regulation theory, which advocates public participation in regulation decision-making as a means of countering capture and corruption. See Ian Ayres and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (OUP 1994).

553 See n 46. Additionally, for a debate on democratic issues surrounding expert-led decision-making, see: Beck (n 220). Sheila Jasanoff, *The Fifth Branch: Science Advisers as Policymakers* (Harvard University Press 2009).

554 Yvonne Rydin, *Conflict, Consensus and Rationality in Environmental Planning: An Institutional Discourse Approach* (OUP 2003).

555 Lee and Abbot (n 541) 37. Andy Stirling, '"Opening up" and "Closing down": Power, Participation, and Pluralism in the Social Appraisal of Technology' (2008) 33 Science Technology and Human Values 262.

556 Jane Holder (n 412) 187.

557 O'Faircheallaigh (n 458) 22.

558 In order to question the legality of decisions on the grounds of participation requirements, it is crucial to identify the content of this right to participate. It translates, within environmental assessment regulatory regimes, in provisions establishing, for example, that the EIA has to be made public, in an accessible language, and within a reasonable timeframe to the public to express their opinion. Provisions on the category of information to be made available are also relevant, as well as on the duty to give reasons including the consideration of public concerns expressed. This will be subject of analysis in chapter 6.

559 O'Faircheallaigh (n 458) 20–22.

it does not reflect a tool for allowing a degree of control over decision-making.[560] Furthermore, when participation is argued as an opportunity for influencing decision-making based on arguments such as legitimacy, right to participate and representation of plural interests (related to the procedural rationale approach), this mainly occurs under the assumption that all citizens can participate evenly and meaningfully.[561] Therefore, by shading light on the unequal distribution of political power among social groups and, he identifies as another fundamental goal of public participation in EA 'to achieve a more equitable distribution of political power and change existing decision structures'. [562] Hence, public participation aims at also empowering local communities and disadvantaged and marginalised groups, leading to adequately addressing the distribution of costs and benefits of development.[563] This relates to the allegory developed by Arnstein for exploring a hierarchy of forms of participation in decision-making, the so-called 'ladder of participation', based on different degrees of control over policy decisions by public participation, from lower stands of information generation to higher stands of redistribution of power.[564]

In summary, participation in the context of environmental decision-making may assume different but interrelated rationales. In fact, as it has been explored by plural theoretical understandings, legislation and policy documents may put forward mixed objectives,[565] and a complementary approach may be desirable in order to address a range of regulatory problems.[566] Nevertheless, the linkage between participation and environmental justice in EA seems to remain a contentious issue.[567] Apparently, consultation mechanisms are not sufficient to ensure meaningful participation and representativeness of vulnerable groups in terms of influencing decision's outcome,

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[560] ibid 21.

[561] ibid 21–22.

[562] ibid 23.

[563] This is a relevant argument because environmental assessment legal framework and practice can also be utilised to reinforce marginalisation or justify already-made project decisions.

[564] Sherryr Arnstein, 'A Ladder Of Citizen Participation' (1969) 35 Journal of the American Institute of Planners 216.

[565] This is the case, for example, of the Aarhus Convention. In its recitals most of the rationales are referred to: enhance the 'quality and implementation of decisions' and 'public awareness', provide public authorities with 'accurate, comprehensive and up-to-date information', 'to strengthen public support', and 'accountability of and transparency in decision making'. Lee and Abbot (n 541) 86.

[566] O'Faircheallaigh (n 458) 19.

[567] Scott Kuhn, 'Expanding Public Participation Is Essential to Environmental Justice and the Democratic Decision-Making Process' (1998) 25 Ecology LQ 647.

and prevalent interests still shape information generation and the deliberation process,[568] and, therefore, influence largely potential distributional outcomes. This leads to the question: what is the specific rationale and legal form for public participation for seeking greater consideration of distributional issues? The following section attempts to value this in operational terms, and to explore how members of the public can relate to EA process under such a rationale.

(iv) Participation, vulnerable groups and justice

This section explores how public participation relates to justice claims in the context of EA operating in development consent of individual projects. Specifically, it questions to what extent statutory requirements for participation can inform and add value to the design of EA in terms of inclusiveness and recognition, and therefore broaden the scope of opportunities to shape outcomes. It also highlights its relevance in promoting avenues for legally challenging project proposals in court.

Chapter 3 addressed the correlation between distributional aspects, recognition of difference and opportunities of participation as formulated by theoretical approaches to notions of justice, from which it is concluded that the legitimacy of the process is related to equal opportunities to take part of decision-making through substantive equality and recognition. This is also a concern raised within environmental governance literature and in the discussion about regulatory models for EA (Section 4.2.2, above). In this particular field, it is acknowledged that 'the question of power is central to how public participation works',[569] and that power struggles may manifest in EA process through the dominance of an expert-driven debate as well as through strong articulation of economic and wider national or regional development interests.[570]

However, as Lee and Abbot observe, 'we cannot assume that mechanisms of participation will be deliberative, or elicit values'.[571] This is to say that participatory

[568] Jane Holder (n 412) 199.
[569] Lee and Abbot (n 541) 107.
[570] ibid 83.
[571] ibid 99.

mechanisms in environmental assessment may not be the adequate forum where, through debate and reasoning, groups of interest will be completely crowded out, in order to bring about disinterested consideration and environmental decisions based on common values. Therefore, the purpose here is to cast attention particularly to how participation plays out with the status given to socio-economic impacts within EA regimes in terms of justice concerns, and hence provides for the analysis of distributional outcomes.

The level of interaction between these elements varies from agenda setting to shaping the content of the decision and its conditions. First, public participation is built upon the identification of the range of stakeholders involved in the EA process, and, therefore, who is allowed to deliberate. The definition of the range of socio-economic impacts to be covered by impact assessment tools is linked directly to this because it will influence the identification of different population groups likely to be affected by the development.[572] Second, and conversely, the framework of actors allowed to participate in the process will influence the scoping process, in terms of perceptions over the potential impacts associated with a developmental proposal to be addressed ('issues might be more local, subjective, informal than those normally covered by EA'),[573] and consequently, the positions assumed in conflicts of interests and potential for engagement.[574] Third, in such a context, distributional aspects arise because impacts rarely affect parties evenly, and it is necessary to identify vulnerable groups and to ensure that their views are taken into consideration (specially in particularly sensitive projects).[575] Subsequently, the definition and evaluation of the range of mitigation and compensations measures is also highly dependent on both the range of impacts specified in the scoping stage and the variety of stakeholders identified.[576] As a consequence, whether distributional aspects will be addressed

[572] Spaul (n 461) 36.

[573] Glasson, Therivel and Chadwick (n 413) 323.

[574] Richard Bull, Judith Petts and James Evans, 'The Importance of Context for Effective Public Engagement: Learning from the Governance of Waste' (2010) 53 Journal of Environmental Planning and Management 991.

[575] Connelly and Richardson (n 85) 404.

[576] This linkage between participation, scoping and evaluation of mitigation and compensation measures within environmental assessment process is similar to the correlation between policy formulation process and steps in participatory methodology presented in Matthijs Hisschemöller and Eefje Cuppen, 'Participatory Assessment: Tools for Empowering, Learning and Legitimating?' in

through the conditions imposed to the developer is constrained by the opportunities of participation in previous stages of the process.

In light of this, three particular aspects related to the design of participation opportunities within EA regime are central, reflecting strategies that can constitute EA as a tool either to promote inclusivity in the project development or to restrain opportunities of engagement.

One aspect is related to the clear identification of project-affected communities geographically and temporally, a key issue relating to drawing boundaries around the project. However, legislation and policy documents do not address this straightforward, opening up room for interpretations and contentious issues around the definition of what constitutes 'local impact' or 'national interest'[577], or 'relevant communities' and 'vicinity'[578]. Additionally, the identification of potential vulnerable groups within the project-affected communities is key. Walker and others offer some guidance by indicating a set of criteria for identifying key vulnerable sectors, including deprivation or income, gender, age, ethnicity, religion, sexual orientation, disability, future generations (intergenerational distributional analysis), people in other countries (international distributional analysis).[579]

A further aspect concerns the timing for participation within EA processes. Including requirements for participation at a relatively early stage in environmental process, rather than at late stages such as the current statutory requirements in place, will result in more opportunities for public engagement and input in terms of local knowledge and perceptions. This would allow for the public to shape the process through active participation[580] and avoid reducing the process to merely an opportunity of project

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Andrew Jordan and John Turnpenny, *The Tools of Policy Formulation* (Edward Elgar Publishing 2015) 38.

[577] Brazilian legislation mentions 'local impact' and 'national impact', to be explored in chapter 7.

[578] For example, in the UK Planning Act 2008 (approving of nationally significant infrastructure projects), there is provision mentioning that the pre-application consultation is of the 'people living in the vicinity of the land' (S47); as well as establishes the preparation of a local impact assessment (S60). The DCLG interprets 'vicinity' of a project as 'those who work in or otherwise use the area, as well as those who live there' (at 50). See Chapter 5 for Brazilian legislation on the topic.

[579] Walker, Fay and Mitchell (n 465).

[580] Jane Holder (n 412) 191.

improvement or project legitimization, potentially widening the opportunities to shape the process.[581]

For instance, the World Bank strongly recommends consultation not only once the draft EA has been prepared but also at the scoping stage, recognizing this is key to identifying impacts as well as to the design of mitigation measures.[582] Similarly, Brazilian scholars suggest the inclusion of a 'preliminary public hearing', prior to scoping.[583] Another example is the pre-application public participation provision in the UK Planning Act, which establishes consultation obligations on the applicant for a project previously to the final application consent is made (to consult not only statutory consultees and to notify the Secretary of State, but also publish a 'statement of community consultation'; the developer will then take into consideration a range of concerns when drawing up the final application). [584]

A third controversial aspect relates to the extent to which participatory processes open up space for the public to influence decision-making in the case of large-scale projects. This raises questions of politics of scale (see section 4.3.3, below), shedding light on the interplay between policy background and project authorisation. If policy and strategic decisions have already been largely taken in terms of the need for or urgency of the development (values and interests playing out), and legal and technical frameworks have been set up, little is left for discussion at the project approval stage. Therefore, the scope for the public contribution in terms of having their perceptions on values, interests and local sustainability taken into account is very narrow. Lee and others, when exploring the scope of public participation particularly in the authorising stage of climate change infrastructure in the UK, suggest that there is limited opportunity to influence decision-making and therefore participation may be perceived as a 'bureaucratic hurdle' and a 'frustrating experience'.[585]

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[581] Esteves, Franks and Vanclay (n 471) 37.

[582] World Bank, 'BP 4.01' (n 477).

[583] See <https://issuu.com/ongfase/docs/rs-equidade>

[584] Planning Act 2008, Chapter 2 of Part 5.

[585] The authors point out that there is a neglect of the 'public' by climate change policy makers in the UK particularly because decisions are taken at the level of strategic planning policy and involve technology options, concluding that '[…] the commitment of decision makers to authorising climate change infrastructure is apparently unshakeable by competing values, interests, knowledge or information'. Lee and others (n 411) 39.

This is particularly striking when risk regulation plays out as expert judgement in highly technical areas (e.g. climate change, GMOs),[586] but is also evident for major urban projects involving controversial development choices, where discourse on national or regional interests are at the forefront confronting livelihoods and the sustainability of specific local neighbourhoods. In these cases the key question is how to encourage an agreement about how to balance national interest and local interests, or a city's interests and local neighbourhood interests.

Finally, in EA procedures, the legally granted, enforceable rights to participate do not amount to a 'right to veto', being limited to the requirement that 'due account' be taken of the outcome of the participation process. Although constituting a material consideration, this contributes to the limited opportunity to influence decision-making.[587] In such a context, there is growing interest in the principle of free, prior and informed consent (FPIC), which is mentioned in the Principles of Environmental Justice, as discussed in Chapter 3. The FPIC principle is understood as a collective right of indigenous peoples to have a say (to give or withhold consent) about development decision-making that affects their livelihoods and cultures, especially the implementation of large projects in theirs lands (e.g. mining, logging, dams). The decision should be reached freely (free from intimidation or coercion), in an informed (access to relevant, comprehensible, independent information) and timely manner (prior to decision-making and with time for consideration), allowing participation in defining conditions (e.g. benefit sharing, no forced resettlement, compensation, no loss of access to income or livelihood).[588]

The FPIC principle can contribute to decisions on distributional issues surrounding the approval of large-scale projects, particularly in terms of emphasizing the interrelation between justice, recognition and participation. The principle developed within international human rights law with regard to rights of indigenous peoples,

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[586] Lee and Abbot (n 541) 84. See also Maria Lee, 'Beyond Safety? The Broadening Scope of Risk Regulation' (2009) 62 Current Legal Problems 242.

[587] Lee and others (n 411) 39.

[588] Christina Hill, Serena Lillywhite and Michael Simon, *Guide to Free, Prior and Informed Consent* (Oxfam Australia 2014) 11.

particularly the right to self-determination.[589] In a wider setting, it has been adopted by international organizations in their social performance standards, in particular by the IFC in Equator Principles, and has even been discussed in specialised literature on agreements between communities and developers which define compensation and benefits distributions.[590]

Nevertheless, controversial aspects remain. [591] The scope of 'consent' is particularly challenging and divides opinions on whether it would constitute a 'right to veto'. [592] While the literature understands that it is defined in terms of veto,[593] performance standards are more cautious, framing it in terms of a right to be consulted. [594] Most importantly, when the FPIC principle is debated with regards to all project-affected communities, not necessarily indigenous people, authors such as Hill and others understands that although the underlying framework applies, the scope of rights relating to consent would be limited in this case: no 'right to veto', being constrained to the right to consultation and negotiation.[595] However, there is little in terms of the potential legal status of FPIC, forming an explicit part of regulatory frameworks for decision-making. In general, the FPIC principle can be inferred from requirements encompassed in local laws on planning legislation for infrastructure development,

[589] It is present in the International Labour Organisation (ILO) Convention 169 on Indigenous and Tribal People (1989) and in the UN Declaration on the Rights of Indigenous People (2007), art. 32(2). Other documents are also relevant for supporting this right, such as the UN Declaration on the Right to Development, the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, and the International Covenant on Civil and Politic Rights.

[590] See: S Nish and S Bice, 'Community-Based Agreement Making with Land-Connected Peoples' in Frank Vanclay and Ana Maria Esteves (eds), *New Directions in Social Impact Assessment: Conceptual and Methodological Advances* (Edward Elgar 2011). Ciaran O'Faircheallaigh, 'SIA and Indigenous Social Develpment' in Frank Vanclay and Ana Maria Esteves (eds), *New Directions in Social Impact Assessment: Conceptual and Methodological Advances* (Edward Elgar 2011). For examples in extractive industries projects in indigenous land, see Ginger Gibson and Ciaran O'Faircheallaigh, 'IBA Community Toolkit: Negotiation and Implementation of Impact and Benefit Agreement'.

[591] Esteves and others sum up the key practical challenges as follows: 'defining who has the right to give consent and who represents the affected communities and therefore has the right to be compensated and/or benefit; ensuring informed consent in contexts where traditional understandings differ from Western scientific understandings; deciding who has legitimacy as an information provider; the issue of veto and the potential undermining of state sovereignty and eminent domain; the right and/or ability of communities to withdraw consent at a later stage; implications for project costs and delay; addressing the power imbalances between affected peoples and developers; mechanisms for redress in the absence of FPIC'. Esteves, Franks and Vanclay (n 471) 37. This relates to issues are raised on the debate about an environmental justice for EA.

[592] ibid.

[593] See: Nish and Bice (n 590). Hill, Lillywhite and Simon (n 588).

[594] See IFC 2012 Performance Standards, Performance Standard 7, point 12.

[595] Hill, Lillywhite and Simon (n 588) 12.

such as requirements for environmental and social impact assessment and consultation, or from the country's support for the international law on the topic.[596]

4.3.3 EA, planning control and politics of scale

This section seeks to explore specific legal structures which may help to clarify the role of EA in contributing to defining space and urban rights, and therefore spatial justice. This gives support to one of the dimensions of the case study analysis developed in Chapters 7 and 8, in which I examine how EA influences and is given weight within planning control processes in practice, particularly in terms of addressing and/or generating land conflicts. To this end, this section focuses on how EA relates, first, to the planning system, and, second, to the legal notion of localism in terms of scales of governance.

Questions regarding 'place-making mechanisms'[597] matter in the EA debate (see Section 3.3). Like land-use and consent rules for planning permission, the EA legal framework and practice reflect similar tensions in the building of social, spatial, temporal and legal conceptions of space,[598] as well as producing specific material changes in the environment.[599] This falls within the questions that 'law and geography' scholarship poses about how law works to 'delineate', 'characterize' and 'commodify' sites that are plural and diverse into 'single, spatially defined units' (under one sole social and legal rationale), thus allowing for the implementation of property rules and distinguishing public from private spaces.[600] The operation of EA is implicated in these phenomena particularly when it is used to mediate – and lessen - disputes over multiple understandings of development and sustainability aims and 'the local' through the legal process. Important issues within this context include the extent to which EA is a legal mechanism sensitive to local environmental democracy

[596] There are authors who have argued that environmental assessment should aim at obtaining the consent of affected communities. See Barton (n 542).
[597] Luke Bennett and Antonia Layard, 'Legal Geography: Becoming Spatial Detectives' (2015) 9 Geography Compass 406, 411.
[598] Antonia Layard, 'Shopping in the Public Realm: A Law of Place' (2010) 37 Journal of Law and Society 412, 420. Chris Butler, 'Critical Legal Studies and the Politics of Space' (2009) 18 Social & Legal Studies 313, 315.
[599] Bennett and Layard (n 597) 406.
[600] Layard, 'Shopping in the Public Realm' (n 598) 414.

and to the locality of an area (when contrasted with national and regional development strategies), or whether its key role is enabling the delivery of representations of a locality, prioritising visions advanced by either (or in combination) regulators, experts, developers or communities.

(v) EA and planning: linkages

The strong linkages between EA and planning derive from the many similarities shared by the systems and from their interactions in institutional practice and decision making.[601] Notably, both are regulatory systems imposing restrictions on development proposals (often applying to the same development concomitantly), operate through administrative law mechanisms with emphasis on discretion,[602] interact with public and private law,[603] and have participation mechanisms as key statutory features (see Section 4.3.2, above). This is also because, among the various 'sites of EA' (land use, biodiversity conservation, pollution control, and development assistance), as Holder mentions,[604] land use control and planning occupy a prominent place. Integrating EA into planning procedures therefore brings to light pressing environmental issues related to planning developments,[605] contributing to how environmental problems are perceived.[606] Moreover, although separate systems, EA and planning function as complements, being integrated within development consent processes (which contributes to avoid overlapping controls).

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[601] For an overview, see: Mark Stallworthy, *Sustainability, Land Use and the Environment* (Cavendish 2002) Ch 5. Jane Holder and Maria Lee, *Environmental Protection, Law and Policy: Text and Materials* (Cambridge University Press 2007) Ch 12 and 13.

[602] On how regulation responds to environmental and planning issues through administrative process incorporating open standards (e.g. 'material considerations', 'best available techniques', 'public interest'), expert judgment and political choices, see Robert Baldwin, *Rules and Government* (Clarendon Press 1997). For a debate on the limits to discretion in these contexts, either internal (statutory and participatory requirements) or external (judicial review), see Fisher (n 456). Mark Tewdwr-Jones, 'Discretion, Flexibility, and Certainty in British Planning: Emerging Ideological Conflicts and Inherent Political Tensions' (1999) 18 Journal of Planning Education and Research 244.

[603] For a debate on the interplay between public and private law with regards to nuisance, see Maria Lee, 'Tort Law and Regulation: Planning and Nuisance' [2011] Journal of Planning and Environment Law 986. Jenny Steele, 'Private Law and the Environment: Nuisance in Context' (1995) 15 Legal studies 236.

[604] Jane Holder (n 412) 65.

[605] ibid 231.

[606] Stuart Bell and Donald McGillivray, *Environmental Law* (7th edn, OUP 2008) 376.

It is beyond the scope of the thesis to attempt a summary of the history, purpose and functioning of planning and environmental law in order to scrutinize how planning decisions and environmental controls are intertwined.[607] The aim here is to shed light particularly on how EA may be consistent with planning control. In this regard, comprehension of the interactions of planning and EA at the level of regulatory subjects is key. From this analysis it emerges that while environmental aspects might constitute material planning consideration,[608] planning permit process influences the perception on environmental risks to be assessed via EA.[609]

This is because, on the one hand, the scope of planning law has evolved from restrictedly regulating spatial-territorial development through land-use rules (which remains its immediate goal) to incorporating the regulation of infrastructure, economic development, access to urban services, realization of urban rights and, importantly, environmental protection.[610] More generally, sustainable development has become a key regulatory purpose of planning (either at the policy or statutory level).[611] On the other hand, the scope of environmental law has also evolved to encompass a wide concept of environment, including regulating aspects of the built environment, such as preservation of listed buildings, landscape and sites deemed worthy of historic conservation. Moreover, environmental regulation interacts with land use through special regime, amongst which EA (alongside industrial permitting, development planning, and nature conservation).[612] Specifically, land-use norms play a central role in siting decisions, by determining land uses and densities at which activities can be performed on a site (with implications to assessing the nature/intensity, design and location in EA) and establishing links with local sectorial

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[607] For an overview, see Chris Miller, *Planning and Environmental Protection: A Review of Law and Policy* (Bloomsbury Publishing 2001).

[608] Discretionary power remains in terms of how authorities will weigh in environmental considerations; however, discretion is limited by statutory guidance, governmental policy and jurisprudence. Bell and McGillivray (n 606) 425.

[609] Chris Hilson, 'Planning Law and Public Perception of Risk' [2004] Journal of Planning Law 1638. However, this relationship does not unfold unproblematically, as discussed in Susan Owens, '"Giants in the Path": Planning, Sustainability and Environmental Values' (1997) 68 Town Planning Review 293.

[610] Bell and McGillivray (n 606) 375.

[611] See Ch 4 and 6 in Stallworthy (n 601). For an example of policy goal encompassing sustainable development in relation to development control, see the UK Planning Statement (2005) Planning Sustainable Development. For an example of statutory provisions in this regard, see the Brazilian case in Chapter 5.

[612] Scotford and Walsh (n 455) 1011.

policies through development plans and zoning.[613] Importantly, planning and EA constitute preventative/anticipatory systems of control,[614] performing key roles in environmental risk regulation through administrative processes.[615] Thus, both systems aim, to some extent, at preventing, mitigating and compensating environmental harm within their respective regulatory scopes.[616]

Another aspect of interest here is related to the role of planning and environmental regulation in informing and shaping land-use and property rights through development consent processes. This relates planning and EA to the debate on the evolving conception of property rights and of public interest linked to land-use choices.[617] Despite the many theoretical formulations,[618] modern property theory recognises property not only as an individual right but also, concomitantly, as social institution.[619] Therefore, property rights are understood as non-absolute, implying also duties[620] that are intertwined with the concept of property itself.[621] This allows for regulatory controls to be established which shape the scope of property rights towards public interest duties regarding social and environmental rights and concerns.[622] Such an understanding translates, for example, into the notion of

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[613] Bell and McGillivray (n 606) 473.

[614] Jane Holder (n 412) 66.

[615] See Fisher (n 456).

[616] Bell and McGillivray (n 606) 387. 'Planning gain' debate might play a role in this, either in minimizing impacts or mediating trade-offs of environmental harm against economic and social gains. Martin Loughlin, 'Planning Gain: Law, Policy and Practice' (1981) 1 Oxford Journal of Legal Studies 61. Interestingly, in planning, this concern is steamed through evolving notions in property theory emphasizing that land decisions need to consider natural ecosystems' features raising issues of sustainability, intergenerational and interspecies justice. See Lynda L Butler, 'The Pathology of Property Norms: Living Within Nature's Boundaries' [2000] William & Mary Law School Legal Research Paper. Susan Owens and Richard Cowell, *Land and Limits: Interpreting Sustainability in the Planning Process* (Routledge 2011).

[617] Scotford and Walsh (n 455) 1038.

[618] This debate is out of the scope of the thesis. For further study of property theory, see for example James W Harris, *Property and Justice* (OUP Oxford 1996). Jeremy Waldron, *The Rule of Law and the Measure of Property* (Cambridge University Press 2012).

[619] AM Honoré and Anthony G Guest, 'Ownership', *Oxford Essays in Jurisprudence* (OUP 1961).

[620] Joseph William Singer, 'Democratic Estates: Property Law in a Free and Democratic Society' (2009) 94 Cornell Law Review 1009.

[621] However, there is some remaining debate on the nature of such interferences to property rights. For arguments in favour of these being intertwined with the concept of property itself (internal element), see Robin P Malloy and Michael Diamond (eds), *The Public Nature of Private Property* (Routledge 2016). Amongst those that understand that this represents imposed limitations on property rights (external element), see Harris (n 618).

[622] John A Humbach, 'Law and a New Land Ethic' (1989) 74 Minn. L. Rev. 339, 342.

'stewardship' [623] or 'socio-environmental functioning of ownership' [624] within environmental law scholarship, according to varying doctrinal constructions.

Scotford and Walsh, when exploring the relationship between property rights and environmental regulation in English Law, assert that environmental regimes related to controlling the use and management of land (including EA) are similar to land-use regimes because they 'constitute' and 'contextualize' property rights to the extent that they contribute to defining the content and the scope of such rights whilst also being limited by property rights and protection rules.[625] Similarly to the interaction between planning law and the processes of private property conceptualization, as explored by legal geographers, environmental regulation, and particularly EA, implies choices about social values and competing uses of land.[626] EA therefore mediates disputes over land-use choices and property rights through administrative processes in cases in which there are conflicted interests (property-rights holders, developers, communities, neighbourhoods, government), and where experts' assessments, notions of the public interest or 'public good' and democratic demands interact.[627] These considerations are key for the normative inquiry under examination in this thesis with regards to EA and its role in allocating land and resources for particular purposes, as well as in identifying and characterizing land-use conflicts deriving from development consent.

(vi) EA, place and localism

Debate on conceptualizing the local sphere of governance is also relevant. This refers to centralism and localism tensions as alternative political logics for planning decisions and environmental control, hence influencing EA operations. Particularly,

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[623] For an analysis of varies conceptual notions of stewardship in environmental law, and particularly with regards to its interconnection with property theory, see Emily Barritt, 'Conceptualising Stewardship in Environmental Law' (2014) 26 Journal of Environmental Law 1, 18–20.

[624] This phenomenon is identified in civil law with the recognition, in constitutional and civil codes' provisions regulating ownership, of social and environmental aspects as internal to the concept of property itself, the so-called 'socio-environmental functioning of ownership'. This will be explored in the context of Brazil's law, in Chapter 5.

[625] This would be part of complex 'symbiotic connections' involving the interplay of mechanisms of public and private law. Scotford and Walsh (n 455) 1011.

[626] ibid 1029.

[627] ibid 1012.

two issues invite questions: first, localism's democratic assumptions are challenged by major projects being constructed, in many cases, as a national or regional concern, or attending particular local interests;[628] second, the socio-legal construction of 'the local' does not necessarily incorporate a diversity of perceptions.[629] Both issues relate to environmental and spatial justice. These questions are grounded on the definition of localism itself. Localism refers generally to the political rationale of prioritising local decision-making over national, centralised governance scale.[630] It develops under the assumption that devolution of powers to the local scales of governance promotes democratic practices and community empowerment.[631] However, controversies surrounding the concept (ambiguity) and practice (more democratic, just and efficient?) of localism are well known in the literature.

First, localism is a contested concept, portraying plural meanings. For example, in terms of its normative justifications, Briffault shows that, at one end of the spectrum, there are theories grounded on participation ('political localism'); and, at the other end, theories claiming for greater efficiency in the provision of public goods and services ('economic localism').[632] Catney and others identify versions of 'positive' and 'negative' localism. 'Positive' localism pursues a turn to the community for social capital building (retaining the state as a facilitator of community development) and recognizes the need for tackling distributional issues resulting from power imbalances. 'Negative' localism emphasizes neo-liberal forms of development and sustainability, based on fostering local self-sufficiency and competitiveness.[633] Environmentalist versions of localism proclaim the need for community self-reliance, based on the notion of sustainable development of the Agenda 21. Furthermore, Layard mentions a distinction between a territorial conception (prioritising 'place')

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[628] See: Jane Holder and Antonia Layard, 'Drawing out the Elements of Territorial Cohesion: Re-Scaling EU Spatial Governance' [2011] Yearbook of European Law 1.

[629] Lawrence Pratchett, 'Local Autonomy, Local Democracy and the "new Localism"' (2004) 52 Political Studies 358.

[630] Phil Parvin, 'Against Localism: Does Decentralising Power to Communities Fail Minorities?' (2009) 80 Political Quarterly 351, 351.

[631] Gerry Stoker, 'New Localism, Progressive Politics and Democracy' (2004) 75 Political Quarterly 117. See also Parvin (n 630) 353.

[632] Richard Briffault, 'Our Localism: Part II--Localism and Legal Theory' (1990) 90 Columbia Law Review 346, 393.

[633] Philip Catney and others, 'Big Society, Little Justice? Community Renewable Energy and the Politics of Localism' (2014) 19 Local Environment 715, 717.

and a spatial conception (emphasizing 'space of flows').[634] Therefore, when localism is announced as the drive for planning or environmental regulatory systems, it should be made clear which rationale is portrayed,[635] otherwise it results in policy inconsistency.[636]

Second, there are authors denouncing the risks of the so-called 'local trap', referring that general arguments for prioritising local decision-making in order to foster democratization in development, environmental and planning systems do not automatically deliver.[637] According to Purcell, such arguments are usually based on *a priori* assumptions: 'decentralization is necessary for democratization', 'democratization requires localisation'.[638] However, localism does not necessarily lead to greater democratic practices and social justice in the allocation of resources, given that disadvantaged communities within a local area may not have the same voice and representativeness as the empowered local groups.[639] Galanter's argument on the relative power imbalance between 'repeat players' and 'one-shooters' in

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[634] Antonia Layard, 'The Localism Act 2011: What Is "Local" and How Do We (legally) Construct It?' (2012) 14 Environmental Law Review 134, 137–138. The author draws on the distinction of place and 'space as flows' in Manuel Castells, *The Rise of the Network Society: The Information Age: Economy, Society, and Culture*, vol 1 (John Wiley & Sons 2011).

[635] Richard C Schragger, 'The Limits of Localism' (2001) 100 Michigan Law Review 371.

[636] An example of one piece of legislation where such a political logic is expressly articulated with regard to planning is the UK Localism Act 2011. The Act establishes the devolution of planning decision-making powers to local scales: local authorities, neighbourhoods and communities. However, in alignment with the literature, commentators of the Act raise concerns about controversies in practical terms. This would be because, despite a plan-led UK system (national strategic policies, Local Plan, Neighbourhood Plan) emphasising local general power of competence, national control retains precedence over local planning decision-making in many of the Act's provisions and in other statutory rules. One example of limits imposed to localism is the 'presumption in favour of sustainable development' contained in the National Planning Policy Framework. Another example refers to the distinct development control procedures for infrastructure projects (under the Planning Act 2008), and for regular planning (under the Planning and Compensation Act 2004). Such a distinction results in the former being framed as national concern, and the latter as local issue, what is made clear in the National Infrastructure Plan (Treasury and the Infrastructure UK, *National Infrastructure Plan* (TSO: Norwich, 2011). For a more detailed analysis, see: Layard, 'Legislation and Policy' (n 634) 134. Nancy Holman and Yvonne Rydin, 'What Can Social Capital Tell Us About Planning Under Localism?' (2013) 39 Local Government Studies 71, 74. See also House of Commons Communities and Local Government Committee, 'The Balance of Power Central and Local Government: Sixth Report Session 2008-2009' (House of Commons 2009).

[637] Mark Purcell and J Christopher Brown, 'Against the Local Trap: Scale and the Study of Environment and Development' (2005) 5 Progress in Development Studies 279. J Christopher Brown and Mark Purcell, 'There's Nothing Inherent about Scale: Political Ecology, the Local Trap, and the Politics of Development in the Brazilian Amazon' (2005) 36 Geoforum 607.

[638] Mark Purcell, 'Urban Democracy and the Local Trap' (2006) 43 Urban Studies 1921, 1926.

[639] ibid 1928. Parvin (n 630) 353.

development consent system corroborates to that.[640] This implies a major issue for development consent, that is how to enhance the chances of participation by the affected community of impacting decision-making,[641] and it seems that localism does not guarantee such a result per se.

Third, there are further equality concerns related to the failure of localism in addressing interpersonal and inter-local inequalities inherent to the access to urban rights.[642] As critics note, localism might contribute to NIMBYim when difficult planning decisions are left to the neighbourhood scale and, therefore, undesirable but necessary land uses are resisted to across different communities;[643] or zoning rules are used to prioritise certain groups of residents and restrict lifestyles under the justification of maintaining the identity or characteristics of an area ('exclusionary zones').[644] This aspect is particularly relevant for understanding conflicts over the application of legal provisions and practices in development consent for major urban projects. This is because investment decisions (alongside zoning regulations articulated for their accommodation) impact unevenly across different social and ethnic groups within the same urban area, sometimes even within the same neighbourhood. When representativeness in decision-making is limited, segregation follows over land conflicts.

Finally, despite the popularity of locality, neighbourhood or community as ideal governance scales,[645] the social and legal construction of 'local' is disputable. It is disputed by the different players at the local governance level pursuing particular and sometimes competing interests, such as local regulatory authorities, developers, communities and neighbourhoods, all of them attributing meanings to the urban geographical space and practicing governance to some extent. These plural,

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[640] Marc Galanter, 'Why the "Haves" Come out Ahead: Speculations on the Limits of Legal Change' (1974) 9 Law & Society Review 95.

[641] Holman and Rydin (n 636).

[642] Briffault (n 632) 420. Holman and Rydin (n 636) 79.

[643] Layard, 'Legislation and Policy' (n 634) 140.

[644] Antonia Layard, 'Law and Localism: The Case of Multiple Occupancy Housing' (2012) 32 Legal Studies 551. Briffault (n 632) 418.

[645] Nick Bailey and Madeleine Pill, 'The Continuing Popularity of the Neighbourhood and Neighbourhood Governance in the Transition from the "big State" to the "big Society" Paradigm' (2011) 29 Environment and Planning C: Government and Policy 927.

contesting meanings are institutionalised under the law as regulatory scales and legal concepts in planning and environmental law through the definition of specific competence powers, administrative boundaries and rights. Law therefore creates legal, territorial, political and institutional units that are static (e.g. territorial delimitations of neighbourhoods or zoning, public space, land rights), not necessarily reflecting the dynamics and diversity on the ground related to social and cultural norms[646] (a reductive process of 'enclosure' and 'commodification').[647]

Given the above, it is crucial to reflect upon how EA operating within development consent interacts with conceptions of space, place, local and land rights. In this respect, in its intricate relationship with planning control, EA contributes to some extent to conceiving an interpretation of 'the local' and of the peoples' experience of it, an interpretation that is 'socially produced and legally bounded'.[648] This occurs throughout the whole EA process: from screening (understanding of environment elements, ecosystems and perception of significance) and scoping stages (perception of values, priorities and diversity), to assessing impacts (perception of risks), consultation (understanding affected communities, participatory rights and conflict of interests), defining alternatives and conditions (understanding diversity, ownership, and distributional issues when defining design aspects, location and compensation measures), and delivering the final decision (what is the prevalent interest according to the concept of development in place). Therefore, reflecting upon the regulatory framework and practice of EA demands acknowledging criticism of scales of governance and of how 'local' is legally constructed.

4.4 Conclusion

In this Chapter I discussed regulatory purpose and integration of value-judgment in EA legal form and practice in order to introduce a justice-informed normative framework. This relates to key aspects of EA regulation, notably the process-outcome

[646] Layard, 'Legislation and Policy' (n 634) 136. Layard, 'Law and Localism' (n 644). Layard, 'Shopping in the Public Realm' (n 598).
[647] Ash Amin, 'Local Community on Trial' (2005) 34 Economy and Society 612.
[648] Layard, 'Shopping in the Public Realm' (n 598) 417.

debate, which is closely entangled with notions of procedural and substantive justice within environmental law and governance. Notwithstanding, when it is given a high profile to matters of justice in EA, both in substantive and procedural terms, conflicts are likely to be revealed and have to be dealt with within decision-making structures. Walker highlights that this can result positively, for facilitating the management of conflicting interests and the implementation of better informed, negotiated and fair mitigation and compensation.[649] However, it can also negatively constitute a source of permanent tension and disagreement between stakeholders over the production and judgement of information on distribution evidence and over strategic development decisions.[650]

This is particularly evident in contentious cases of consent procedures for major urban projects in Brazil, where EA is the medium for impact prediction but also for social and political struggles. Therefore, applying the environmental justice framework for distributional analysis developed in Chapter 3 (see Table 3) and further advanced in this Chapter (see Table 4, below), I turn next to explore empirically the extent to which distributive and procedural concerns of urban-environmental justice are included in the regulation and operations of EA in Brazil. The purpose is two-fold: to assess whether this is available through the current legal form of EA and whether the operation of EA in practice is likely to play a role in redressing systematic socio-environmental and spatial unequal distribution of benefits and burdens of urban development (see Chapters 6 to 8).

[649] Walker, 'Environmental Justice, Impact Assessment and the Politics of Knowledge' (n 165) 312.
[650] ibid 315.

Table 5 Framework for distributional analysis in EA for major urban projects

Socio-Economic Impacts	**Climate-change related issues**	**Participation Representativeness**	**Locality Land conflicts**
Population changes Employment Losses on income and assets Local economy implications Disaggregate effects on health (stress, disruption, anxiety) Effects on well-being Effects community cohesion (social networks) Community safety (traffic road, hazardous materials) Access to urban infrastructure and services Housing (conditions, overcrowding, ownership, affordability, insulation, heating) Access to open space Land uses Whether resettlement or economic displacement is likely to occur Compensation	Impacts of climate change on the project and on the surrounding environment (ecological and human systems) GHG emissions and local air quality Emergency preparedness and response (information, risk hazard assessment, emergency response plan) Energy efficiency	Clear definition of project-affected communities (geographically and temporally) Representation of interests of vulnerable groups affected (income, gender, age, ethnicity, religion, sexual orientation, disability) Consultancy with affected communities Access to information and to justice Free, prior, and informed consent	Neighbourhood Social and cultural identity Community character Local perceptions on sustainable development and sustainability Resettlement or livelihood restoration plan Protection for affected people who may be informally occupying the land (land tenure rights and right to housing) In situ development: to benefit from development projects and increase property values

CHAPTER 5
IMPACT ASSESSMENT AT THE INTERPLAY OF URBAN AND ENVIRONMENTAL POLICIES FRAMEWORK IN BRAZIL

5.1 Introduction

This Chapter inaugurates Part II of the thesis. In this Part I investigate whether EA, operating within planning control, allows for decision making to be framed by the aim of achieving urban-environmental justice. The Chapter specifically appraises the legal and institutional framework for EA in Brazil (the geographic and jurisdictional setting for the empirical work), which comprises the core regulation for development consent of major projects. It therefore provides the grounds for the case study analysis that follows (Chapters 6 to 8) and highlights the contentious nature of seeking to realize both development and environmental protection goals in Brazil (see Section 1.5). The Chapter showcases the sophisticated nature of domestic law, having its foundations in the federalist structure and constitutional system, but which coexists with an enduring implementation gap[651] that feeds constant claims for legal reform.

The Chapter explores how Brazilian law creates and operates a legal conception of locality and urban sustainability through providing general powers of competence and attribution of rights and duties to individuals and groups at the crossroads of environmental protection and planning and land-use rules. These conceptions shape the normative goals of impact assessment and give substance to its implementation. Therefore, this study focuses on stressing the linkages between environmental and planning systems, and identifying how the planning system has incorporated environmental regulation into its ground rules and into its land-use planning and control mechanisms. Through this combination development is regulated and, consequently, environmental problems are forged and addressed in an urban context.

These EA and planning systems are, however, complex: they are characterised by excessive regulation, multiple normative goals and simultaneous recognition of public

[651] Lesley McAllister, *Making Law Matter: Environmental Protection and Legal Institutions in Brazil* (Stanford Law Books 2008) 20.

and private interests, creating the conditions for contest and conflict between goals which may be in opposition. I suggest that the obligations deriving from EA and planning systems and practice can best be assessed by examining the constitutional rights-based approach to environmental protection and urban development adopted in Brazil. Hence this Chapter starts by outlining the constitutional provisions on environmental and urban policies, and then turns to examine the regulatory structures that contain the basis of a legal framework on development consent. This examination is made up of two key environmental and urban policy tools driving impact prediction within development consent: environmental impact assessment (EIA) and neighbourhood impact study (NIS) respectively. Importantly, when presenting EIA and NIS, the aim is to highlight not only areas of friction in terms of regulating development goals, but also potential regulatory entry-points for an urban-environmental justice-oriented impact assessment framework (explained and elaborated in Chapter 4).

There are two caveats. The EA legal regime here addressed corresponds to the set of federal laws and major regulation that apply nationally, being observed by all environmental authorities at the federal, state and municipal levels. Nevertheless, due to the federalist system, there are three levels of regulators: federal (which issues general rules), state and municipalities (which enjoy powers to issue regulations on administrative procedures as well as executive powers, according to powers of competence constitutionally established and statutorily regulated). An example of the scope of local legal framework will be explored in the context of the case studies (see Chapters 6 to 8). Also, although this federal level provides the main sets of rules governing EA of particular categories of developments and economic sectors, this Chapter does not give a doctrinal account of these in order to prevent crowding the chapter with the many statutory and non-statutory provisions comprised within the planning and environmental regimes. Where relevant these sets of regulations are given in the context of the case studies.

Finally, the key features of the Brazilian system are emphasized by way of a comparative checklist featuring the USA and EU EA's legal frameworks, briefly

presented in Table 6.[652] This approach aims to guide the reader to understand the Brazilian domestic system in light of familiar experiences, and, therefore, allow for an informed dialogue. To a lesser extent, it also helps to shed light on the similar principles and regulatory approaches that form the basis of these systems, which are however applied to quite different contexts (a middle-income developing country in the 'global south' or developed countries in the 'global north'). The comparison is limited to the legal frameworks, not reaching analysis of contextual aspects (either legal traditions or social and political conditions) or performance in practice.

5.2 Constitutional Provisions on Environmental and Urban Policies

5.2.1 Contextual aspects towards forging a rights-based approach to environmental protection and urban development[653]

The understanding of provisions on general powers of competence, impact prediction, and attribution of rights and duties to individuals and groups in the Brazilian legal context relies on studying the scope of constitutional norms. Brazil has adopted a rights-based approach in the constitutional design of environmental protection and urban development policy. This is a model that not only establishes state binding duties towards public policy goals and links rights with duties, but that also grants collective rights to an ecologically balanced environment and to the city and therefore offers important avenues for judicial protection through litigation on public interest grounds.

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[652] The USA is included for being a pioneer in establishing EA legislation, which has inspired the Brazilian regime. However, it is worth highlighting that, although both countries are federations, in the USA system the states enact their own legislation on EA, which is therefore different from the one at the federal level; whereas, in Brazil, the federal legislation applies nationally as the overarching framework. The EU is included because its EA framework determines procedural rules that apply to a wide range of developed countries in the context of the European Union. The Table does not include reference to the UK, as was the case in Ch. 2, for its EA regulation generally mirrors the general process of the EIA Directive (implemented through planning legislation, mainly Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011.

[653] Content included in sections 5.2.1 and 5.2.2 was partially published in J Mattei, L V Boratti, 'Constitutional Environmental Protection in Brazil: A Rights-based Approach' in P Fortes, L V Boratti, A Palacios Lleras, T G Daly (eds), *Law and Policy in Latin America: Transforming Courts, Institutions and Rights* (Palgrave MacMillan 2016).

The inclusion of both a right to the environment[654] and of an urban policy chapter in constitutional norms in Brazil was brought about by the 1988 Constitution - although environmental and planning regulations were already present within the existing set of laws.[655] This is a programmatic, broad-ranging, constitution which places considerable emphasis upon declaring and strengthening rights. It is an example of a 'radical-democratic' constitution typical of Latin American countries. Therefore, it is worth contextualizing the Brazilian experience within the constitutional developments in Latin America with a view to exploring what underlies the adoption of such a rights-based framework. It is argued that the constitutionalization of rights in the region has shaped environmental and urban policies towards a rights-based approach.

In enacting the 1988 Constitution, Brazil was at the forefront of a wave of major constitutional reforms carried out by Latin-American countries from the late 1980s (redemocratization) up to recent times,[656] the so-called New Latin American constitutionalism.[657] The two key features that characterize this movement are the widening of democratic participation, and the recognition of new constitutional rights.[658] Besides the classical democratic-liberal political and civil rights, most of the new Latin-American constitutions have notably detailed economic, social and cultural

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654 The debate surrounding the convenience of a rights-based approach, in particular through the inclusion of such rights in constitutional texts, invokes analysis of the intersection of human rights theory, constitutional law and environmental protection. However, this is beyond the scope of this thesis. For a debate of theoretical foundations, see: Jeremy Waldron, 'A Rights-Based Critique of Constitutional Rights' (1993) 13 Oxford Journal of Legal Studies 18. For an account of the different legal formulations in international documents and national constitutions, see: Dinah Shelton, 'Human Rights, Environmental Rights, and the Right to Environment' (1991) 28 Stanford JIL 103. Tim Hayward, 'Constitutional Environmental Rights: A Case for Political Analysis' (2000) 48 Political Studies 558. Ernst Brandl and Hartwin Bungert, 'Constitutional Entrenchment of Environmental Protection: A Comparative Analysis of Experiences Abroad' (1992) 16 Harv Envtl L Rev 1. On the criticism of a rights-based approach in advancing environmental protection, see: Christopher Miller, *Environmental Rights: Critical Perspectives* (Routledge 1998). Catherine Redgwell, 'Life, the Universe and Everything: A Critique of Anthropocentric Rights' in Alan E Boyle and Michael R Anderson (eds), *Human Rights Approaches to Environmental Protection* (Clarendon Press 1996).

655 For an account, see José Drummond and Flávia Barros-Platiau, 'Brazilian Environmental Laws and Policies, 1934-2002: A Critical Overview' (2006) 28 Law and Policy 84. José Roberto Bassul, 'City Statute: Building a Law' in Cities Alliance (ed), *The City Statute of Brazil: A Commentary* (Cities Alliance 2010) <http://www.citiesalliance.org/sites/citiesalliance.org/files/CA_Images/CityStatuteofBrazil_English_Ch5.pdf>.

656 For an account of the constitutional reforms in the period, see: Rodrigo Uprimny, 'The Recent Transformation of Constitutional Law in Latin America: Trends and Challenges' (2011) 89 Texas Law Review 1587.

657 Roberto Gargarella, *Latin American Constitutionalism, 1810-2010: The Engine Room of the Constitution* (OUP 2013).

658 Uprimny (n 656) 1601.

rights, as well as collective rights.[659] Therefore, Latin-American constitutions regulate a wide range of rights and duties, which classical European constitutionalism does not usually consider as constitutional subjects.

The comprehensiveness of the constitution allows for the expression of political aims and derives from contextual elements common to Latin-American countries, which are well explored in the relevant literature.[660] In particular, this political orientation is a reaction to the authoritarian regimes of the 1970s and to the socioeconomic crisis associated with the implementation of neoliberal programmes in the 1980s.[661] In this scenario, constitutional texts gave prominence to values such as pluralism and diversity (in highly plural and ethnically diverse societies which were subject to persistent forms of discrimination), combined with democratic participation. Due to such structural social inequality, distributive justice was articulated within constitutional principles mainly through the prescription of social rights.[662] In addition, the constitutionalization of socioeconomic rights and the setting up of mechanisms for their implementation allowed litigation and, correspondingly, judicial activism to emerge and flourish. This contributed to the development of a constitutional and human rights theoretical framework on rights justiciability, which had the effect of enhancing the courts' legitimacy when intervening in institutional issues.[663]

The variety of changes introduced by the new Latin American constitutionalism has also influenced the environmental and urban policies adopted in Brazil. The recognition of environmental and urban rights at the constitutional level comes along with this rights-oriented approach in a context where environmental protection[664] and

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[659] ibid 1591.

[660] For further analysis on contextual aspects, see: Miguel Schor, 'Constitutionalism Through the Looking Glass of Latin America' (2006) 41 Tex Int'l L J 1. Diego López-Medina, 'The Latin American and Caribbean Legal Traditions: Repositioning Latin America and the Caribbean on the Contemporary Maps of Comparative Law' in Mauro Bussani and Ugo Mattei (eds), *The Cambridge Companion to Comparative Law* (Cambridge University Press 2012).

[661] Schor (n 660) 34.

[662] ibid.

[663] César Rodríguez-Garavito, 'Beyond the Courtroom: The Impact of Judicial Activism on Socioeconomic Rights in Latin America' [2011] Tex L Rev 1669, 1671.

[664] More far-reaching approaches do exist in Latin America, having the potential to enable a transition to a deeper ecological paradigm. The 2008 Ecuadorian and the 2009 Bolivian constitutions are the most

urban development must be balanced with social justice.[665] This refers to the emergence of the so-called Brazilian socio-environmentalism during the authoritarian regime,[666] as explored in Chapter 2, as well as to the emergence, in the same period, of urban social movements embracing the notion of fairness and democracy that agglutinated later in the notion of the right to the city.[667]

This move towards constitutionalization does not merely represent a political statement in such a context.[668] Indeed, it has influenced law and policy-making in practice. This is because both previous and current regulation has to be interpreted under the new provisions and it is a benchmark for executive acts review. Most importantly, the constitutional recognition of environmental and urban rights, proclaimed as collective or diffuse rights, encompasses public interest litigation. The increased litigation on public interest grounds has therefore also given rise to judicial activism with regards to socio-urban-environmental conflicts,[669] where development policies and property rights are confronted with administrative limitations and substantive rights (housing rights, right to a healthy environment and to the city).[670] This enhances environmental and urban law enforcement, which is left not only in the hands of the state.

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celebrated examples, which promote the institutionalisation of indigenous ancestral values and organisational systems and end up entitling nature to subjective rights. For an account, see: Ruben M Dalmau, *El Proceso Constituyente Bolivariano (2006-2008) En El Marco Del Nuevo Constitutionalism Latinoamericano* (Enlace 2008). Eduardo Gudynas, 'La Ecologia Política Del Giro Biocéntrico En La Nueva Constitución de Ecuador' (2009) 32 Revista de Estudios Sociales 34. Boaventura de Sousa Santos, *Refundación Del Estado En América Latina: Perspectivas Desde Una Epistemología Del Sur* (Antropofagia 2010).

665 Acselrad (n 169) 77.

666 Cavedon and Stanziola Vieira (n 215).

667 Tavolari presents a thorough analysis of the conceptual development of the notion of the right to the city linked social movements' claims in Brazil. The author argues that the notion was first incorporated by the academia and then spread to social mobilization under its philosophical and political dimensions by influence of the works by Lefebvre (on right to city), Castells (on urban social movements), and (on social justice and the city). A legal dimension was incorporated later in the legal reform debates following redemocratization. Bianca Tavolari, 'Direito à Cidade: Uma Trajetória Conceitual' (2016) 104 Novos Estudos 93.

668 Joseph L Sax, 'The Search for Environmental Rights' (1991) 6 L Land Use & Envtl L 93, 94.

669 For example, judicial challenge of development consent for major infrastructure projects affecting traditional or low-income communities; definition of land use rules in the context of master plans or zoning norms that interfere in the exercise of property rights; procedural aspects related to land use changes and opportunities for participation in decision-making; forced evictions; land tenure and ownership regularization; environmental nuisance.

670 Antonio Azuela, 'Introdución: Los Juristas Y Las Ciencias Sociales Frente Al Activismo Judicial Y Los Conflictos Urbano-Ambientales En América Latina' in Antonio Azuela and Miguel Ángel Cancino (eds), *Jueces y Conflictos Urbanos en América Latina* (PAOT-IRGLUS 2014).

Major problems deriving from a 'hyper-regulation' of themes at constitutional levels in Latin America are not ignored. For instance, this may lead to a significant number of constitutional reforms, weakening effectiveness, loosening of the constitutional normative strength of constitutional law,[671] and, in some cases, increasing the power of the executive branch.[672] Environmental and urban policies are not immune to such concerns, which is reflected in the persistent gap between the strong constitutional framework and limited regulatory enforcement and trade-offs on the ground,[673] to be further addressed in the case studies analysis (Chapters 8 and 9).

5.2.2 Constitutional environmental protection

The departure point for exploring the scope and structure of the constitutional model adopted for environmental protection is the wording of Article 225 of the Brazilian Constitution:

> 'All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the government and the community shall have the duty to defend and preserve it for present and future generations.'

This is a complex provision with multiple functions, calling for some clarification.[674] First, it recognises the environment as an asset of 'common use', for 'it belongs to everybody in general and to nobody in particular'.[675] This means that the environment is not subject to ownership, and cannot be disposed or divided. Therefore, environmental policies and environmental decision-making should aim at the preservation of the overall quality of the environment and essential ecological processes, considering the public interest involved. Second, the right to the environment is recognised as a fundamental right. This is based on an understanding of a healthy environment as a pre-condition to fulfilling human rights standards. This

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671 Gargarella (n 657) 152.

672 Almut Schilling-Vacaflor, 'Bolivia's New Constitution: Towards Participatory Democracy and Political Pluralism?' (2011) 90 European Review of Latin American and Caribbean Studies 3, 22.

673 McAllister (n 651).

674 The analysis is based mainly on Brazilian legal doctrine.

675 Drummond and Barros-Platiau (n 655) 95.

understanding connects environmental rights to the realisation of human dignity and well-being,[676] and results in benefiting from the special normative nature of fundamental rights. One of those benefits is direct enforceability (self-executing), albeit still requiring further implementing regulation (Article 5 §1). Another benefit is that the right is irrevocable, inalienable, and not subject to the statute of limitations.[677] This last aspect has played an important role in claims for compensation for losses and reparation of damage related to long-term contaminated and deforested areas, known as historical hazards.[678]

Moreover, a more rigorous regime for constitutional amendment applies, reflecting greater legal certainty. This is because it is covered by the so-called 'eternity clause' (Article 60 (§4)(IV)), which precludes removal or amendment of various fundamental rights and principles. The provision has been further interpreted in environmental matters to perform also the function of 'non-regression' or of a 'no-further degradation test'.[679] This means not only that such a guarantee cannot be abolished, but also that the current level of environmental protection cannot be reduced.[680] It represents, in this sense, a barrier to deregulatory efforts.[681] In fact, it has already been used in court decisions as reasoning for constitutional review and application of sanctions.

Third, the right to the environment is presented in the Brazilian Constitution as a 'fundamental right-duty'. At the same time that it grants 'a right for all', it also imposes a duty to protect the environment.[682] This is because environmental rights would be part of the so-called solidarity rights, the ones that 'may be invoked against the state and demanded of it' but 'that can be realized only through concerted efforts

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[676] Sax (n 668) 100. Joshua Bruckerhoff, 'Giving Nature Constitutional Protection: A Less Anthropocentric Interpretation of Environmental Rights' (2008) 86 Texas Law Review 615, 622.

[677] Luís Roberto Barroso, *Interpretação E Aplicação Da Constituição: Fundamentos de Uma Dogmática Constitucional Transformadora* (Saraiva 1996).

[678] See: STJ, REsp 1.120.117/AC, DJe 19.11.2009 <http://www.stj.jus.br>.

[679] Bruckerhoff (n 676) 638.

[680] Ingo W Sarlet and Tiago Fensterseifer, *Direito Constitucional Ambiental: Estudos Sobre a Constitutição, Os Direitos Fundamentais E a Proteção Do Ambiente* (Revista dos Tribunais 2011) 222.

[681] This would have to be justified by a compelling public interest or by the necessity of realization of other constitutional rights: Bruckerhoff (n 676). Antonio Herman Benjamin, 'A Constitucionalização Do Ambiente E a Ecologização Da Constituição Brasileira' in José JG Canotilho and José Rubens M Leite (eds), *Direito Constitucional Ambiental Brasileiro* (Saraiva 2007) 122.

[682] Sarlet and Fensterseifer (n 680) 68.

of all actors on the social scene'.[683] As a result, they assume enhanced status and, therefore, the public interest related to the maintenance of essential ecological processes justifies limiting private property interests.[684] This is translated, for instance, into the doctrine of socio-environmental function of property that binds environmental and planning permits, as well as landowners' duties toward special protected areas (see below).

Fourth, fundamental rights operate in two dimensions: objective and subjective.[685] The objective dimension is related to the recognition of certain values that bind public authorities when performing governmental tasks.[686] In this case, environmental protection is recognised as a legitimate fundamental value under the Brazilian constitution, which imposes on the government the obligation of taking such a value into consideration under conditions of constitutional review of statutory provisions, as well as for applying the law and designing policies. There is a general duty to take measures aiming at the preservation of 'essential ecological processes' (Article 225, heading), and also specific duties (Article 225 §1), which encompass matters such as ecological management of species and ecosystems; biodiversity; control of genetic resources; control of technologies, substances, and production methods; creation of protected areas; the requirement of environmental impact studies; establishment of sanction mechanisms. These are to be pursued gradually through law, policy, and decision-making.[687] As a result, government discretion is limited to some extent to the fulfilment of those duties,[688] and deviation therefrom may constitute

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683 Shelton (n 654) 123.

684 Nicholas Bryner, 'Brazil's Green Court: Environmental Law in the Superior Tribunal de Justiça (High Court of Brazil)' (2012) 29 Pace Environmental Law Review 470, 481.

685 Ingo W Sarlet, Luiz G Marinoni and Daniel F Mitidiero, *Curso de Direito Constitucional* (Revista dos Tribunais 2012).

686 Filippe AS Nascimento, 'A Dimensão Objetiva dos Direitos Fundamentais: É Possível Reconhecer Os Direitos Fundamentais Como Uma Ordem Objetiva de Valores?' (2011) 13 Revista Direito e Liberdade da Escola da Magistratura do RN 211, 215.

687 This duty might manifest either through positive obligations (non-omission and non-insufficient protection) or through negative obligations (non-interference). Sarlet, Marinoni and Mitidiero (n 685) 574. The Brazilian Supreme Court has recognised that the judiciary can even determine that the executive branch take measures to ensure the realisation of social and ecological rights under special circumstances, and that budgetary deficiency cannot be claimed for not fulfilling this duty. However, the issue remains controversial. See: STF, REsp 658171/DF, DJe 21.02.2014 <http://www.stj.jus.br>.

688 José JG Canotilho, 'Estado Constitucional Ecológico E Democracia Sustentada' in José Rubens M Leite, Heline S Ferreira and Boratti (eds), *Estado de Direito Ambiental: Tendências* (2nd edn, Forense Universitária 2010) 159.

administrative misconduct and violate criminal and administrative norms.[689] In fact, a comprehensive body of legislation governing those themes has been enacted since 1988 and institutional aspects have been strengthened.

The subjective dimension of fundamental rights guarantees the enforceability of these rights. Thus, recognising the right to the environment as a fundamental right means that there is a justiciable environmental right that can be invoked against interference (by the government or third parties). Most importantly, the Brazilian constitutional provision creates a collective or diffuse right to the environment (or 'transindividual right'), benefiting the whole society rather than only particular individuals. This is an important feature because it justifies rights-protection instruments on public interest grounds. In this sense, there is a series of constitutional norms recognising collective rights regarding the natural environment (Article 225), the built environment (Article 182), culture (Article 216), and ethnic groups (Article 231). Moreover, procedural guarantees have also been assigned. For example, the publication of impact assessments is mandatory (Article 225, §1, IV, Constitution); and there is a regulation on access to information held by the environmental agencies (Law 10,650/2003). Furthermore, public participation in environmental matters is ensured through several mechanisms, mainly representative councils, consultations, public hearings, and environmental and neighbourhood impact reports.

Finally, there are also administrative and judicial mechanisms for enforcing such guarantees. Relevant here is the Civil Public Action Act (Law 7,347/1985), which allows the judicialisation of collective and diffuse interests, such as the environment. Under this law, prosecutors and civil society organisations, amongst other actors, can file civil suits against the government or third parties to protect the environment. Moreover, the Constitution also permits every citizen to file class actions against state acts that damage the environment or other assets comparable to it (Article 5 LXXIII).[690] Such procedural guarantees and mechanisms for redress have been widely used by prosecutors, NGOs and community groups for obtaining court orders requiring the cessation of harmful activities, and for questioning the legality of the

[689] Benjamin (n 681) 74.
[690] McAllister (n 17).

environmental licencing of large-scale projects, mainly on the grounds of poor quality of environmental reports, and violation of rights to information, consultation and participation.

5.2.3 Constitutional chapter on urban policy

As previously argued, planning law performs a key function in environmental protection (see Section 4.3.3). This results from the multi-regulatory subjects of planning law, which is centred on land-use but also includes social, environmental and economic interests, and, therefore, reflects upon the regulation of access to services and infrastructure, and the exercise of individual and collective social and environmental rights.[691]. Most importantly, such a close tie is ensured by normative aims emerging from the constitutional and subconstitutional frameworks for urban policy. This section sketches the constitutional provisions that integrate environmental protection into urban planning rules, constituting the foundations for distribution of powers and for regulation of private property rights and state duties in light of urban-environmental public interest. Analysis of the case studies (Chapters 7 and 8) demonstrates how this is strongly featured in local planning legislation.

With regards to urban planning, whereas federal government holds the power to issue general rules and states enjoy a residual competence,[692] it is the municipalities that exercise the power to elaborate legislation regarding local interest and land-use norms.[693] Therefore, through the elaboration and implementation of a local urban development framework, the municipality consists of the central agent of urban development and territorial ordinance. This is governed by the constitutional chapter on urban policy,[694] which, beyond placing the municipality centre stage, sets up urban policy's normative aims: to foster the development of the social functions of the city and citizens' well-being. The 'social function' of property and of the city is key.

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[691] Within domestic literature highlighting this interaction, see: José Affonso Silva, *Direito Urbanístico Brasileiro* (7th edn, Malheiros 2012) 38.

[692] Article 24(I)(§1) e (§2). States also hold competence to issue legislation on metropolitan areas (Article 25).

[693] Articles 30 and 182.

[694] Articles 182 and 183.

The social function of property is a concept that has travelled from twentieth century European doctrine affirming property as a fundamental right that also includes an obligation to promote social interests[695] to reverberate in Latin America, where assuming a contextual twist. In Latin America, the rights-duty notion developed as a mechanism for redistribution due to concerns with inequality of access to land. Through enforcing positive duties on landowners (productive use) and on the state (to expropriate), it informed land policy reform first in rural then in urban areas, being granted constitutional status in countries of civil law tradition.[696] It also evolved, later, to accommodate sustainable development concerns, concomitantly recognising environmental rights and the proliferation of environmental regulation. [697] Additionally, this approach has led also to the recognition of the social function of land tenure, which is linked to claims for access to urban land as a means for realising housing rights in circumstances of high inequality in the distribution of land.[698]

In Brazil, from the many constitutional provisions referring to the concept,[699] read in conjunction with the Civil Code,[700] it is inferred that property performs a trifold function: social, economic and environmental ('socio-environmental function').[701] These confine the meaningful content of the duties contained in ownership, and therefore inform administrative restrictions imposed in the name of public interest and collective rights.[702] In terms of urban property specifically, Brazilian law has evolved to outline particular elements. For urban property to serve its function it has to be in accordance with normative goals placed in the constitution (including well-being and

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[695] Based mainly on the work by Duguit criticizing the individualist notion of property rights. See: MC Mirow, 'The Social-Obligation Norm of Property: Duguit, Hayem, and Others' (2010) 22 Florida Journal of International Law 191.

[696] Thomas T Ankersen and Thomas Ruppert, 'Tierra Y Libertad: The Social Function Doctrine and Land Reform in Latin America' (2006) 19 Tulane Environmental Law Journal 69, 99.

[697] This is in line with the prolific Environmental law scholarship on the relationship between property and environmental protection, from addressing private property duties towards conservation to notions of stewardship.

[698] Letícia M Osório, *The Social Function of Property and the Human Right to Security of Tenure in Latin America* (Hart forthcoming). On Brazil, see also: Silva (n 691) 75.

[699] See: Article 5(XXIII); Article 170(III); Article 173(§1; Article 182(caput) and (§2); Article 184(caput); Article 185(sole paragraph); Article 186(II).

[700] Article 1228(§1).

[701] While the first two are related to the social function of rural property (with regards to respect of labour rights in the exploitation of land and productivity standards), the latter refers to both rural and urban property (referring to compliance with environmental regulation).

[702] See: Fábio Konder Comparato, 'Direitos E Deveres Fundamentais Em Matéria de Propriedade' in Juvelino Strozake (ed), *A Questão Agrária e a Justiça* (RT 2000). Silva (n 691) 241.

environmental protection) and detailed by specific statutory guidelines (including social justice[703] alongside economic development and environmental protection), as well as with land-use norms defined locally in the city's master plan.[704]

This is followed by the progressive notion of 'social function of the city', elements of which are defined by the statute regulating the constitutional provision, the City Statute (see below). The City Statute ties up the normative aims of urban development policy with the realization of the social functions of the city and of property[705] and includes, within the general guidelines for the pursuit of such goals, the guarantee of the right to *sustainable* cities. This is declared as 'the right to urban land, housing, environmental sanitation, urban infrastructure, transportation and public services, to work and to leisure for present and future generations'.[706]

This is a broad definition encompassing the exercise of fundamental rights from individual claims for access to land and housing to economic, social, political, cultural and environmental rights that are the basis for enjoying a dignified life in urbanized areas. It includes participation in planning decisions, fair distribution and equal access to services and urban infrastructure, respect of diversity in its cultural and historical manifestations and the right to enjoy a healthy environment. The interpretation of such a provision has been stretched beyond a general statutory policy guideline[707] by some scholars who conclude that the right to the city comprises a collective or diffuse right, based on the inclusion of the built environmental within the interests to be protected via class action.[708] In conclusion, this represents the incorporation of a rights-based approach to urban sustainability in urban development policy, and offers

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[703] Importantly, there are mechanisms that can be applied by local authorities to enforce the use of urban property in order to avoid speculation, since regulated by municipal legislation (Article 182(§4)) (e.g. compulsory parcelling, building or utilization, and progressive tax rates). There are also legal mechanisms for ensuring tenure rights (concession of real right to use) and even acquisition of property rights when to ensure possession rights and the realization of housing rights.

[704] Article 182(§1) and (§2).

[705] Article 2(heading).

[706] Article 2(I).

[707] Silva (n 691) 150. Nelson Saule Junior (ed), *Direito Urbanístico: Vias Jurídicas Das Políticas Urbanas* (Sergio Antonio Fabris Editor 2007) 50. Letícia M Osório, 'Direito à Cidade Como Direito Humano Coletivo' in Betânia Alfonsin and Edésio Fernandes (eds), *Direito Urbanístico: Estudos Brasileiros e Internacionais* (Del Rey 2006) 195. Attoh also addresses the issue: Kafui A Attoh, 'What Kind of Right Is the Right to the City?' (2011) 35 Progress in Human Geography.

[708] Article 53, Law 10,257/2001 amending Article 1(VI), Law 7,347/85.

a practical legal approach to the otherwise considered a rhetoric debate based on the right to the city framework[709] (see Section 3.3).

Interestingly enough, the conceptual notion of the right to the city came to the fore once more with the worldwide social mobilizations in 2013,[710] amongst them the massive street protests in Brazil.[711] In Brazil, mobilizations started from an increase in bus fares to rapidly incorporate far reaching and hugely diverse demands, ranging from the control of corruption to the quality of public services, and also engulfing discontent with the infrastructure preparation for the 2014 FIFA World Cup.[712] Despite the complex combination of factors underpinning such developments,[713] living standards in urban centres were at the core of the protests, encompassing access to land, housing, healthy environment, transport and other urban services, combined with disputes over having a voice in decision-making implicating local development benefits and burdens. Writers who have studies the right to the city over the past few decades have had to reassess its significance in the face of these contemporary events in Brazil[714] and elsewhere.[715] Although the social and political dimensions are yet to be fully comprehended, it seems that there is consensus that the right to the city represents a valuable catalysing of claims for social justice and democracy in urban centres. The question remaining concerns to what extent its legal dimension, such as that incorporated into Brazilian legislation, is responsive to these claims.

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709 Edésio Fernandes, 'Constructing the "Right To the City" in Brazil' (2007) 16 Social & Legal Studies 201.

710 'Global protest grows as citizens lose faith in politics and the state' The Guardian, 22 June 2013 <https://www.theguardian.com/world/2013/jun/22/urban-protest-changing-global-social-network>.

711 'Protests in Brazil: the streets erupt' The Economist 18 June 2013 <http://www.economist.com/blogs/americasview/2013/06/protests-brazil>.

712 See Tavolari (n 667) 106–107.

713 These would have to be analysed in light of socio-economic developments resulting in social mobility and access to consumption market.

714 Ermínia Maricato, *Cidades Rebeldes: Passe Livre E as Manifestações Que Tomaram as Ruas Do Brasil* (Boitempo 2013).

715 See: Mark Purcell, 'Seeking (and Finding) Democracy' in Nahide Konak and Rasim Dönmez (eds), *Waves of Social Movement Mobilizations in the Twenty-First Century* (Lexington Books 2015). Peter Marcuse, 'Reading the Right to the City. Part II: Organisational Realities' (2014) 18 City 103.

5.3 The legal form of EA in Brazil: overview of regulatory aspects and institutional arrangements

5.3.1 The process coordinating EA: environmental licensing

In the Brazilian system, environmental licensing represents the key development consent mechanism. It consists of an administrative procedure for granting consent to carry out a development that implicates the use of natural resources or is likely to cause environmental damage. Other permits or authorizations may be required throughout, in a coordinated way, according to the type of activity (e.g. pollution emission and water use permits or authorization for vegetation clearance), which is governed by specific regulation. This, however, demands clarification. The terminology 'environmental licensing', as literally translated from the Brazilian legislation in Portuguese, is not generally adopted in other jurisdictions. Hence, it shall actually be understood as the equivalent to general regimes of structured decision-making process for development consent, within which EA is embedded. As one of the environmental licensing stages, corresponding environmental impacts are identified and evaluated through conducting technical studies (including EIA, but not limited to it). The law and policy underpinning this system, despite its peculiarities in terms of legal tradition and contextual aspects, comprise a form of procedural control similar to the USA's NEPA[716] and the EU's EIA Directive.[717]

Environmental licensing enjoys a well structured legal framework. It was included as one of the command and control instruments in the 1981 National Environmental Policy Act[718] - promulgated under the strong influence of the USA's 1969 NEPA,[719] having procedures regulated nationally by statutory[720] and non-statutory norms (issued by the National Environmental Council),[721] which set out a list of activities

[716] National Environmental Policy Act (NEPA) 1969.

[717] Directive 2011/92/EU on the assessment of the effects of certain private and public projects on the environment (as amended by Directive 2014/52/EU).

[718] Article 10, Law 6,938/1981.

[719] Luis E Sánchez, *Avaliação de Impacto Ambiental: Conceitos E Métodos, São Paulo* (Oficina de Textos 2008).

[720] Complementary Law 140/2011.

[721] The major non-statutory regulations are CONAMA Resolutions 237/1997 (which establishes legal definitions and procedural rules) and 01/1986 (which disciplines EIA).

subject to the procedure.[722] Although state and local regulators have to comply with environmental licensing rules established in federal regulation, they can implement additional supplementary guidelines.

A sometimes contentious issue concerns the definition of the competent authority, since executive branches of the three federative spheres enjoy powers of competence to implement and monitor compliance with environmental rules.[723] To prevent overlapping in the exercise of their powers with respect to EIA, the system is based on rules of cooperation and supplementary action.[724] Norms on competence are mostly dependent on the public domain that may be affected and their scope of impact. The licensing authority will be the federal agency in case of national interest (e.g. military or nuclear activities, or located in territorial sea waters or continental shelf and in native peoples' land), national or regional environmental impacts (beyond the territorial limits of one or more states or of the country), as well as activities in federal conservation units.[725] The state environmental authority[726] will be in charge in most of the remaining cases, where the impact is confined to their own territories and in state conservation units. Municipal authorities have jurisdiction to license enterprises whose impact is merely local, but this depends on the existence of administrative structures and on typology defined by the correspondent state council. Interestingly, there has been a process towards decentralisation of environmental licensing over the last decade, with municipalities gradually increasing their participation and influence in this process.

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[722] Annex I, CONAMA Resolution 237/1997.

[723] Based on constitutional provision on executive powers (Article 23 (III), (VI) and (VII), Federal Constitution) and regulated by Complementary Law 140/2011.

[724] Article 7, CONAMA Resolution 237/1997; Article 13, Complementary Law 140/2011. See: KRELL, Andreas J. *Discricionariedade Administrativa e Proteção Ambiental*: o controle dos conceitos jurídicos indeterminados e as competências dos órgãos ambientais: um estudo comparativo. Porto Alegre: Livraria do Advogado, 2004, p. 112; MILARÉ, Édis. *Direito do Ambiente*. 3. ed. São Paulo: Revista dos Tribunais, 2004, p. 489. Despite some disagreement in the literature, see: Paulo Affonso Leme Machado, *Legislação Florestal (Lei 12.651/2012) E Competência E Licenciamento Ambiental (LC 140/2011)* (Malheiros 2012) 66.

[725] Mainly, the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA). For activities in conservation units, Chico Mendes Institute for Preservation of Biodiversity (ICM-Bio).

[726] An environmental state agency or a department under the State Environmental Secretariat.

Unlike other regimes, environmental licensing in Brazil comprises a three-step process, which regulates the granting of three specific licenses authorizing[727] under especial conditions.[728] The developer first applies for a preliminary license, which approves the location and design of the project, and establishes the basic requirements of environmental control and the main conditions to be complied with during subsequent phases. This is the stage at which environmental studies are required; it is therefore usually the most time-consuming and the most heavily litigated aspect of development consent. Next, the installation license authorizes a project's implementation, including construction work. Then, the operation license finally authorizes the entry into operation, upon confirmation that technical aspects and mitigating and compensation measures were met. At the discretion of the environmental authority, licenses may be issued simultaneously for projects of low impact.[729]

The validity of licenses may be varied and renewed within the legal timeframe established by the competent environment agency. This allows for compliance monitoring and review of conditions over time.[730] Moreover, the licences may be reviewed by the competent authority in specific cases.[731] Importantly, operating without a valid environmental license or in breach of the established conditions, as well as providing fraudulent information may result in criminal and administrative penalties imposed upon individuals (e.g. fines, imprisonment), and the enterprise (e.g. interruption of the activity, prevention from entering into contract with governmental bodies).[732] Authorities and civil servants may also be implicated.[733]

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[727] See Article 8, CONAMA Resolution 237/1997.

[728] The definition of conditionings is a highly disputed aspect, being subject to criticism for, in many cases, not having direct relation with environmental control to address aspects of public policy or public services provision. See: Marcia Dieguez Leuzinger and Sandra Cureau, *Direito Ambiental* (Elsevier 2013) 86ss.

[729] Paragraphs of Article 12, CONAMA Resolution 237/1997.

[730] See paragraphs for Article 18, CONAMA Resolution n. 237/1997.

[731] Article 19, CONAMA Resolution 237/1997 (breach of the conditioning, omission in the information submitted or incidental risks).

[732] Article 60, Law 9,605/1998 (environmental criminal and administrative sanctions). Also, Article 299, Penal Code.

[733] Criminal responsibility: Article 66, Law 9,605/98. Administrative and civil responsibility: Article 37, §6, Constitution; and Law 8,429/1992.

Notably, environmental licensing plays a central role in the land use planning system. Although operating through distinguished systems and usually governed by different authorities, environmental licensing is linked to planning permission in the context of development consent in practical terms. Application for planning permission (under local planning authority's competence) depends on the prior granting of preliminary license (by the environmental authority). Likewise, later in the process, the final occupancy permit (which forms part of planning permission) depends on the prior granting of operation licence. Moreover, impact assessment mechanisms take place at the intersection between environmental licensing procedure and land use planning decisions: whereas EIA is the main impact assessment mechanism involved in environmental licensing, planning permission procedures and decision-making may also be informed by *neighbourhood impact assessment* (NIS), a targeted impact assessment tool established to further urban policy by evaluating specific urban issues, and therefore their carrying out must be well coordinated (see below).

(i) Environmental Impact Assessment

The Brazilian environmental licensing system refers to a set of instruments that perform impact assessment functions,[734] amongst which EIA is the most well-established and effective. The first EIA was performed in the beginning of the 70s following international pressure[735] and it was only later incorporated by environmental licensing. Nowadays, it enjoys constitutional protection[736] and is shaped by non-statutory regulation operating for 30 years.[737] Despite the particularity of the Brazilian three-step licensing procedure within which EIA operates (it shall be submitted and analysed prior to the granting of the first environmental license),[738] EIA rules are similar to those operating in other jurisdictions in terms of regulatory

[734] Article 9(III), Law n. 6938/1981. Also, Articles 1(III) and 30(sole paragraph), CONAMA Resolution 237/1997. These include: preliminary environmental report (RAS), environmental control report (RCA), environmental control plan (PCA), plan of recuperation of depredated areas (PRAD).

[735] For a hydroelectric project financed by the World Bank.

[736] Article 225(§1): 'To ensure the effectiveness of this right, the Public Power shall: […] (IV) – require, as laid down in law, for the installation of a work or activity with potential to cause significant degradation of the environment, a prior study of environmental impact, which shall ne made public; […].' Also, Article 30, CONAMA Resolution 237/1997.

[737] This is the CONAMA Resolution 001/1986, which sets out screening and scoping criteria. It would be the equivalent to the EU EIA Directive, in terms of regulatory role.

[738] Article 3, heading, CONAMA Resolution 237/1997.

goals and elements such as screening, scoping and public consultation. Importantly, though, EIA is exclusively project-based. Although there are initiatives for specific sectors,[739] there is currently no provision or framework for strategic environmental assessment.

Screening is determined according to significance criteria, so that EIA is mandatory for projects likely to have significant effects on the environment. Federal regulation adopts a list of projects for which EIA is always mandatory due to a presumption of causing significant harm (Article 2),[740] but state and local regulators may issue supplementary lists. These lists are not comprehensive, hence EIA may be required for other activities according to the interpretation and discretion of the competent environmental authority.[741] However, since the threshold of 'significance' is not legally defined, this judgment remains vague and ambiguous,[742] and is therefore subject to controversy and litigation.

In terms of scoping, the core regulation sets out what should be taken into account in compiling the EIA report and the non-technical summary (EIA/RIMA is the acronym in Portuguese).[743] This includes, in sum, a description of the project; compiling information on the environmental and social base line; identifying and evaluating environmental, economic and social impacts (impacts that are negative, positive, cumulative, temporary, long-term); indicating technological and locational alternatives; and proposing mitigating measures.[744] Additional guidelines for conducting EIA may be set through Terms of Reference issued by the environmental authority for certain types of activities.

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739 These are non-statutory, non-binding arrangements mainly in the energy sector.

740 The list includes most of the activities present in Annexes I and II of the EU EIA Directive. Importantly, it includes urban development over 100 hectares or in areas of relevant environmental interest (to be defined by the competent environmental authority).

741 There is no statutory set of screening criteria, such as that provided by the Annex III of the EU EIA Directive.

742 Article 1, CONAMA Resolution 01/1986, includes the definition of 'environmental impact', but not of 'significance'. Criteria such as nature of the impact, magnitude or probability are still open-ended and give room for considerable discretion in screening decision.

743 This is the equivalent to the environmental impact statement (EIS).

744 Articles 5 and 6, CONAMA Resolution 01/1986. These provisions are similar to the content of Annex IV of the EIA Directive.

It is worth highlighting that, despite the publicity of the process,[745] there is no legislative obligation to subject screening and scoping exercises to public consultation. Participatory phases take place only once the EIA/RIMA is submitted by the developer, and comprise intervention by statutory consultees and proceedings at public hearings. Comments by statutory consultees will be collected as a mandatory phase, which may include forest and water departments, and river basin committees, as well as environmental agencies of other federal spheres.[746] In case conservation units or their buffer zones are likely be directly affected, their management bodies are required to grant authorization.[747] At the state and local levels, the EIS are submitted for approval to the respective environmental councils.[748]

Public hearings are held at the discretion of the environmental authority, or these may be called for by public prosecutors or by petition by a number of citizens.[749] There is consensus within domestic doctrine that these hearings assume only an informative function.[750] However, doctrine also recognizes that public hearings in EA processes perform manifold purposes: inform interested parties,[751] promote debate,[752] increase information available to decision-makers by collecting impressions from lay public

[745] The general public is informed of the request for development consent and of the decision through the Official Gazette and publication in local newspapers, and the documents are accessible in the correspondent environmental agency premises.

[746] The intervention of statutory consultees in the environmental licensing in general is established in Article 13(§1), Complementary Law 140/2011, which is considered non-binding. Nevertheless, they have to be taken into consideration and may integrate the decision motivation. Eduardo Fortunato Bim, *Licenciamento Ambiental* (Lumen Juris 2014) 85. Also, it is mentioned in Article 11(§2), CONAMA Resolution 01/1986 for cases where an EIA is carried out.

[747] Article 3(§3), Law 9,985/2000. This authorization is binding to the licensing process. In addition, the management body of the conservation union may specify conditionings to be included in the license (Article 3(§1), CONAMA Resolution 428/2010), which becomes biding to the validity of the license granted. However, it is worth clarifying that if the project is not subject to EIA, this body will be merely notified, no authorization required (Article 5, CONAMA Resolution 428/2010).

[748] This are multi-stakeholder bodies composed of representatives of government, civil society and business, set up by state and municipal governments as part of the administrative institutional arrangements for implementing the environmental policy. At the national level, there is the National Environmental Council, which integrates the structure for implementing the environmental policy at the federal level. Public hearings are disciplined by CONAMA Resolution 09/1987.

[749] Article 8, CONAMA Resolution 01/1986. There has been litigation over the issue, under claims for the holding of more than one hearing in complex cases or when the affected community has difficult access to the event, and for breaching of information and publicity obligations.

[750] See: Édis Milaré, *Direito Do Ambiente* (Revista dos Tribunais 2004) 465. Maria Augusta S O Ferreira, *Direito Ambiental Brasileiro: Princípio Da Participação* (Fórum 2010) 68. Similar understanding can be found in the UK, see: Walton v. The Scottish Ministers (Scotland) [2012] (§14: 'no right to dictate the result).

[751] Paulo Affonso Leme Machado, *Direito Ambiental Brasileiro* (17th edn, Malheiros 2009) 259.

[752] Bim (n 746) 193.

and demands of affected community,[753] to strengthen the legitimacy of decision-making.[754] Hence, in this system, both substance and process rationales for participation, as outlined by Lee,[755] are channelled.

(ii) Considerations of the substance-process dynamic in respect of regulatory goals

The regulatory goal of the EA system structured around environmental licensing is not explicit in the legislation; it can only be inferred. In this respect, domestic scholarship overwhelmingly affirms that resulting legislative obligations are of a procedural nature. More specifically, they concern the setting of procedural requirements regulating information gathering to inform thoughtful decision-making, at the same time allowing for transparency and public participation. Notably, the literature emphasizes that EA does not determine the outcome of decision-making since it fails to mandate particular results in favour of the environment. In this regard, EA (with particular emphasis on EIA) performs an instrumental function.[756] Even though EA establishes limits to the exercise of discretion by the environmental authority by requiring that the body takes the conclusions into consideration and provide a fully reasoned decision, it does not eliminate political judgments.[757] This echoes the well-disseminated underpinning idea in international literature of the procedural control exercised by EA being focused on contributing to 'informed choices'[758] (see Chapter 4). In terms of law and policy, this is also in line with other legal frameworks such as the USA's NEPA[759] and the EU's EIA Directive.[760]

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753 Antonio Cabral, 'Os Efeitos Processuais Da Audiência Pública' (2006) 22 Boletim de Direito Administrativo 789, 790.

754 Diogo de Figueiredo Moreira Neto, *Direito Da Participação Política: Legislativa, Administrativa, Judicial - Fundamentos E Técnicas Constitucionais de Legitimidade* (Renovar 1992) 129.

755 Maria Lee (n 392) 176–180.

756 For domestic literature, see: Paulo de Bessa Antunes, *Direito Ambiental* (16th edn, Atlas 2014) 618. Maria Luiza Machado Granziera, *Direito Ambiental* (3rd edn, Atlas 2014) 412. Celso Antonio Pacheco Fiorillo, *Curso de Direito Ambiental Brasileiro* (13th edn, Saraiva 2012) 223. Vladimir Passos Freitas, *Direito Administrativo E Meio Ambiente* (3rd edn, Juruá 2004) 73. Antonio Herman Benjamin, 'Os Princípios Do Estudo de Impacto Ambiental Como Limites Da Discricionaridade Administrativa' (1992) 317 Revista Forense 25, 27.

757 Benjamin (n 756) 27.

758 John Alder, 'Environmental Impact Assessment: The Inadequacies of English Law' (1993) 5 J. Envtl. L. 203, 211.

759 See: Michael Hertz, 'Parallel Universes: NEPA Lessons for the New Property' (1993) 93 Columbia Law Review 1668.

However, it is also recognised that EA is in some respects also linked to fulfilling environmental policy objectives included mainly in the constitution provisions and in the Environmental Policy Act, which would be an indicative of EA having substantive effects[761] These are related mainly to ensuring the enjoyment of the right to a healthy environment and promoting sustainable development, through procedural rules for impact prediction, access to information and participation.[762] Notably, environmental justice is not explicitly an EA regulatory goal in the Brazilian regime, neither is there any obligation placed on institutional agents to evaluate distributional issues when drawing up EA policies or implementing these. In conclusion, although there is some room for comparing this with reflexive theories of social learning or cultural change that envisage more substantive outcomes in terms of sustainable development, Brazil's regime relates closely to the information provision theories of EA, and thereby emphasises its procedural nature. Moreover, the lack of clearly defined regulatory goals has negative implications in practice, particularly when an EA is challenged on grounds of inadequacy.[763]

(iii) Considerations on judicial control[764]

The Brazilian case law is not considered in great depth here due to time and space constraints, but it is useful to make some brief, general, comments about how EA has

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[760] See: Alder (n 758). Jane Holder (n 412) 237.

[761] Antonio Herman Benjamin and Édis Milaré, *Estudo Prévio de Impacto Ambiental* (Revista dos Tribunais 1993) 106.

[762] Benjamin (n 756) 39–40.

[763] John Glasson and Nemesio Neves B. Salvador, 'EIA in Brazil: A Procedures–Practice Gap. A Comparative Study With Reference to the European Union, and Especially the UK' (2000) 20 Environmental Impact Assessment Review 191, 191.

[764] It is worth remembering the criteria applied for judicial review of EIA by landmark decisions in the USA and in the UK, with the purpose of highlighting different experiences in terms of substantive implications of procedural rules. In the USA, Supreme Court in Stryker's Bay has adopted a narrow judicial review approach, emphasizing the procedural nature of EIA (*Stryker's Bay Neighbourhood Council Inc* v *Kerlen* 444 US 223 (1980)), despite a more permissive earlier understanding in Calvert Cliffs when applying the 'arbitrary' and 'capricious' criteria (*Calvert Cliffs'Coordinating Committee* v *Atomic Energy Commission* 449 F2d 1109 (DC Circ 1971)). In the UK, Berkeley No1 recognized the potential role of participation in shaping the substance of the decision (*Berkeley* v. *Secretary of State of the Environment, Transport and the Regions* [2001] Env. LR 16). Holder attributes that to the distinguished policy contexts: whereas in the USA NEPA offers explicitly policy objectives that permeate the procedural content of EA and therefore offers some substance to decisions through EIA, in the UK the planning system (which implements the EU EIA Directive) does not account for as clear a policy guidance other than a general claim for sustainable development. As in Brazil, in neither of the cases the courts review the merits of the decision (substantive review). Jane Holder (n 412) 265–266.

been enforced via judicial review. This not only prompts widespread complaints as judicialization is one of the main causes of delay in development consent, but also, and most importantly, leads to questions about the limits of judicial control over discretionary powers exercised by public administrations. The scale and intensity of litigation is due to Brazil's rights-based approach that favours access to courts on public interest grounds (see Section 5.2, above), combined with a complex, tense political and economic context, where developmental interests conflict with respect to constitutional and statutory guarantees (see Chapters 8 and 9). At the fore of the legal debate about the practice of EA regimes are questions familiar beyond Brazil: how do courts attribute procedural and substantive functions to EA, and, specifically, whether the procedural control exercised by EA is capable of shaping substantive outcomes (see Chapter 4).

Despite this being a large and diverse body of decisions, trends can be identified. For example, cases involving the application and enforcement of EA procedural rules usually challenge the operation of opportunities of participation (whether there has been any obstacle to the exercise of the rights of participation, in terms of, for instance, the number of public hearings held and accessibility to its venue, or access to information in due time) and intervention by statutory consultees (depending on whether it is considered to have an informative or a binding nature). Despite the general understanding that process is biding upon authorities and therefore non-compliance with prescribed procedures entitles the licenses to be annulled, both lower and higher courts decisions lean towards overcoming defaults in the process in order to favour developmental interests at stake.[765] With regards to the inclusive, participatory function of EA, participation of affected parties is considered a value in its own right. Nevertheless, the likelihood of participation having an effect upon the final decision is not directly addressed.[766]

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[765] See: Flávia Silva Scabin, 'Desafios E Oportunidades Para O Aprimoramento Dos Sistemas de Licenciamento Ambiental No Brasil: Uma Análise Jurídica E Institucional' (FGV 2014) <http://avaliacaodeimpacto.org.br/wp-content/uploads/2014/11/Palestra-Fl%C3%A1via-Silva-Scabin.pdf> accessed 29 September 2015.

[766] Similar to *Berkely No1*, in the UK, which emphasizes the role or EA in ensuring the public the right to meaningful participation *(Berkeley v. Secretary of State of the Environment, Transport and the Regions* [2001] Env. LR 16. See: Bell and McGillivray (n 606) 465. Jane Holder (n 412) 271–272.

Litigation also occurs to resolve cases in which the technical expertise of environmental authorities, relied upon in the EA process, is challenged. This raises the question of the scope and limit of judicial review of the merits of administrative decisions (substantive control by the courts), which is as yet not completely settled. Such cases assume a twofold aspect. One aspect concerns cases where courts are required to review screening decisions. When EIA is clearly mandatory due to statutory provision (listed activity), violation of the obligation to submit it will result in annulment of the grant for development consent on the basis of non-compliance with procedural requirements. Nevertheless, when there is room for judgement about the likely significance of any environmental effects – a matter of discretion - [767] there is a matter of merit and litigation implicates scrutiny for the content of the decision. There are several precedents concluding that the courts can scrutinize the motivation of the screening decision on the basis of the duty to give reasons, and therefore hold that the development should be submitted to EIA. This is based on the undetermined content of 'significance,' hence the administrative decision on this issue may be subject to judicial scrutiny according to an analysis of whether the decision is considered to be reasonable and proportionate.[768] There are, however, precedents concluding that the choice of type of environmental study to be carried out (either EIA or simplified studies) falls within the discretion of the environmental authority on the grounds of technical criteria; this is satisfied if sufficient information is provided.[769]

The other aspect is related to the information provision function of EA, arising in cases challenging the inadequacy of the substance of environmental studies based on divergence over the scope and quality of the information made available. This highlights the relevance of scoping in influencing the outcome of a decision; this is because a poor quality EIA will inform limited mitigation and compensation measures. There are cases questioning the completeness of EIA, for non-inclusion of certain types or magnitude of impacts or for containing flaws or factual errors.[770] Also, there are a number of class actions challenging the methodological quality of

[767] Benjamin and Milaré (n 761) 112.
[768] See, for instance: STJ, REsp 1330841 (2011/0088728-1 - 14/08/2013).
[769] See, for instance: TRF4, AC 5001715-85.2011.404.7201.
[770] See, for example, TRF4, 2004.04.01.049432-1/SC, DJe 07/01/2005.

EIA, offering alternative technical studies based on different methodology or weighing of information.[771] As there are no agreed standards for environmental reports, courts tend to be more reluctant to intervene. Case law indicates that courts tend to respect the discretionary nature of administrative decision-making, limiting their review to questions of legality and reasonability (compliance with due process requirements) rather than imposing judicial decision over technical and political judgements.[772] The same applies for the definition of alternatives and mitigating and compensatory measures.

5.3.2 Legal reform proposals in Brazil's EA regime: modernization or deregulatory oversimplification?

Claims for the reform of Brazil's EA regime are at the heart of developmental strategies at place due to conflicts over the development consent process for large-scale infrastructure projects (see Section 1.5). Despite the existing consensus among stakeholders with regards to the need for a more efficient and coherent process, with harmonization of regulatory framework, as well as for reducing judicialization over non-compliance of requirements, there is much disagreement about how to implement this. Whereas pro-development forces pursue the streamlining of EA processes through simplified requirements and shortening and/or skipping of phases (see the reform proposals below), environmentalist and civil society groups emphasize the relevance of enhancing the human dimension in impact studies and of social control through participation at earlier planning stages, as well as claiming the need for more efficient and effective post-assessment monitoring of the conditions imposed.[773] There is also controversy regarding the nature, range, costs and implementation

[771] See, for example, TJSP, AI 546.688-5/9-00, DJe 21/09/2006.

[772] See: Bim (n 746) 323–328. This is similar to the judicial deference doctrine in the US context (Chevron case).

[773] Many institutions and organisations have publicized reports assessing the EA legal regime and practice and suggesting reforms, focusing on the particularities of certain categories of projects. See, mainly: World Bank, 'Environmental Licensing for Hydroelectric Projects in Brazil : A Contribution to the Debate' (n 408). ABEMA, *Novas Propostas Para O Licenciamento Ambiental No Brasil* (ABEMA 2013). Scabin (n 765). See also relevant decisions by the Federal Court of Auditors: Tribunal de Contas da União, 'Decision TCU 2212/2009 (auditing on the Environmental Licensing by IBAMA)' (Tribunal de Contas da União 2009). Tribunal de Contas da União, 'Decision TCU 2856/2011 (auditing on Environmental Licensing of Roads - BR 101 and Transnordestina)' (Tribunal de Contas da União 2011). Tribunal de Contas da União, 'Decision TCU 3413/2012 (auditing on the Environmental Licencing of Jirau and Santo Antonio Hydroelectric Dams)' (Tribunal de Contas da União 2012).

control of socio-economic mitigating and compensation measures implicated in major projects, with some voices criticizing this as an attempt to use EA as a means to overcome public policies deficiencies.[774]

In an effort to overcome more urgent administrative deadlocks, the Ministry of the Environment and the federal environmental agency have recently issued a set of non-statutory measures aiming at bringing into line EA requirements and processes at the federal level for specific infrastructure sectors.[775] However, this does not alter the overall EA legal regime, which demands more complex legislative reform. In this regard, whilst researching this thesis, nineteen reform proposals were submitted to the Congress (eighteen statutory reforms and one constitutional amendment) and one non-statutory amendment under debate before the National Environmental Council. The debate has escalated recently. Despite some proposals dating back to 2004, most are from 2011 onwards. The constitutional amendment date from 2012; ten out of the sixteen bills proposed at the Lower House date from 2011 to 2016; both of the bills proposed at the Senate date from 2015, as is the non-statutory proposal (see Table 8).

The most recent and controversial development has been the debate in the Brazilian Senate about a constitutional amendment proposing to replace the three-step EA for the sole requirement of a preliminary environmental impact statement for strategic infrastructure projects. The concern is that such an EA may be considered to offer sufficient scrutiny prior to granting consent; this could not be suspended or cancelled except in the case of supervening events.[776] The executive reasoning of this constitutional amendment claims the need to reduce or even completely avoid the judicialization of EA for strategic projects in order to ensure legal certainty, because this is considered the main cause of projects' delays.

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[774] See Bim (n 746).

[775] See: Inter-ministerial Decree 419/2011 (on the role of federal authorities in the environmental licensing, in particular the governmental protection agencies for indigenous people, for quilombos communities and for historical and cultural heritage, and the Ministry of Health); 420 and 423/2011 (on roads); 424 and 425 (on ports); 421 (on transmission lines); 422 (on oil and gas).

[776] This is the PEC 65/2012, which was approved by the Senate's Committee on the Constitution, Justice and Citizenship on 27 April 2016 (prior to being submitted to vote by the Congress's both Houses), encompassing the inclusion of a seventh paragraph to Article 225.

The proposed amendment has been subject to intense debate by legal experts using the argument that this would in effect result in removing EA from the legal system by eliminating the need to consider the content of environmental impact studies in decision-making as well as inputs from participatory processes. It would also eliminate the possibility of imposing conditions on the developer attached to the granting of consent and orienting the elaboration of monitoring programmes. In a nutshell, it would, at once, violate environmental and public administration principles guiding EA (from prevention and the precautionary principle to information and participation rights). Moreover, it would eliminate the possibility of administrative or judicial review of the EA process, which is unconstitutional.[777]

Despite differences with regards to the legal form for the review of the framework (constitutional provision, statutory or non-statutory regime) or its regulatory scope (e.g. addressing either EA general rules or only the EIA regime, procedural form, specific requirements, or special rules for certain categories of projects), there is a clear trend permeating throughout the proposals (see Table 7). This is to establish streamlined procedures, mainly for large-scale infrastructure projects (fast-track or 'one-stop-shop', or the introduction of strict timeframes), but also for developments in general by proposing shortening in procedures (e.g. one-step, 'self-declaratory', licensing, integrated and 'corrective' licenses), as well as for allowing greater discretionary powers to environmental authorities to determine when simplified rules apply and whether EIA is required. In addition, it seems that social control is diminished in many of the proposals, which either do not address mandatory public hearings or do not clearly discipline its form (except for the case of bills that encompass not only hearings but also online consultation), as well as with provisions lessening the role of statutory consultees.

Experts have interpreted these proposals as setbacks for environmental protection, because they result in diminishing social and judicial control.[778] Also, there is little attention paid to measures that could improve the quality of environmental studies,

[777] See technical note by the Federal Prosecutors Office available at <http://www.mpf.mp.br/pgr/documentos/nota-tecnica-pec-65-2012/> accessed 20 May 2016.

[778] Instituto Socioambiental, 'Nota Técnico-Jurídica: Minuta de Resolução CONAMA sobre Licenciamento Ambiental' (ISA 2016).

with limited debate on improving the quality of information and content/scoping (despite poor quality EIAs – too narrow or incomplete - being a heavily disputed matter in judicial review). In this respect, specific reference to Brazil's broader policy commitments are missing in the debate, such as the need to assess and specify a project's climate change mitigation and adaptation strategies, best-technology-available and notions of vulnerability to disasters. In conclusion, the proposed reforms do not seem to be able to deliver better environmental decision-making.

On a positive note, though, there are some proposals addressing the need for including a strategic level of assessment into the Brazilian system, inspired by the European SEA. Although the debate is still developing, once encompassing only the inclusion of a provision in the National Environmental Policy Act but not its detailed discipline, it represents a major development. The lack of strategic assessment has been highlighted by stakeholders as a highly problematic issue because of the resulting concentration of planning decisions with conflicts being carried over into EA.[779] Moreover, the main bill on statutory reforms shows an attempt to better address the concept of 'significance' by establishing a system based on combining degrees of impact (to be determined according to categories of development by non-statutory rules) and criteria of resilience for the site according to territorial management tools (e.g. environmental zoning), which allows for more contextualised assessment and integration with planning mechanisms. Therefore, although preserving the exercise of discretion by the competent authority for the screening decision, the regulation would offer a more structured set of criteria for it evaluating what is likely to have significant impact. Also, it seems that the relevance of the Terms of Reference has been highlighted, as a means of improving the quality of impact studies. Finally, there is an explicit concern towards transparency and information management to be improved by implementing online databases encompassing environmental studies and decisions.

Additionally, it is worth noting that, despite the on-going attempts to improve the legal form of EA, improvements can be made which do not rely on reform of the legal framework but rather could be accommodated within the current regime. These

[779] Scabin (n 765).

include overcoming operational hurdles by institutional arrangements such as enhancing institutional capacity by removing financial and human resources constraints. In addition, the reform initiatives focus almost exclusively on aspects of administrative procedures (e.g. attributions, deadlines, documents, role of consultees, etc.); there remaining still incipient research for evaluating the quality of environmental studies and capitalizing on ex-post monitoring and feedback,[780] which could contribute to the debate on the scope of impacts to be assessed and on methodology. Also, the development of guides on the elaboration of environmental studies and best practice remains unaddressed, although these are current practice in other jurisdictions.[781]

As explored above, the currently limited scope of discussions in Brazil has lead stakeholders to advocate deregulation of procedural and administrative apparatus to allow for regulatory cost reduction. However, a more fundamental concern is EA regulatory goals, an aspect which is not an element of the legal reform on the table. This issue relates to the current movement in EA debates pushing for changes in the regulatory agenda in light of regulatory theories,[782] as well as focussing also on assessing outcomes, rather than concentrating solely on process. The difficulties in the practice of EA show that there are overlapping expectations raised against a broadly defined, but not explicit statutory goal. While statutory definitions are restricted to mentioning pursuing sustainable development and doctrine emphasizes information gathering, informed decision-making and participation, the practice on the ground has lead to questions about whether EA should additionally and importantly aim at

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[780] A recent study on the quality of EIA was published by the federal environmental agency: IBAMA, 'Caminhos Para O Fortalecimento Do Licenciamento Ambiental Federal' (IBAMA 2016) <http://www.ibama.gov.br/phocadownload/noticias_ambientais/resumo_executivo.pdf> accessed 30 June 2016.

[781] This is the case of the USA, for example, where the EPA's website offers 24 guides on a range of EA topics (e.g. air, quality, energy efficiency, health, cumulative effects, and also environmental justice). See: <http://www.epa.ie/pubs/advice/ea/>. See also guidance offered by the UE, available at <http://ec.europa.eu/environment/eia/eia-support.htm>.

[782] For example, Directive 2014/52/EU, amending the EU EIA Directive (to be implemented by May 2017) was a result of a broad review process in the context of the EU's Better Regulation agenda. See: European Commission, 'Review of the Environmental Impact Assessment (EIA) Directive' <http://ec.europa.eu/environment/eia/review.htm> accessed 6 January 2016. Despite existing criticism of the Better Regulation approach to the EU environmental policy, for which see: Peter Hjerp and others, 'The Impact of Better Regulation on EU Environmental Policy under the Sixth Environment Action Programme, Report for the Brussels Institute for Environmental Management' (IEEP 2010) <http://www.ieep.eu/assets/644/Better_Regulation_Report.pdf> accessed 6 January 2016.

evaluating a project's performance and ensuring environmental standards, or, even further, the articulation of environmental and socio-economic public policies, social justice and human rights and evaluation of a project's adherence to these goals. The potential for developing EA in this direction can be considered in the context of urban policy and development.

5.4 Urban Policy: Scales of Planning and Decision-making

5.4.1 Core regulatory framework: from city statute's general rules to master plan's local strategies

Federal Law 10,257/2001, the so-called City Statute, regulates the constitutional chapter on urban development policy. It constitutes the main body of regulation on urban space planning and land-use rules in Brazil, stating the general objectives and directives, as well as regulating the implementation of legal instruments created by the 1988 Constitution and also establishing new ones. According to the literature, it is an example of practical implementation of principles and proposals encompassed in the Habitat Agenda and the UN-Habitat's Global Campaigns for Good Governance and Secure Tenure for the Urban Poor.[783]

The City Statute was enacted more than ten years after the 1988 Constitution, as a result of an intense negotiation process within the National Congress and through civil society groups mobilized for urban reforms.[784] The Statute ended up incorporating some of the most pressing claims of urban-social movements,[785] including: (1) offering guidance for the interpretation of the constitutional principle of the social functions of urban property and of the city; (2) regulation of urban policy instruments to be implemented by municipalities; (3) indication of clear participatory processes for fostering democratic practices in local governance; and (4) the

[783] Edésio Fernandes (ed.), *Direito Urbanístico e Política Urbana no Brasil* (Del Rey 2000).

[784] For a detailed account of the evolving of the legislative process, from legislative debates previous to the 1988 Constitution to the 11-year consideration of the bill in the Chamber of Deputies, see: Bassul (n 655).

[785] Ermínia Maricato, *Brasil, Cidades: Alternativas Para a Crise Urbana* (Vozes 2001).

establishment of legal mechanisms for regularizing informal settlements located both in private and public areas (land rights and better living conditions).[786]

Most importantly, environmental and distributional concerns feature strongly in the sixteen guidelines that the City Statute sets as normative aims to inform urban policy. Hence, environmental considerations and social justice provide benchmarks against which to assess urban policies and the implementation of legal tools, underpinning an idea of fostering just and sustainable cities. This reflects the role of planning law in addressing socio-territorial inequality in terms of access to land, housing, services and participation in planning decision-making, which, with environmental protection, offers a legal framework for urban sustainability in Brazil.

An example of this recognition of environmental concerns, beyond guaranteeing the right to sustainable cities seen above,[787] is that socio-spatial planning - including distribution of population and activities, definition of land-use rules, and production and consumption patterns - shall avoid negative impacts on the environment.[788] After all, urban policy embraces broadly the protection of natural and built environment, and of the cultural, historic, artistic, landscape and archaeological heritage.[789] With regards to distributional concerns,[790] there is emphasis on the implementation of democratic mechanisms in the context of urban planning and development consent;[791] universalization of access to urban land, services and infrastructure; [792] fair distribution of benefits and burdens of urbanization in terms of inconvenient uses, impact upon infrastructure and deterioration of areas;[793] and recovery of economic

[786] Letícia M Osório (ed), *Estatuto Da Cidade E Reforma Urbana: Novas Perspectivas Para as Cidades Brasileiras* (Sérgio Antonio Fabris Editor 2002).

[787] Article 2(I).

[788] Article 2(IV); (VI)(g); (VIII).

[789] Article 2(XII).

[790] See José Roberto Bassul, 'Estatuto Da Cidade: Quem Ganhou? Quem Perdeu?' (Senado Federal 2005).

[791] Article 2(II); (III); (XIII). Several mechanisms ensure participation of individuals and associations, such as representative councils, popular initiative for the proposal of urban laws, consultation in the elaboration of plans and programmes, public hearings in the context of environmental and neighbourhood impact studies, and participatory budgeting.

[792] Article 2(V); (VI)(c), (d), (e); (XIV). Relevant here are the legal tools for preventing speculative retention of urban land based on the observation of the social function of propriety, as well as mechanism for land regularization and tenure security of low-income informal settlements.

[793] Article 2(VI)(b), (d), (f); (XI).

benefits enjoyed by developers (mainly increased property values/value capture) due to public investment.[794]

These general guidelines will inform and shape planning at the local and neighbourhood scale, which is governed by the municipalities though their elaboration of master plans. The master plan contains the duties and administrative limits attached to property according to urban development strategy and land-use rules. It therefore defines the social function of property in terms of what shall be the use and the type of occupation of each part of the municipal territory.[795] The master plan is to be approved by municipal law in a process ensuring opportunities for public participation through representative council's meetings and public hearings, as well as transparency and access to information (revised every ten years).[796] This approval process is mandatory for municipalities with more than 20,000 inhabitants, and the ones integrating metropolitan areas, areas of interest for tourists, in the vicinity of developments likely to cause significant regional or national environmental impact, and listed in a national registry of risk areas.[797]

Importantly, the master plan not only establishes territorial norms, but also gives expression to social, economic and environmental strategies as well as institutional arrangements. This is due its broad reaching content,[798] which, beyond framing land-use norms and regulating planning tools, also integrates sectorial policies at the local level, including environmental, water, waste management, sanitation and transport. Furthermore, the master plan usually informs the legal concept of environment for the purpose of its implementation, emphasising the interaction between the built environmental and environmental, social, cultural and historic aspects of urban centres. The plan shall also include disaster prevention in case of municipalities

[794] Article 2(VI), (c); (X); (XI).

[795] Article 4(§3).

[796] Article 40(§4). Resolution 25/2005 of the National Council of Cities presents guidelines for public participation in the elaboration process.

[797] Article 41.

[798] Article 42. It is worth noting that Resolution 34/2005 of the National Council of Cities brings recommendations with regards to the minimum content of the master plan, in complement to the statutory provision. This include, amongst others: normative aims and principles (social function of the property and of the city, and right to housing, to the city and to a healthy environment); social housing; protection of historic, cultural and natural dimensions of the built environment; public participation mechanisms.

located in risk areas.[799] In summary the master plan has a key position in the intersection of environmental and planning legislation, playing a central role in the definition of the notion of locality and urban sustainability as well as of the legal content of the right to the city.

5.4.2 From planning to impact assessment: neighbourhood impact study (NIS)

City Statute's guidelines and master plan's local policy and land-use norms shape the regulatory form of urban legal tools, which encompass diverse issues and sectors: planning;[800] financial;[801] legal;[802] and impact assessment.[803] These are hence established in the federal legislation and shall be regulated locally by the master plans. This thesis reflects on the operations of impact assessment tools within development consent for major urban projects, which represents a central part of the managing of urban development. This section focuses on Neighbourhood Impact Assessment (NIS), which operates at a localized scale of decision-making.

NIS is established as an impact assessment tool within the urban policy framework[804] to be implemented by the local authority in the process of planning permission consent. It comprises the process of assessing likely impacts upon the surrounding neighbourhood of major projects in the urban area (encompassing biophysical, social and economic aspects of the urban development agenda), identifying adequate responses, prior to planning permission approval.[805] Therefore, it informs local authority decision-making with regards to project feasibility, and the need for intervention or mitigating and compensatory measures. Nevertheless, like EIA, NIS is instrumental for informed decision-making, representing primarily a technical-

[799] Article 42-A, as amended by Law 12,608/2012.

[800] Article 4 (I) to (III).

[801] Article 4(IV).

[802] Article 4(V).

[803] Article 4(IV).

[804] Article 4(IV), City Statute. It is worth noting that despite regulated by the City Statute, similar tool was already existent in local legislation of certain municipalities, including São Paulo (1994) and Porto Alegre (1979), the latter being the setting for the thesis's case studies.

[805] Art. 36. Municipal law will define the private and public developments and activities in urban areas that will require the previous preparation of a Neighbourhood Impact Study (EIV) to obtain the licenses or authorizations to build, expand or operate from the municipal government.

political judgement, rather than a deliberative and consultative vehicle of local public participation.

The origin of NIS in Brazilian legislation is associated with two other instruments. On the one hand, it was inspired by the USA's development impact fees, which aim at charging new developments for the expected resulting demand placed on the government to invest in improved local infrastructure; that is to say 'to pay the costs of growth'.[806] Nevertheless, this is a function to be performed by other urban legal tools established in the City Statute which allow for the local government to recover economic benefits enjoyed by developers (mainly increased property values) due to public investment through charging fees when authorizing certain planning operations (e.g. compulsory land parcelling, granting of building waiver or change of use, joint urban operations). These tools are directly related to the redistribution of benefits and burdens of urban development.[807]

On the other hand, NIS is also connected closely to EIA, performing a very similar function (impact prediction and informed decision-making) but consisting of a less complex study which focuses primarily on impacts upon the built environment. The underpinning idea is that major urban development shall not only comply with traditional, pre-fixed, land-use rules, but also be subject to appraisal on the basis of its specific adequacy and effects on the neighbourhood area and population. Therefore, NIS remains at the level of project-scale impact assessment, not reaching strategic assessment, regional or community assessment.[808] NIS and EIA are such close mechanisms that in case the development is subject to both, only an EIA may be carried out, which then encompasses the mandatory content for NIS, whereas an NIS

[806] Arthur C Nelson and Mitch Moody, 'Paying for Prosperity: Impact Fees and Job Growth' (The Brookings Institution Center on Urban and Metropolitan Policy 2003). See also: Moon-Gi Jeong and Richard C Feiock, 'Impact Fees, Growth Management, and Development: A Contractual Approach to Local Policy and Governance' (2006) 41 Urban Affairs Review 749.

[807] See Article 4 (IX) and (XI).

[808] It is worth mentioning the notion of 'neighbourhood sustainability assessment' as a latest generation of assessment tools addressing particularly neighbourhood development. Sharifi and Murayama explain that 'NSA tool (also sometimes referred to as: district sustainability assessment tool, neighbourhood sustainability rating tool, sustainable community rating tool) is a tool that evaluates and rates the performance of a given neighbourhood against a set of criteria and themes, to assess the neighbourhood's position on the way towards sustainability and specify the extent of neighbourhood's success in approaching sustainability goals'. Ayyoob Sharifi and Akito Murayama, 'A Critical Review of Seven Selected Neighbourhood Sustainability Assessment Tools' (2013) 38 Environmental Impact Assessment Review 73, 74.

does not suffice as a substitute for an EIA.[809]

Despite being anchored in the City Statute (federal legislation), NIS is a tool falling under the competence of local government; this is unlike the EIA, which may be governed by environmental authorities at the federal, state or local level (see above). Therefore, NIS implementation depends on legal provision in municipal law (either by enactment of specific municipal law or provision in the master plan). This legal provision will set out screening criteria for identification of what categories of developments and activities are subject to it within that jurisdiction, dependent on nature, size and area of influence.

With regards to scoping criteria, the City Statute outlines a general set of impacts to be considered,[810] which can only be assessed in practice before the submission by the developer of a detailed technical project (e.g. informing geological aspects, landscape, and constructed area), as well as impacts on existing urban services and infrastructure such as transport, waste management, water and energy supply systems). These emphasize (a) population impacts (focusing mainly on increasing density); (b) stress put on available infrastructure and facilities networks (considering increased demand and need for improvement); (c) accordance to land-use rules and environmental and social capacity of the area to absorb the development; (d) increase in property prices and 'gentrification' (a potential consequence of the improvement of infrastructure and restoration of the neighbourhood, it means that the development could result in income concentration or social inequity, which demands assessing whether it would exclude low and middle-income population or attract informal settlements[811]); (e) ventilation and lighting; (f) urban landscape and natural and cultural heritage (this may contribute to conservation and restoration of derelict areas, as well as respecting diversity within urban communities). Such analysis informs the negotiation of mitigation and compensation measures, which are usually related to infrastructure improvement (e.g. enlargement of roads, installation of signalization and parking lots,

[809] Article 38.

[810] Article 37.

[811] Mariana S Sant'Anna, *Estudo de Impacto de Vizinhança: Instrumento de Garantia Da Qualidade de Vida Dos Cidadãos Urbanos* (Fórum 2007). Letícia M Osório, Jaqueline Menegassi and LP Mattos, 'Estudo de Impacto de Vizinhança', *Estatuto da Cidade Comentado* (Melhoramentos 2004) 241.

improvement of the public transportation access, etc.) and compensation in case of community displacement.

Interestingly, unlike EIA, NIS does not require consideration of alternatives in term of location or technologies since it targets the impacts deriving from a specific project on a specific neighbourhood. Nevertheless, the set of statutory criteria is not exhaustive: municipal law implementing NIS can expand on those criteria in order to include detailed aspects according to the local context (e.g. the physical, environmental, social, cultural, economic, and infrastructure characteristics) and the planning strategies mainstreamed into the existent master plan. Consequently, there is room for adapting NIS to the social and economic geographies of a local context.

The main regulatory goal of the NIS is to predict impacts in order to demand that developers provide improvements and contributions to enhance infrastructure, quality of life and ecological balance in urban contexts, but it is also a tool for promoting public participation about the approval of major developments impacting upon the city.[812] This is enforced through the mandatory publicity of documents, the analysis of NIS by a representative council linked to the executive branch, and the holding of public hearings.

Interestingly, the rights-based constitutional provisions explored above have implications for the legal understanding of the notion of 'neighbourhood' within domestic law.[813] This evolved from a private law perspective, dictated by the Civil Code[814] and emphasizing nuisance involving exclusively landlords of bordering properties, to encompass the broad notion of 'urban ordering' and social function of the city brought about by the 1988 Federal Constitution, with the emergence of fundamental rights (social and diffuse, mainly right to housing, to a healthy

[812] Rogério Rocco, *Estudo de Impacto de Vizinhança: Instrumento de Garantia Do Direito às Cidades Sustentáveis* (Lumen Juris 2006) 55.

[813] The study of the evolving concept of neighbourhood as planning unit in the context of urban planning movements is out of the scope of this thesis. For an interesting account of the matter with emphasis on the incorporation of sustainability as a framework for planning at the neighbourhood level within mainstream planning movements since the beginning of the 20th century (Garden City, Neighbourhood Unit, Modernism, Neo-traditional Planning, and Eco-Urbanism), see: Ayyoob Sharifi, 'From Garden City to Eco-Urbanism: The Quest for Sustainable Neighborhood Development' (2016) 20 Sustainable Cities and Society 1.

[814] Chapter V, 2002 Civil Code.

environment and to the city) and of the doctrine of social function of property.[815] This means that neighbourhood disputes are not restrained to individual conflicts anymore, but reach collective conflicts underpinning disputes over quality of life, access to urban services and infrastructure and participation in urban development decision-making.

Nevertheless, particularly with respect to regulating the assessment of impacts of urban development, legislation still lack a clearer definition of 'neighbourhood impact'. The concern expressed in legislation is with the 'area of influence', sensitive to direct and indirect effects in terms of affected urban infrastructure and local residents. This is to say that the relevant legislation adopts a 'spatial-territorial' approach to neighbourhood. A more complex, engaging 'social' conception of neighbourhood as explored by planning theorists is currently out of reach.[816] The embracing of a more comprehensive social notion could shed light on, and emphasize, social identity and cultural links, and therefore conflicts and social disruption, in terms of sustainable communities or community character, as explored in Section 3.3.2. Potentially, this could better assist impact assessment in identifying and evaluating a broader scope of negative impacts upon communities affected by major urban developments, enhancing also the effectiveness and fairness of compensatory mechanism, and closely bridging the gap between environmental justice and sustainability criteria in decision-making.

5.5 Conclusion

This chapter detailed an introduction to the EA regime in Brazil in the context of development consent and its interaction with the planning system. It did so not only by approaching the procedural rules for EA, emphasising environmental licensing and the impact assessment tools EIA and NIS, but also addressing normative aims that

[815] Rocco (n 812) 15–18.

[816] From the concept of neighbourhood emerging from the notion of 'neighbourhood unit' laid down by Perry (Clarence Arthur Perry, *The Neighbourhood Unit, a Scheme for Arrangement for the Family-Life Community*, vol Reprinted (Routledge/Thoemmes Press 1998)) or Lewis (Lewis Mumford, 'The Neighborhood and the Neighborhood Unit' (1954) 24 The Town Planning Review 256), to the criticism by Jacobs (Jane Jacobs, *The Death and Life of Great American Cities* (Pimlico 2000)). On how neighbourhood planning has incorporated sustainability as framework, see: Sharifi (n 813).

give substance to a value-driven EA. The constitutional rights-based approach to environmental protection and urban development informs and shapes the operations of EA, which must be sensitive to principles and rights emerging from the system. This is to say that key EA regulatory aims of impact prediction and information gathering co-exist with considerations related to legal notions such as the social function of property and right to the city, which ensure individual and collective rights enforcement (property rights, environmental rights, social rights and participatory rights).

Notably, the notions of social function of property and of a right to the city, read in conjunction with norms on powers of competence, forge an understanding of locality and urban sustainability within Brazilian law and dictate a 'politics of scale' in urban-environmental decision-making. This departs from general commands in constitutional provisions (completing 28 years) and the City Statute (completing 15 years), to be detailed locally according to strategic decisions included in the master plan, all linking land-use with environmental protection and social justice. It then reaches finally development consent and therefore the implementation of EA, which turns out to be an important part of urban development policies implementation. Here, EIA and NIS are the main tools of impact prediction and democratization of urban management, channelling mediation of contrasting interests (private and collective) and somehow imposing limits to the discretion of the administration. Nevertheless, in a context where local development has focused on incentivising major, highly impacting, urban projects, providing the main driver for planning, even maybe to the detriment of the master plan, EA becomes even more relevant and a key factor in shaping locality and urban sustainability. This not only with respect to specific projects and neighbourhood affected areas, but also potentially to public interests encompassing vast regions of the city.

However, this value-driven EA does not evolve without controversy. If a rights-based approach integrates normative assumptions about the purpose of EA and dictates its operation, it brings about increased judicialisation and thereby provides a conceptual framework for individual and class based litigation. This is exacerbated by a lack of

impact assessment at the strategic level.[817] Taking place latter in the process, non-settled conflicts over what is strategic in development goals are likely to be transferred to project-level EA. EA, therefore, is crowded with disputes over property rights, land tenure security, right to housing and to a healthy environment, as well as access to participatory mechanisms, which become a source of discontentment, propelling claims for legal reform. This is particularly pressing in the case of mega-projects where the impacted groups do not have a say on siting decisions (already taken) and mitigating and compensation measures involving human rights affirmation (e.g. displacement, disruption of livelihoods). Hence, EA echoes debates on who benefits and who loses in the process of rapid and large scale development, evoking distributional concerns linked to urban-environmental justice.

Finally, the debate around proposals for changes in the EA regime clearly shows the impact of context in the shaping and implementation of environmental law, particularly in developing countries such as Brazil. It is clear that what is at the basis of the proposals is not EA effectiveness in assessing environmental impacts or promoting participation or even the need for legislation to incorporate a clear rationale for regulatory purpose and for enhancing the learning role of EA. It is rather what is considered a bureaucratic hindrance for development consent. This highlights how sensitive EA is to the pursuing of development goals and balancing socio-environmental claims, and how different players hold differing understandings over the nature of environmental licensing, EIA and NIS. As put by Fisher el. al:

> […] despite its technical nature, EIA is not a neutral set of procedures but rather a social practice embedded in environmental politics. Assessing the environmental impact of a project must be seen against a background of socio-political conflict over that project. Likewise, the divergences of opinion over its nature and purpose reflect environmental values and politics.[818]

Bearing this in mind, I now move to the empirical analysis of EA operating in practice. Coming chapters investigate empirically whether EA actually influences decision-making or whether this is dependent on more influential political interests and developmental agendas as well as more assertive legal arrangements. This then

[817] John Glasson and Nemesio Neves B. Salvador (n 763) 191.
[818] Fisher, Lange and Scotford (n 391) 850.

would be out of reach of EA's procedural form – something that was noticed very early on by Sax when assessing the USA system, but that is also true in the Brazilian context.[819]

[819] Joseph L Sax, 'The (Unhappy) Truth about NEPA' (1973) 26 Oklahoma Law Review 239.

CHAPTER 6
CASE STUDY OUTLINE: RESEARCH DESIGN AND INSTITUTIONAL CONTEXT

6.1 Introduction: Purpose and Scope of Case Study Analysis

Chapters 1 to 5 have laid the theoretical framework for the study of the role of EA in addressing environmental justice problems, with a focus on regulatory aspects of the development consent regime in Brazil. In this Chapter I detail and explain the nature of the empirical work which I have conducted with the purpose of investigating the linkages and (in)consistencies of the theoretical and regulatory framework with the reality of applying EA in practice. The aim of the empirical work is to inquire how certain Brazilian development consent procedures (including both EA and planning system) work, specifically the extent to which they offer a practical effective response to inequalities in an urban context, or, looking more critically, whether they act as a means to reaffirm and even perpetuate such inequalities in this setting. The cases selected involve the development consent process for two major urban works (road expansion and football arena/real estate) in one specific city in Brazil (Porto Alegre/RS) in the context of preparation for hosting the FIFA's Football World Cup 2014 (key elements of which are discussed below). The empirical research comprised gathering and analysing qualitative data on the development consent procedure documentation, in particular the content of environmental impact reports.[820]

The thesis's methodological approach was presented in Chapter 1 (Section 1.4), where I justified the choice for qualitative research based on case study analysis and shaped by the adoption of socio-legal methodology. This relates, in short, to the need to grasp fully with context and unfold processes of particular consent procedure cases when investigating the role of EA in mediating social and environmental struggles over urban development. The research design introduced in the present Chapter, more specifically, explains how the case studies were conducted, from case selection to the

[820] It is possible that other relevant information appear in other documents, such as planning application, supplementary information requested, council meetings or public hearings minutes. These were analysed when available.

drawing of an analytical framework; from understanding legal and institutional structures to identifying data sources.

6.2 Selection of Cases

The two cases selected for the conduction of empirical analysis are located in the same geographic and administrative setting, one of the Brazilian host cities for the FIFA's Football World Cup 2014 (see Section 6.5.1 below), and evolved in similar timeframes in the run-up to the event (2009-2014). They correspond to (1) the expansion of part of the local urban road system (by the local authority), and (2) the building of a football arena (a privately owned development). The case selection criteria included two main sets of considerations.[821] The major one is related to the potential contribution of the cases to illustrating the operation of key theoretical and normative concepts the thesis draws on (within an environmental justice perspective of EA). This encompasses aspects such as the cases' relevance (common and specific), complexity (either in regulatory or operational terms), and contextual aspects (perceptions over urban development and types of conflicts raised). The other set of considerations concerns practicalities:[822] data accessibility was a key issue, as were time constraints (although this aspect is more difficult to quantify as the process of selecting, researching and compiling the case studies has been an on-going process). For details, see Table 9 below.

In terms of shared relevance, I selected these particular cases because they highlight very well the prominent role of impact assessment tools in development consent at the local level when disputed urban development choices are implicated. In this regard, both cases constitute large-scale urban interventions advanced under the context of the city's preparation for a major sporting event, were located in vulnerable areas (low-income communities, lacking infrastructure), and were subject to environmental licensing by the local authority. Therefore, they contribute to providing evidence to

[821] This is roughly based on case analysis design described in Stake (n 23). Yin (n 20).

[822] As emphasized by Blatter and Haverland, pragmatism is also a criterion for case selection. Blatter and Haverland (n 11).

clarify what effects might be expected from legislation and practice of EA in terms of environmental justice in the realm of urban development.

Notwithstanding, they also help to uncover the different manifestations the relationship between EA and environmental justice may assume, which is where their particular relevance lies. First, this is because the expansion of the avenue was subject to a simplified environmental study, whereas the football arena was subject to a full EIA. This implied differences in terms of perceptions over environmental and social issues within the process, as well as in terms of participation opportunities. Also, although a stand-alone NIS was not conducted in any of the cases, they allow for the important interface of EIA and NIS to be addressed. Second, because they shed light on different contentious aspects. The avenue expansion case has a particularly strong component of urban development associated with a massive resettlement scheme of low-income population. Thus, it raises concerns about the extent to which rights have been trammelled: the right to housing, right to the city, territory and community cohesion, and procedural justice. The building of the football arena raises debate about the practice of negotiating compensation measures towards nature preservation and city's infrastructure within environmental licensing procedure. This is related to important issues of just distribution of the benefits and burdens of urbanization, particularly the benefits to private property resulting from public investment.

It is worth underlying here that, in order to 'locate' the selected cases in 'a population of similar cases',[823] I looked at development consent processes for projects related to the World Cup 2014 in all the twelve host cities[824] which were subject to EA either by state or local authorities. These encompass urban mobility and infrastructure (urban road network, metro lines, bus rapid transit system, airports), building and refurbishment of football arenas, and urban renovation (touristic areas or certain neighbourhoods).[825] Focusing on procedures governed by local authorities – in line with the thesis main subject of interest - it was possible to identify a pattern of controversial aspects. These relate mainly to the use, in many cases, of simplified

[823] ibid.

[824] Belo Horizonte/MG, Brasília/DF, Curitiba/PR, Fortaleza/CE, Manaus/AM, Natal/RN, Porto Alegre/RS, Recife/PE, Rio de Janeiro/RJ, Salvador/BA, São Paulo/SP.

[825] A list of these developments can be fount on the federal government's official website on the World Cup 2014, available at <http://transparencia.gov.br/copa2014/home.seam>.

environmental studies, rather than full scope EIA, and absence of NIS, despite the scale and significance of impacts on urban infrastructure and certain neighbourhoods. Also, development consent seems to have evolved coupled with 'tailor-made' land-use changes, limited influence from affected communities' perceptions into the process, and resettlements under controversial compensation schemes.[826]

This analysis contributed to identifying relevant categories of projects and types of conflicts that were recurrent in the context of the host cities' preparation for the event. In this regard, although the case studies are not 'representative' of some broader class of infrastructure development and are set within the geographical and institutional boundaries of one specific municipality, they represent and illustrate this reality. Hence, the identification of common characteristics in relation to the application and playing out of EA and planning control procedures means that certain conclusions can be reached about their role in highlighting and mediating environmental injustices. In addition, focusing deeply on one urban area and working on a small sample of cases (before attempting at a numerical larger but substantially narrower survey, limited to the content of environmental impact reports) allowed for grasping with detailed analysis of processes as well as contextual aspects related to how local institutional and legal structures are entangled with urban development choices. This enriched the building of the framework of analysis, which may be helpful in analysing the use of EA in other (similar and even dissimilar) contexts.

[826] See 'Mega-Events and Human Rights Violation in Brazil' (n 79).

Table 9 Case studies - Case selection criteria

	Criteria	CASE 1	CASE 2
	Type of project	Road network infrastructure (by the municipality)	Football arena combined with real estate development (privately owned)
	Common relevance	▪ Major urban interventions in the context of the World Cup 2014 ▪ Development consent and EA process governed by local authority	
	Particular relevance	▪ Simplified environmental study ▪ Major resettlement scheme ▪ Stand-alone socio-economic study	▪ Full scope EIA ▪ Financial compensation scheme
	Complexity	▪ Infrastructure project alongside social housing programme ▪ Displacement of 3,900 people of low-income communities	▪ Football arena combined with real estate development ▪ Change in the uses of the area ▪ Conditional on undertaking agreement
CONTEXT	Perceptions over urban development	▪ Hosting of mega-events as opportunity for long planned infrastructure development ▪ Highly impacting urban mobility project	▪ Sports facility and real estate project as drivers for urban development ▪ Trade-offs: compensation towards preservation and urban infrastructure
CONTEXT	Type of conflicts	▪ Participation in planning decisions ▪ Displacement of communities ▪ Urban rights and access to services ▪ Land tenure rights ▪ Flexibility of EA processes	▪ Negotiation of ecological and financial compensation measures ▪ Economic development *v* socio-environmental issues ▪ Risk of social and economic displacement of local communities ▪ Gentrification
	Data accessibility	▪ Digital repository of legislation ▪ Digital repository of court decisions ▪ City councils (archives, website) ▪ National Environmental Ministry (website, civil servants) ▪ National Ministry of Cities (website, civil servants) ▪ Environmental bodies at local, regional and national levels (archives, website, civil servants) ▪ Federal Prosecution Office (website, staff) ▪ NGOs and community groups (archives, website, members)	

6.3 Sources of Data

As informed above, the option was for case study approach centred on qualitative, textual analysis focusing on the study of the content of development consent documentation correspondent to the selected cases (see Table 9, below). Although less prominently, the empirical data also encompass a large set of other documental sources. These include statutory texts, judicial documents, official documents by state agencies, and institutional websites. The relevance of such sources is placed on the understanding that legal texts and documents capture legal and institutional practices and processes, and hence that the practice of EA is registered in the documented form of the procedures. This offers not only a representation of how EA law and institutional operations are organized, but contains also evidence of social context and of interactions between social actors implicated.[827]

The collection of documents was carried out, mainly, through official websites and online repositories of institutional agencies, such as legislative bodies, governmental departments (environmental and planning agencies), Public Prosecutors Office and courts. This allowed gathering full, official versions of statutory texts and planning legislation, government reports and court decisions, as well as information regarding public administrative structures (agencies and jurisdictions), and some general guidance for EA application. Hard copies of the complete development consent and environmental licensing procedures documentation subject to analysis were obtained at the municipal agencies' archives (City Departments of the Environment and of Public Works and Urban Mobility).

Table 10 Case studies - Key documents for content analysis

Key documents			
Year	**Document**	**Content**	**Source**
2009	Administrative Procedure n. 00.2.261358.00.1	environmental licensing for the football arena/real estate	SMAM's archive
2011	Administrative Procedure n. 02.074255.100	environmental licensing for the avenue expansion	SMAM's and SMOV's archive
2013	Public Civil Action n. 001/1.13.0012134-4	civil action challenging the granting of environmental licensing to the football arena/real estate	State Public Prosecutor's Office

[827] Reza Banakar and Max Travers, 'Introduction to Section Three (Studying Legal Texts)' in Reza Banakar and Max Travers (eds), *Theory and Method in Socio-Legal Research* (Hart 2005) 133.

6.4 Analytical Framework

Based on the theoretical framework and regulatory considerations developed in Part I, a set of themes was drawn upon to the elaboration of an urban-environmental justice matrix (Chapter 3) and further developed into a correspondent substantive agenda for EA (Chapter 4). These themes are related to social justice, procedural justice, inclusiveness and environmental sustainability concerns in the urban setting and inform the foundation of the case study analysis. The aim is to employ these guiding themes to examine the way in which the normative concepts they convey permeate planning and environmental decision-making processes on the ground, and, more specifically, are reflected on, or given practical meaning, in the operations of EA in the context of development consent for urban developments. A key aspect is to assess the impact of these themes on decision outcomes, whilst recognising that this is a very difficult element of the case analysis.

In order to assess how these themes come out through the case studies, an analytical framework was developed (see below). This framework systematises key elements integrating the guiding themes (sub-themes) which were considered in the analysis of the process and content of the development consent processes respective to the cases, with emphasis on the documents correspondent to the environmental licensing procedures. As a resource of qualitative research, this framework does not constitute a proper 'box-ticking' exercise; rather, it organises relevant information to be taken into account in the analysis of the documents correspondent to each procedural step. This guided the description of the cases and thus the reaching of conclusions.

Table 11 Case Study - Case analysis analytical framework

Analysis criteria	
Social Justice +Inclusiveness + Env Sustainability	Process
√ = explicitly mentioned ∅ = not explicitly mentioned but could infer/interpret ⊗ = not mentioned explicitly or by reference // = irrelevant C = category | [+] = positive | [-] = negative Q = quantitative analysis | [√1] = quantified | [√] = not quantified G = geographic scope | L = local | N = neighbourhood | R = region T = temporal scope | S = short | M = medium | P = permanent | FG = future generation AG = aggregate changes | A = aggregate | D = disaggregate A = alternative	√ = satisfactory ∅ = unsatisfactory ⊗ = inexistent // = irrelevant

		EA						**Planning documents**						**Socioeconomic Assessment**						**License**					
	Elements	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A
SOCIAL JUSTICE	population changes																								
	employment income																								
	local economy																								
	health, well-being																								
	access to services																								
	housing conditions																								
	land uses, tenure rights																								
	resettlement, relocation																								
	economic displacement																								
	compensation scheme																								
	vulnerable groups																								
	in situ development																								
	risk management																								

		Screening/scoping	**Consultation/participation**	**Compensation schemes**
PROCESS	stakeholder identification			
	definition of project-affected community			
	Term of Reference			
	publicity of documents			
	public hearings			
	other meetings			
	consideration of community concerns			

		EA						Planning documents						Socioeconomic Assessment						License					
	Elements	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A
INCLUSIVENESS	community character																								
	community stability																								
	sense of place																								
	social mixing, cohesion																								
	mixed land uses																								
	accessible public spaces																								
	gender equality																								
	perceptions on SD																								

		EA						Planning documents						Socioeconomic Assessment						License					
	Elements	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A
ENV SUSTAINABILITY	water soil																								
	air pollution																								
	waste management																								
	noise																								
	flora fauna																								
	energy efficiency																								
	risk areas																								
	emergency response																								
	CC mitigation																								
	CC adaptation																								

6.5 Contextual and Legal-Institutional Aspects

6.5.1 Geographical setting

The geographic and administrative location of the case studies is the city of Porto Alegre, the capital of Brazil's southernmost state (Rio Grande do Sul), officially established in 1772. This city has developed an economy driven by services, industry and agribusiness[828] and, due to its proximity to other Mercosur capitals[829] and for having an alluvial port, it is a centre for regional international trade. According to latest data,[830] Porto Alegre has more than 1,8 million inhabitants, at a 100% urbanization rate. It is the tenth most populous city in the country[831] and the focal point of the fourth largest metropolitan area (nearly four million people). It enjoys a 'very high' Municipal Human Development Index (MHDI), which places it at the seventh position amongst the 27 Brazilian capitals and at the 28th position amongst the 5,565 Brazilian municipalities in the national MHDI ranking (2010).[832] However, inequality is still high[833] and there remain wide intramunicipal differences (inequality factor within neighbourhoods varies 440 times between the best and worst values).[834] For example, with regards to living conditions, 13,68% of the population lived in slums and 11% of the domiciles were located in areas classified as 'precarious housing' in 2010.

The city's master plan ('Director Plan of Urban and Environmental Development')[835] divides the city geographically into nine macrozones, sixteen districts and 81 neighbourhoods (each macrozone is divided in territorial units, where different urban regimes apply).[836] This is for planning purposes only, considering that no devolution of administrative powers exists. Interestingly, Porto Alegre is one of the greenest

828 <http://www.fee.rs.gov.br/>

829 Mainly to Buenos Aires (Argentina), Asunción (Paraguay), Montevideo (Uruguay).

830 <http://www.atlasbrasil.org.br/2013/en/perfil_m/portoalegre_rs>

831 <http://portoalegreemanalise.procempa.com.br/?cidades=2_114_0>

832 <http://portoalegreemanalise.procempa.com.br/?cidades=2_114_0>

833 Gini coefficient at 0,60, which is the coefficient used to measure the degree of income concentration, varying from 0 (complete equality) to 1 (complete inequality).

834 <http://portoalegreemanalise.procempa.com.br/?regiao=1_5_0>

835 Approved by Complementary Law 434/99, which was modified by Complementary Law 646/2010.

836 Observando, v.4, n. 1, 2014: Observando as características urbanísticas de Porto Alegre (Prefeitura de Porto Alegre 2014).

capitals in the country, offering open green spaces (squares/plazas) and having nearly 10% of the territory designated as conservation area.[837] However, urban-environmental services remain somehow precarious: over 99% of the households enjoy access to piped water, electricity and garbage collection,[838] and more than 88% of the city is connected to the sewer service; but 60% of the sewage produced is not treated and only one third of solid waste is recycled (2014), which have decreased over the last couple of years.[839]

As it has occurred in other Brazilian large cities, the local administration has advocated investment in infrastructure (with the incentive of federal government's programmes), as well major urban private projects, as drivers for urban development. The attraction of mega-events, including sporting mega-events, is key within this strategy, seen as opportunity for increasing national and international competitiveness and for a step change in the scale and quality of urban infrastructure and services (see Chapter 1). Therefore, when Brazil was announced as the host country for the FIFA's Football World Cup 2014 in October 2007, the city government submitted a proposal to host this and this was officially approved in May 2009.

As part of the city's preparation for complying with FIFA's requirements and conditions, a strategic plan was put in place to the management of a series of projects.[840] Sixteen key project proposals were included in the so-called 'World Cup Matrix of Responsibilities', a sort of investment plan establishing shared responsibilities among federal, state and local governments for infrastructure projects in the host cities.[841] Amongst those, there were twelve urban mobility projects, encompassing the expansion of the city's road network and improvement of public transport. Most of these were already foreseen and previously included in other funding schemes, but ended up becoming politically and economically viable due to the World Cup investment opportunity.

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837 < http://portoalegreemanalise.procempa.com.br/?regiao=1_6_0>

838 <http://www.atlasbrasil.org.br/2013/en/perfil_m/portoalegre_rs>

839 <http://portoalegreemanalise.procempa.com.br/?regiao=1_6_0>

840 These encompassed a wide range of thematic areas, including urban mobility, refurbishment/building of football arenas (Beira-Rio and Grêmio Arena), urban services, sustainability (a great infrastructure project for improving sewage system and water services), tourism, and cultural events.

841 <http://www.copa2014.gov.br/pt-br/brasilecopa/sobreacopa/matriz-responsabilidades>

However, the hosting of World Cup took place in a scenario already tensioned by multiple cases of development proposals provoking discontent in the city. This falls within existing local debates about the way development consent for controversial, high impact urban developments has been conducted, with a focus on urban-environmental and socio-economic impacts deriving from land-use decisions and EA processes. For example, a series of projects had recently involved disputes over land-use and environmental legislation enforcement as well as debate on gentrification and access to public spaces. Controversially, specific changes in the master plan and zoning rules have been put in place allowing for increasing densification and reduction of preservation areas, and weakening of land rights.[842] The developments related to the World Cup sparkled similar issues, involving the lack of social debate about their relevance in the context of long-term urban planning,[843] for causing displacement of communities and for allowing for tax exemptions and facilitated public biding processes. Social movements gathered to debate human rights' violations and affected communities mobilised locally, articulating their concerns in line with national campaigning groups.

6.5.2 Legal-institutional framework: impact assessment tools at the local level

To consider the legal and institutional context in which the cases are embedded was key for the empirical analysis. As examined in Chapter 5, the Brazilian constitution grants important powers to municipalities, both legislative and executive ones, therefore it was necessary to take into account the legal norms governing the conceiving and implementation of urban-environmental decision-making at the local level. In light of this, this section sketches out the main features of development consent in the city of Porto Alegre with a focus on EA processes and planning

[842] See, for instance: Beira Rio Stadium (Complementary Laws n. 608/2009 and 609/2009, which increased occupation and construction indexes); Pontal do Estaleiro (Complementary Law 614/2009, implementing changes in zoning rules to allow for commercial uses in an area of environmental and cultural priority use); Cais Maua (public-private partnership for revitalizations of harbour area allowing for mixed uses); Morro Santa Tereza (State level Bill 388 allowing the sell of the area to private investors, which raised concern towards the displacement of resident communities in disrespect of land tenure rights).

[843] Betânia Alfonsin, 'Resgatando O Processo de Preparação Para a Copa de 2014 Em Porto Alegre: Problematizando Os "Legados"' in Paulo RR Soares (ed), *Porto Alegre: Os Impactos da Copa do Mundo 2014* (Deriva 2015) 241.

control. This includes identifying public administrative structures and selected environmental and land-use legislation. This provides important insights into the dynamics of localism, which are manifested in the real life conduct of legal procedures, as explored through the case analysis that follows (Chapters 7 and 8).

The city's master plan,[844] in association with specific statutory texts, offers the legal basis for development consent by establishing general requirements and procedures for planning and environmental control. Importantly, the master plan identifies the categories of urban projects subject to more rigorous approval process due to its use, size, complexity or location ('special projects of urban impact'),[845] for which the conduction of impact assessment studies are required. There are four key impact assessment tools available. Planning permission regulation requires urban viability study (UVS) and, in cases, neighbourhood impact study (NIS). With regards to environmental licensing, environmental impact assessment (EIA) or a simplified environmental report (SER) may be employed. Less complex, small to medium size projects will be subject only to UVS,[846] while more complex, high impact projects will be subject also to either EIA, SER or NIS.[847]

Concern with assessing impacts of development proposals in urban areas is present in the local legislation since 1979, when UVS was first established by the master plan.[848] EIA and SER were implemented 20 years later by municipal law (1998)[849] and master plan changes (1999).[850] It took another decade to NIS to be established through changes in the master plan in 2010[851] and then regulated in 2012,[852] as a reflection of the promulgation of the City Statute (see Section 5.4). The fact that Porto

[844] Complementary Law 434/1999, modified by Complementary Law 646/2010. It is worth emphasizing that Porto Alegre's master plan represents a modern take on planning legislation, for it comprises not only land-use rules but also defines the socio-spacial configuration of the city in the interplay between planning with other sectorial policies. It also offers a strong element of environmental protection and attention to participatory mechanism and land rights (see Article 1).

[845] Articles 41 and 56 to 64, Complementary Law 434/1999.

[846] Article 41(1) and Annex 11.1, Complementary Law 434/1999.

[847] Article 42(1) and Annex 11.2, Complementary Law 434/1999.

[848] Complementary Law 43/1979.

[849] Municipal Law 8,267/1998, amended by Municipal Laws 10,331/2007, 10,360/2008, 10,674/2009 and 11,752/2014.

[850] Complementary Law 434/1999.

[851] Complementary Law 646/2010.

[852] Complementary Law 695/2012.

Alegre has a long established and well settled legislation on impact assessment tools for urban and environmental impacts alike was a key aspect for its choice as the geographic and administrative setting for the case studies.[853] Other host cities do not offer the same level of sophistication in legislation and practice.

Notably, besides the existing legislative and administrative structures, the municipal government put in place a series of reforms aiming at streamlining development consent procedures in the run-up to the World Cup. This included, on the one hand, changes to institutional arrangements: the City Department of Planning was extinguished, being its attributions transferred to newly created departments specifically to deal with the management of urbanization works and to overview public biddings and contracts related to the event.[854] On the other hand, there was the issuing of new regulation for development consent,[855] which ended up benefiting other private development proposals submitted after the event took place (see Chapter 8).

(i) Urban Viability Study (UVS)

Porto Alegre implemented for the first time in 1979 the requirement for a technical assessment of the potential urban impacts of development proposals, the so-called urban viability study (UVS).[856] Since then, the UVS has been included as the core requirement for planning permission under different editions of the master plan and is extensively regulated by municipal legislation.[857] It comprises a technical study to be submitted by the developer to the City Department of Urbanization prior to requiring development consent. It gives support to decision-making on planning permission for it presents the project's engineering technical elements, identifies compliance with

[853] Information on planning and environmental licenses granted is available to the public through the city's Official Gazette (informing the category of development and type of license). However, the Gazette does not contain information on the kind of impact assessment study conducted in the process neither on applications rejected. For this analysis it is necessary to access hard copies of procedures kept in the archives of the city's departments.

[854] See Laws 11,396/12 and Law 11,401/2012 and Decrees 18,161/2013 and 18,200/2013.

[855] Series of municipal Decrees enacted from 2014, including Decree 18,623/2014, which updates regulation on planning permission procedure.

[856] Complementary Law 43/1979. See also Complementary Law 158/1987 (changes in the master plan to require UVS for projects in areas larger than 5,000 square metres classified as Urban Area of Intensive Occupation).

[857] Decrees 14,826/2005, 18,170/2013, 18,609/2014, 18,623/2014, 18,787/2014 and 18,886/2014.

land-use rules, and allows consideration of the project's interaction with the surrounding in terms of urban mobility infrastructure. However, UVS consists mainly in the analysis of project's technicalities (building features and impacts on traffic), not including legal provision for broader impact assessment, consideration of mitigation/compensation measures and public participation.[858] Hence, according to the degree of project's impacts, other impact assessment tools will be also required.

(ii) Environmental assessment

As seen in Chapter 5, municipalities in Brazil may be responsible for the EA of certain projects, the ones with 'local impact', and if specific legal and administrative structures are in place. The general definition of 'local impact' is part of the federal legislation, but state and municipal level regulation bring lists of activities considered to be of local impact and thus authorized to be subject to EA by the local environmental agency,[859] according to specific typology defined by the State Council for the Environment (size/scope, pollution potential and nature).[860] With respect to process, the corresponding municipal legislation replicates the three-step licensing procedure established by the federal norm, as well as procedures for consultation and the indication of the scope of the impacts to be assessed.[861]

In establishes however, that, in the context of local environmental licensing, the local environmental agency may require either a full EIA[862] or a simplified environmental study (SER).[863] EIA is mandatory for developments likely to cause significant environmental impact, including the ones listed in federal legislation[864] and in the master plan (special projects of urban impact of major complexity and polluting

[858] In the 1979 master plan, there was provision for consultation of neighbourhood associations (article 23), which was not replicated in the later amendments. Also, UVS has been used as a means for negotiating compensatory measures in a few successful cases, but this is not expressly regulated.

[859] Article 7. Listing included in CONSEMA Resolution 288/2014 (modified by CONSEMA Resolution 291/2015).

[860] Article 9(XIV), Complementary Law 140/2011; Article 6, State Law 11,520/2000; Article 6, CONAMA Resolution 237/1997. Additionally, the state has delegated the licensing of activities of 'supra-local' impact to some municipalities through bilateral agreements (Resolution FEPAM 08/2006). Porto Alegre signed the first agreement in 1999 and the updated list is from 2008.

[861] Article 10, Municipal Law 8,267/1998 (as amended). See also SMAM Resolution 02/2011.

[862] Article 9(1), Municipal Law 8,267/1998 (as amended).

[863] Article 9(2), Municipal Law 8,267/1998 (as amended).

[864] Article 2, Conama Resolution 01/1986.

impact), and also the ones the local environmental authority discretionarily points out in motivated decision.[865] For the remaining cases, SER applies (special projects of urban impact of minor complexity and polluting impact but that equally demand the assessment of environmental issues). [866] Interestingly, in the definitions of 'environment'[867] and of 'impact'[868] it is stresses the relevance of taking into account the particularities of the urban setting. This results in the consideration of environmental impacts in terms of physical (geology, hydrology, air quality, noise), biological (fauna and vegetation) and anthropic aspects (cultural and historical heritage, traffic) with a focus on urban infrastructure and urban landscape.

In terms of institutional arrangements,[869] in Porto Alegre, alongside the City Department of the Environment, that governs environmental licensing procedures, the Municipal Council of Urban and Environmental Development (CMDUA) plays an important role in EA operations. This is the body responsible for analysing environmental impact reports of projects subject to EIA, prior to development consent. Development proposals of projects related to the World Cup 2014 were submitted to this Council from 2010.[870]

(iii) Neighbourhood impact study (NIS)

Although UVS and EIA have consisted in well-established impact prediction tools both in regulation and in practice at the local level, there was lacking provision of an assessment tool in line with the purpose and scope the City Statute assigned to NIS (see section 5.4). This is because while UVS gives priority to assessing project's technicalities, the environmental authority has privileged considerations of natural environmental aspects in the analysis of EIA, only timidly addressing complex urban

[865] Article 2(2) and (3), SMAM Resolution 02/2011.

[866] Article 9(3), Municipal Law 8,267/1998 (as amended).

[867] Article 2, Municipal Law 8,267/1998 (as amended).

[868] Article 5 Municipal Law 8,267/1998 (as amended).

[869] Provision at the federal level in the Complementary Law 140/2011 and in the State Environment Code (article 69, Law 11,520/2000).

[870] Iara Regina Castello, 'A Copa Do Mundo, a Legislação Urbanística Do PDDUA E a Reconfiguração Territorial Da Metrópole Gaúcha: Reconfiguração Territorial' in Paulo RR Soares (ed), *Porto Alegre: Os Impactos da Copa do Mundo 2014* (Deriva 2015) 114.

development aspects.[871] Thus, a bill was proposed in 2011,[872] and legislation passed in 2012 regulating NIS in Porto Alegre as an impact assessment mechanism to address specifically urban impacts of project proposals in support of development consent decision. It is worth noting that NIS is broader in scope and content than the UVS (which does not consider mitigation/compensation measures), but narrower than EIA in terms of the range of impacts taken into consideration[873] (for NIS focuses on particular issues related to urban landscape and infrastructure/services, as well as land-use changes).

NIS legislation replicates the requirements (content and scope)[874] and procedural aspects (access to information and public consultation)[875] established in the City Statute, adjusting these to the particularities of the local administrative structures. For example, for the purposes of the law, 'neighbourhood' is defined as 'the area directly or indirectly affected by the development, preferably within the correspondent urban structure unit'.[876] This definition is similar to the concept of 'affected area' included in the EA legislation, but it is linked to the territoriality aspect implied in planning and land-use rules of the master plan (zoning and land-use regimes). The City Department of Planning governs the procedure, issuing the Term of Reference with guidelines for the NIS elaboration, and articulating with other relevant departments.[877]

An important regulatory aspect left to the auspices of municipal law is the definition of the types and categories of developments to be subject to NIS. This is linked to the provisions of the master plan defining and listing the 'special projects of urban

[871] Gladis Weissheimer and Maria Tereza F Albano, 'Estudo de Impacto de Vizinhança: A Legislação Do EIV Em Porto Alegre' (IBDU).

[872] <http://200.169.19.94/processo_eletronico/031372011PLCE/031372011PLCE_PROJETO_30262848_1206.pdf>

[873] The structure of NIS report is similar to the structure of environmental impact reports, including: (i) project's description and description of its compatibility with sectorial policies, plans and programs; (ii) description of the area of influence; (iii) impacts identification and assessment; (iv) consideration of mitigation and compensation measures; (v) and monitoring may be established.

[874] Article 7, Complementary Law 695/2012.

[875] Article 13, Complementary Law 695/2012.

[876] Article 2, Complementary Law 695/2012.

[877] Articles 4 and 5, Complementary Law 695/2012.

impact'.[878] In addition, NIS regulation combines this list with the area of location of the development. This means that some developments listed in the master plan will be classified as of 'urban impact' for NIS purposes only if located in certain areas. Importantly, despite falling within the mandatory cases, a development may be exempted from NIS in two circumstances. One, if the local authority discretionally considers that the UVS is sufficient, which must be motivated as well as agreed upon by the Council of Urban and Environmental Development.[879] Second, if the development is also subject to EIA by the local environmental authority and therefore EIA can encompass the content legally required for NIS, in an effort to avoid overlapping.[880] Then, coordination is needed from the part of the local authorities to ensure that the correspondent range of impacts is satisfactory identified and assessed. However, this allows for large discretion from the part of local authorities in defining the kind of impact assessment tool to be employed.

Table 12 Case studies – Public administration structures, Porto Alegre/RS

Public Administration structures, Porto Alegre/RS		
Agency	**Competence**	**Attribution**
Municipality	executive branch	executive powers
Municipal Council of the Environment (COMAM)	consultative body	representative body with advisory attributions regarding environmental policy
Municipal Council of Urban and Environmental Development (CMDUA)	consultative body	representative body with advisory attributions regarding planning policy and proposals for large developments (SER and EIA)
Municipal Commission of Urban Analysis (CAUGE)	technical body	responsible for the technical analysis of UVS
City Department of Environment (SMAM)	executive brunch (direct administration)	responsible for environmental licensing
City Department of Urbanization (SMURB)	executive brunch (direct administration)	responsible for licensing, approval and inspection of buildings
City Department of Public Works and Urban Mobility (SMOV)	executive brunch (direct administration)	responsible for licensing, approval and inspection of urban infrastructure
City Department of Housing (DEMHAB)	executive brunch (direct administration)	responsible for local housing programmes

878 Article 8, Complementary Law 695/2012.

879 Article 8(2), Complementary Law 695/2012.

880 Article 9, Complementary Law 695/2012.

Table 13 Case studies – Key statutory texts, Porto Alegre/RS

Key statutory texts[881]		
Year	**Legislation**	**Content**
1979	Complementary Law 43/1979	establishes the first master plan
	City Organic Law	establishes the administrative structures and correspondent executive and legislative attributions
1996	Complementary Law 368/1996	establishes the municipal policy for environment
1998	Law 8,267/1998, lastly amended by Law 11,752/2014	regulates environmental licensing at the municipal level
1998	CONSEMA Resolution 05/1998	regulates environmental licensing at the state of Rio Grande do Sul
1999	Complementary Law 434/1999 (modified by Complementary Law 646/2010)	master plan – Director Plan of Urban and Environmental Development (PDDUA)
1999	Law 8,279/1999	State Environmental Code
2000	Decree 12,789/2000	regulates environmental licensing of infrastructure network and public services
2011	SMAM Resolution 02/2011	public consultation and public hearing with regards to environmental studies (EIA and SER) required by the local authority
2012	Complementary Law 695/2012	regulates NIS
2014	Decree 18,623/2014	regulates planning permission procedure
2014	Decree 18,886/2014	regulates UVS
2014	CONSEMA Resolution 288/2014	defines the list of activities/developments of local impact to be authorised by the local authority in the state of Rio Grande do Sul

6.6 Conclusion

This Chapter detailed the design of the empirical socio-legal work conducted, which is presented in Chapters 7 and 8 (content analysis of two full-range development consent and environmental licensing procedures for major urban developments). Importantly, this Chapter links Parts I and II of the thesis; this is because the analytical framework introduced above was informed by both a conceptual (theories of environmental justice) and a regulatory approach (EA legal form) advanced in previous chapters, and informs case analysis developed in the coming chapters. Also, the Chapter gave an account of the scope of the local legal structures for EA in the context of planning control in the geographic and administrative setting of the case studies, which complements the outline of the federal legal and institutional

[881] The law and policy in the thesis is up to date as 10 June 2016.

frameworks for EA in Brazil as explored in Chapter 5. These elements provide the foundations for the qualitative research seeking to explain EA operations, more specifically, how the regulatory form of EA develops in practice in urban contexts from an environmental justice perspective. Partial conclusions on case analysis are presented at the end of Chapters 7 and 8; a comprehensive summary of these is presented in Chapter 9.

CHAPTER 7
ENVIRONMENTAL ASSESSMENT OPERATIONS, JUSTICE IN DEVELOPMENT CONSENT AND THE RIGHT TO THE CITY: CASE STUDY ON AVENUE EXPANSION

7.1 Introduction

In this Chapter I give a detailed account of the case study on the expansion of a key element of the urban road system in the city of Porto Alegre/RS, the 'Tronco' Avenue. This was the most contentious infrastructure work carried out in the city in preparation for hosting the FIFA's Football World Cup 2014. A large-scale urban intervention of strategic importance for urban mobility and spatial planning (having impacts on traffic linking the city from south to city centre to north), it involved a massive resettlement scheme of low-income population. These features mean that the case offers a particularly strong representation of urban development choices associated with concerns about the violation of urban rights. In this regard, the case provides evidence of the part played by EA operations in terms of procedural and substantive justice in the realm of urban-environmental decision-making.

In the process of development consent, the project was subject to a simplified environmental study, rather than a full EIA or a NIS; this has implications for the nature and scope of information considered as well as for the range of opportunities available for public participation. Also, a socio-economic study targeting the affected community was conducted, which gave support to the implementation of the compensation scheme and housing programme put in place in the context of the relocation of residents. Considering this, content analysis was carried out on documents concerning the environmental licensing procedure,[882] with a focus on the environmental study report produced, but also including the socio-economic study, which was attached to this (see Table 14 in Appendix V). The analysis presented here comprises (i) an outline of the key elements of the case study; (ii) the role of the information provided in environmental licensing in shaping outcomes (the choice of

[882] Administrative Procedure n. 02.074255.100/SMAM.

'what' information); (iii) the interplay with planning and land-use choices ('spatializing justice') and (iii) the relevance of EA participatory mechanisms in voicing conflicts over urban development (procedural justice).

7.2 Outline of the Case Study

The expansion of this avenue[883] had been foreseen in the city's road system plan since 1979,[884] but this was implemented only in the context of the World Cup 2014. This highlights the interplay between urban development choices and the hosting of the sporting mega-event, which provided an opportunity to attract investment whilst also mobilising political debate. The result was a contentious project, viable financially and socially, but with controversial elements. The project consisted of the most expensive World Cup-related urban infrastructure intervention in the city[885] and was the one that impacted directly the largest number of people due to the need to relocate residents (1,525 registered families) of a low-income area (Cruzeiro region). The fact that the case encompasses an urban mobility technical project associated with a social housing programme stresses the complex linkages between local policies for urban development, housing and environment.

According to the legal regime applicable (Section 6.4), development consent for this sort of project is subject to UVS (included in the definition of special project of urban impact), and to environmental licensing under the local authority responsibility (which governs EA of the building, expansion and improvement of streets and avenues). However, EIA was not mandatory in this case, nor was an NIS (for it is not included in the list of correspondent regulation). As a result, the project was subject to a simplified environmental study (SER). Despite the scale and complexity of the

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[883] The project involved the expansion of the avenue length in 5,6 km and to 40 metres width, including three car lanes of seven metres and bus lanes of 3,5 metres in both ways, as well as bike lanes, sidewalks and a median strip; and it was planned to be implemented in four stages.

[884] Complementary Law 43/1979. See also the city's Urban Mobility Plan <http://lproweb.procempa.com.br/pmpa/prefpoa/eptc/usu_doc/rel_plano_mob_urb_poa_v02.pdf>.

[885] Total of BRL156 million. The building work costs were funded by the federal government (BRL4128,5 million), and the costs of land expropriation were supported by the municipality (BRL28 million <www.transparencianacopa.com.br> accessed 10 February 2016. A local committee was set up by the municipality to manage the project (see Official Gazette 03/10/2010).

impacts on the city and affected community, no judicial or administrative challenges exist regarding the choice for impact assessment (an issue placed within debates on the limits of judicial review of EA process).

The inclusion of the project in the World Cup's Matrix of Responsibilities in 2010 shaped the funding schemes and work schedules. The environmental study was conducted in 2010 and implementation was planned to start in 2011, to be completed by July 2014.[886] However, due to delays and intense community mobilization, the local government decided to withdraw the project from the Matrix in 2013. This allowed an extended timescale for negotiating the relocation of residents. By March 2016, the implementation of the development was still on-going and the estimated completion date is now December 2017, depending on the progress of the relocation of affected families.[887] Information gathered at the time of writing indicated that there were approximately 300 families remaining to be resettled,[888] accounting for 20% of the directly affected community.

7.3 'What' Information Matters

7.3.1 Contribution of the EA via the environmental licensing procedure

As this case was a public urban infrastructure development, the City Department of Public Works and Urban Mobility represented the municipality in the environmental licensing procedure.[889] In this context, a simplified environmental study was conducted (SER), rather than a full EIA.[890] This was guided by Terms of Reference which were not specific for this particular development, but applied to all the urban

[886] <www.transparencianacopa.com.br> accessed 10 February 2016.

[887] <http://www.obrasdemobilidadeurbana.com.br/noticias/relatorio-obras-de-mobilidade-urbana-mes-de-marco--2016/238> accessed 23 March 2016.

[888] According to official communication by the City Housing Department dated 12 January 2016, which is attached to the Civil Inquest n. 01202.00077/2015 at 161.

[889] Administrative Procedure n. 02.074255.100/SMAM.

[890] This was conducted by a private consultancy contracted via public biding (Bidding Terms n. 002.081004.11.7/SMAM).

mobility infrastructure developments related to the World Cup 2014.[891] Notably, this document gave no emphasis to the need for consideration of potential socio-economic, socio-spatial or urban sustainability aspects of such developments. It focused mainly on potential environmental impacts related to technicalities of the engineering work on the physical (e.g. geologic aspects, soil erosion, flooding risk) and biological environment (flora and fauna). Under the tag 'anthropic environment', it referred only to the identification of public areas (e.g. open space) and to the setting up of a waste management scheme during the construction work. Consequently, the resulting environmental impact report and environmental licenses issued reflected this limited approach.

A 101-page long environmental impact report[892] accompanied the requirement for the issuing of the first environmental license (preliminary license, which approves location and project).[893] Another complementary report[894] was later presented accompanying the requirement for the issuing of the second environment license (installation license, which authorizes construction work and clearing of vegetation). The first report was written in more general terms, whereas a value scheme for the identified impacts was only introduced in the second one.[895] This is not ideal given that the main role of this (and of EIA and NIS alike) is to support decision-making with regards to the preliminary license. In this case this meant that the impact assessment had no, or very limited, input in the approval of the project design in this case. This assumption is reinforced by the fact that the first environmental license was issued only one day after the first environmental report was attached to the environmental licensing procedure.[896]

Importantly, content analysis shows that the consideration of aspects related do distributional urban-environmental issues was unsatisfactory. In the first report, in the

[891] 'Terms of Reference for the Environmental Impact Report of the Urban Mobility Infrastructure Developments for the 2014 World Cup', issued on 31 July 2009. Procedure at 7-12.
[892] Procedure at 169ff, attached on 27 July 2011.
[893] Another environmental report was elaborated by other consultancy for a 450-metre stretch of construction works that did not involve relocation of residents (at 346ff).
[894] Dated 27 October 2011.
[895] The scheme developed for the evaluation of the relevance of impacts was set up as follows: (i)category: positive/negative/neutral; (ii)spatial reach: local/neighbourhood/regional; (iii)temporal reach: short term/medium term/permanent; (iv)relevance: low/moderate/high (chapter 3 of the report).
[896] Preliminary License n. 012119/2011, issued on 28 July 2011.

description of the socio-economic elements,[897] there is an account of the concerns associated with the disruption of the community and residents' relocation in terms which recognise their relationships with the affected area and the value that it holds for them:

> The emotional bond of the people in relation to their houses and to the community seems to be very significant in the study carried out so far. The houses have a higher value than the one established by the market, given that they represent the realization of dreams, struggles, joy and difficulties of the people, in other words, they translate a rich life history, narrated in many chapters. Each room of the house or place of the neighbourhood has its own history, and therefore the houses encompass a very significant symbolic value for the people. The insecurity arises from the need to abandon this past full of history and for starting again in a future that, according to the residents, is full of uncertainty and doubts'.[898] (author's translation)

However, there is no substantial characterization of the affected population (number of people, profile, demographic data, neighbourhood character, etc.),[899] identification and valuation of the impacts this might represent, or consideration of correspondent mitigation or compensation measures. In the second report, in this respect, there was reference to the socio-economic study elaborated previously by the Housing Department (see below),[900] but the evaluation of these impacts remained very limited. For instance, in only five pages seven socio-economic impacts were analysed: employment generation;[901] uncertainty derived from relocation;[902] inconvenience of the construction work (noise, traffic of heavy vehicles, and pollution);[903] increase in property prices;[904] increase in traffic;[905] improvement of traffic conditions;[906] and

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[897] Environmental Report at 84-86.

[898] Environmental Report at 86.

[899] It is limited to a very general reference to census data for the entire larger neighbourhood for the year 2000 and some information on the type of edifications and age groups.

[900] Environmental Report at 45.

[901] Impact considered as positive, local, medium term, and reversible. Environmental Report, items 3.23-24.

[902] Impact considered as negative, regional, medium term and irreversible. It was stated that '[…] the residents will suffer some uncertainty during the installation phase due to the necessity of relocation of some families' and the mitigation measure suggested is limited to 'guidance and support to the families' (author's translation). Environmental Report, item 3.24.

[903] Impact considered as negative, local, medium term, and irreversible. Environmental Report, item 3.25.

[904] Impact considered positive, regional, permanent, and irreversible. Environmental Report, items 3.25-26.

[905] Impact considered negative, local, permanent, and irreversible. Environmental Report, item 3.26.

need for mitigation.[907] Nevertheless, none of these aspects was quantified or analysed under disaggregate criteria (e.g. number/type/remuneration of job positions offered, property price estimate, journey reduction, accessibility to public transport). Interestingly enough, the increase in property prices was considered beneficial, which contrasted sharply with criticism of the social housing programme. This is because this would result in the price of land in the area becoming prohibitively expensive for the low-income residents who needed to be relocated under a limited compensation scheme but who were willing to stay in the same region. This is a highly significant issue in terms of securing urban-environmental justice.

Most of the report was dedicated to the description of the physical and biological affected environment and correspondent impacts and mitigation/compensation measures. In the combination of both reports, approximately 70 pages were dedicated to the former, and approximately 237 pages to the latter (against 22 pages for socio-economic aspects). Great emphasis was placed, on the one hand, on impacts on the physical environment due to technical aspects of the engineering work, mainly in the installation phase. These included issues such as earthmoving, drainage and flooding prevention, erosion, noise and particulate material;[908] as well as the setting up of a waste management plan for the construction work.[909] On the other hand, flora preservation and compensation for clearing of vegetation were extensively addressed, due to strict municipal legislation applicable (a number of native trees conservation programmes). This encompassed the mapping of trees specimens, protection of specially protected trees,[910] trees transplant,[911] compensation for clearing of vegetation[912] and street and park tree planting.

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[906] Impact considered as positive, local, permanent, and irreversible. Environmental Report, items 3.26-27.

[907] Impact considered negative, local, medium term, and reversible. Environmental Report, item 3.27.

[908] All in accordance with the technical project elaborated by the municipality and attached to the procedure and in observance of municipal technical legislation (Decree 13,536/01).

[909] This is regulated by Conama Resolution 307/2002 and Consema Resolution 109/2005.

[910] State Law 9,519/1992.

[911] This was subject to specific authorization (n. 01-042/12).

[912] This is regulated by Municipal Decree 17,232/11 and was subject to specific authorizations (n. 01-021/12, n. 01-160/12 and n. 01/164-12).

Key issues were completely absent from the environmental reports. First, and most relevant, no consideration was given to alternatives to project design, such as alternative routes allowing for reducing the impact on the number of the affected people. Second, no consideration was given to the non-implementation alternative, what could offer some evidence for cost-benefit analysis involving the argued benefits for the improvement of transport links in a large region of the city and the costs of the relocation of population (financial, political and in terms of rights violation). Third, environmental and health impacts related to GHG emissions and noise due to the increase in traffic after the completion of the avenue expansion were not included in the analysis (they are only mentioned for the implementation phase, and not quantified).

In addition, and of great relevance for the thesis framework, impacts that would likely be subject to assessment through an impact assessment tool such as NIS were not mentioned. There was no consideration of the land tenure rights of the residents and, particularly, to notions of 'neighbourhood', despite the recognition that the project would affect/disrupt their history and attachment to the area and to the surrounding community (linkages between land tenure rights, social function of tenure and right to housing/to the city). Moreover, consideration or quantification of distributional aspects such as impacts on housing rights, employment, income and access to urban services and infrastructure were absent. Finally, there was no consideration on the impacts on the urban landscape and property market in the area. Consequently, the simplified environmental study did not encapsulate any debate on the territoriality of the project implicating in urban-environmental concerns.

The resulting environmental licenses reflect this narrow approach. Both licenses[913] addressed the developer's obligations towards the issues prioritized in the Terms of Reference and the reports, including towards flora preservation and compensation (protection of specially protected threes,[914] threes transplant,[915] compensation for

[913] Preliminary License n. 012119/2011, issued on 28 July 2011 and Installation License n. 012716/2012, was issued on 16 May 2012.
[914] State Law 9,519/1992.
[915] This was subject to specific authorization (n. 01-042/12).

clearing of vegetation[916] and street and park tree planting); technical aspects related to earthmoving (origin of the replacement material, drainage and flooding prevention);[917] and the setting up of a waste management plan for the construction work.[918] There was no consideration of developer's obligations with regards to the relocation scheme as a condition for the progress of the works schedule, neither any mitigation or compensation measures related to that.

7.3.2 Contribution of a socio-economic study

Due to the need for relocating people[919] from the impacted area, a socio-economic study was carried out by the City Department of Housing.[920] This study subsidised the implementation of the compensation scheme and social housing programme offered to those directly affected (see Section 7.4 below). It is important to highlight that this is not a proper stand-alone socio-economic impact assessment, for which there is no mandatory legal provision within EA regulation in Brazil. Therefore, although a summary report of this study was attached to the environmental licensing procedure,[921] there is no legal requirements or procedural rules regarding its elaboration or proper consideration within EA decision-making processes. Nevertheless, this study was the tool which addressed socio-economic and socio-spatial aspects related to the development in case (in terms of diagnosis but not of impact assessment), as well as conveyed a channel for public participation – although limited in many aspects (see Section 7.5 below). Therefore, it provided important insights on incremental developments that were difficult to capture from the content analysis of the environmental study report itself, in particular on the scale and complexity of impacts that were absent from the EA carried out.

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916 This is regulated by Municipal Decree 17,232/11 and was subject to specific authorizations (n. 01-021/12, n. 01-160/12 and n. 01/164-12).

917 All in accordance with the technical project elaborated by the municipality and annexed to the procedure and in observance of municipal technical legislation (Decree 13,536/01).

918 This is regulated by Conama Resolution 307/2002 and Consema Resolution 109/2005.

919 The General Secretariat of the Presidency defines 'involuntary relocation' as the compulsory change of the place of residence or of exercise of economic activities due to the implementation of engineering and architecture developments and services, resulting in improvement in the quality of life and ensuring the right to housing of the affected community.

920 <http://lproweb.procempa.com.br/pmpa/prefpoa/transparencia/usu_doc/coparelatimpactosocial6_1.pd> accessed 10 January 2016.

921 Procedure at 44ff.

The study was conducted in 2011, encompassing on-site visits, registry of families that would be subject to the resettlement programme, eleven meetings with the community, and six opportunities where social offices were set up in the area,[922] following the practice of land regularization programmes in Brazil. However, there is no clear information in the documentation consulted about the dates of the meetings, or on the number and profile of the participants (no minutes of the meetings were attached to the environmental licensing procedure and no information was found on the City Hall' website).

The study identified eight urban settlements alongside the avenue that would be affected,[923] describing these very briefly in terms of their location, years of existence, origin of the residents, land tenure issues and existence of risk areas. According to the information provided, the settlements had consolidated in the area for decades, rather than representing temporary or precarious occupations. Five of them had existed for more than 30 years, there being cases where 55% of the families had lived in the area from 20-40 years, 12-24 years and 10-30 years. With regards to migration flow, most of the families had come from other low-income areas of the city and of cities from the metropolitan region. Another relevant aspect relates to land-use and land tenure rights. It was identified that there was irregular land occupation over areas designated for the road network in six of the settlements (considering the urban network long planned in previous master plans of decades ago but yet not implemented). Five areas were already included in land regularization programmes, once they could be guaranteed the right to housing and to land tenure according to the applicable Brazilian law. Moreover, from the total of 1,478 buildings mapped, 1,157 are residential, 78 are commercial, 61 have mixed use (residential/commercial), and 22 are used for religious activities.[924]

In terms of demographic data, the study identified 1,525 families affected (5,212 people), by age group (10% children under 5; 18.9% aged from 6-14; 58,23% of young people and adults; 6.81% of elderly) and individuals with mobility disabilities

[922] Procedure at 48ff.
[923] Procedure at 50-51.
[924] Procedure at 53.

(6,8%).[925] Nevertheless, it did not address specific disaggregate or distributional aspects that might impact unevenly across the different affected groups due to the implementation of the relocation scheme. Moreover, it limited the identification/quantification of the affected community to the directly affected families that would have to be relocated. In this respect, consideration of any broader notion of 'neighbourhood' or a potential larger affected community within the region which may be disrupted by the intervention.

Relevant socio-economic aspects were mapped out though data on income and housing conditions. Regarding income, 15% of the families lived with three or more minimum wages per month. The study pointed out that access to services was precarious, with a high percentage of households accessing energy and water supply irregularly (50,4% and 42,6% respectively) and not connected to the sewage system (15,8%). In addition, there were families living in houses without toilet (6,6%) or sharing toilet facilities (8,19%). Moreover, there was a high incidence of respiratory diseases and viruses (32% and 20%) due to poor living conditions arising from poverty.

The study also considered the perceptions of the affected community about their place of living and expectations.[926] Positive aspects pointed out included the location (well-connected to the city centre and other regions of the city) and accessibility to urban public equipment and services (mainly, transport links and health centres). Negative aspects mentioned were related to violence and lack of access to basic urban infrastructure (energy, water, sanitation). Importantly, regarding the options offered by the municipality in the context of the relocation scheme, most of the people interviewed indicated they would preferably like to be relocated to other areas in the same region (67%),[927] which was a relevant aspect to be taken into consideration for the political and technical choices for such a purpose.

[925] Procedure at 53.

[926] Procedure at 55.

[927] While 24,77% would accept the housing bonus, and only 3,5 % would consider resettlement in other regions of the city.

7.4 Land-use Rules and Social Housing Programme: Spatializing Justice

To implement the resettlement of the affected community, which the development was dependent upon, the municipality strategically articulated social housing programmes and land-use rules.[928] Social housing compensation schemes previously established in municipal legislation for very specific emergency situations were made available for the project,[929] as well as funding from a national-wide social housing programme.[930] Also, amendments to land-use rules regarding the reserve of priority areas for the relocation of the affected communities were put at the centre of the debate. This section does not engage in a legal analysis of this, but it is considered as context which emphasises urban-environmental justice concerns implicated (socio-spatial, economic and environmental segregation due to development) at the interplay between planning and environmental decision-making.

The relocation scheme proposed encompassed two main compensation mechanisms, to be chosen by the affected families. One was resettlement in housing units to be built under the federal social housing programme. In this case, the municipality would acquire areas where social housing units would be built[931] and would pay for the mortgage. Units could be sold only after five years from the issuing of the deed title.[932] Social renting[933] would be paid for the families that needed to be relocated from site while the new units were still not available, and the moving costs would be covered.[934] Alternatively, families who did not want to adhere to the housing programme could accept a pecuniary compensation, the so-called housing bonus:[935] the municipality would purchase a house chosen by the family in the housing market,

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928 Lucimar Fátima Siqueira, 'A Questão Da Moradia Em Tempos de Copa Do Mundo Em Porto Alegre' in Paulo RR Soares (ed), *Porto Alegre: Os Impactos da Copa do Mundo 2014* (Deriva 2015) 73.

929 Under the Local Plan for Social Interest Housing.

930 Federal Law 11,977/2009, the so-called 'Minha Casa, Minha Vida' programme.

931 The original proposal was for 2-bedroom flats with 42 square metres. The community mobilised and negotiated flats of 51 square metres. The estimate unit cost was BRL52,000.

932 Article 7(I), Municipal Law 11,229/2012.

933 BRL800,00/month per family.

934 Social renting is established by the Local Plan of Social Interest Housing, at 69.

935 Housing bonus is established by the Local Plan of Social Interest Housing, at 70.

at the same estimate cost for the building of housing units.[936] This compensation method had been previously established as an emergency tool for circumstances of natural disaster or imminent risk, and had been recently adapted to encompass a broad resettlement policy also including cases of urban infrastructure intervention.[937]

Nevertheless, the implementation process became controversial.[938] In this respect, the designation of priority areas for implementation of social housing by the municipality through land-use arrangements gave rise to disagreements.[939] This is because the area designated was located far away from the impacted region, contrary to the community will and in discordance with municipal legislation that determines that urban intervention involving relocation shall prioritize keeping the affected population in the vicinity of the impacted area through the implementation of land regularization programmes. This is on the grounds of protection of housing and land rights, and realization of the right to the city. Therefore, as a result of community mobilization, and also of an investigative procedure set up by the State Public Prosecutors Office to assess potential human rights violations,[940] a bill on priority social housing ensured that housing units to be built in plots of land identified by the community and acquired by the municipality close to the original site would be primarily designated for the resettlement of those affected families.[941]

Interestingly, by the time the socio-economic study was conducted (2011), 67% of the affected population said they would opt for resettlement schemes in the same region,

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[936] For houses of higher value and properties with titles deeds, the families could negotiate higher pecuniary compensation. The same applied to residents that performed commercial activities (small retail shops, magazine stands, hair salons, garage, metalwork shops).

[937] This was firstly articulated for the use of the tool in the context of a specific large-scale infrastructure project counting on funding from the Inter-American Development Bank (Law 10,443/2008) and, later, for infrastructure developments related to the World Cup (Law 11,229/2012, regulated by Decree 17,772/2012). For a study on the situation of the relocated families post-project implementation, see: Betina Ahler, 'Casas e seus Entornos: O Reassentamento com Bônus Moradia na Cidade de Porto Alegre/RS' (Biblioteca Digital UFRGS) <http://reformaurbanars.blogspot.com.br/search/label/PISA> accessed 10 February 2016. Other cities have adopted the housing bonus in Brazil for the same purpose: Belo Horizonte/MG, Manaus/AM, Belém/PA, Goiânia/GO.

[938] Consequently, relocation did not started until middle of 2014, despite on-going construction work since 2012.

[939] Complementary Law 663/2010 (designation of 'special areas of social interest').

[940] Representation RD n. 01202.00078/2012 and Civil Inquest n. 01202.0007/2015.

[941] The municipality acquired 41 areas in a radius of 2 km from the original site. Article 7, sole paragraph, Complementary Law 716/2013.

24,77% would opt for the housing bonus, and only 3,5 % would opt for resettlement schemes in other region. However, according to some authors,[942] the community felt some pressure towards accepting the housing bonus, both for the urgency in embarking on the works (due to the approaching of the World Cup) and because of uncertainties regarding the timeframe for the new housing units becoming available. Criticism was also made about the low value of the pecuniary compensation. Such compensation did not allow for the purchase of another property in the market in the same region, because of the higher valuation for properties with title deeds in comparison with plots that were in irregular situation. Consequently, many families that opted for this ended up moving to distant areas of the city, with limited access to urban infrastructure and services, or even to other municipalities where they could find affordable properties. This was a significant factor in the disruption of long established urban communities, solidarity networks and neighbourhood dynamics.

Official information available on the Housing Department's website dated of January 2015 accounted that, out of 1,525 families, 499 had opted for the housing bonus, 175 had received compensation, and 195 were under social rental. Latest figures, updated at the time of writing and drawn from documentary analysis show that 1,225 families had already benefited from the relocation scheme by July 2015, with 300 still to be assisted (no further details were publicized regarding the kind of compensation scheme chosen).[943]

7.5 EA Procedures and Procedural Justice

As concluded by Alfonsin,[944] World Cup-related urban mobility infrastructure projects in the city of Porto Alegre constituted 'cabinet decisions'. This is because decision-making took place within city's departments and technical bodies, with little or no participation of representative councils and general public in the debate about

[942] See: Lucimar Fátima Siqueira, 'A Questão Da Moradia Em Tempos de Copa Do Mundo Em Porto Alegre' in Paulo RR Soares (ed), *Porto Alegre: Os Impactos da Copa do Mundo 2014* (Deriva 2015). Alfonsin (n 843).

[943] Official communication from the Housing Department dated 12 January 2016 which is attached to the Civil Inquest n. 01202.00077/2015, at 161.

[944] Alfonsin (n 843) 239.

their relevance or mode of implementation. The case under analysis is a prime example. The correspondent environmental impact report was not presented in any consultation process or public hearing, neither was the project presented before the local urban-environmental council for appreciation.[945] This means that the affected community had no opportunity to participate in the EA procedures - and thus to discuss the 'significance' of impacts, the scoping of impacts to be studies or the relevance of alternatives to the proposed project: as a result the potential and valuable input from civil society representatives was not collected and collated.

Opportunities for affected community participation occurred outside the EA procedures, in the context of the presentation and negotiation of the relocation scheme and implementation of the social housing programme. According to information identified in the material analysed (official documents attached to the environmental licensing procedure and to the Civil Inquiry)[946] and information accessed in social media (community associations', NGOs', City Hall's and news websites)[947], a number of meetings were held from 2011 to 2015. However, it remains difficult to estimate the exact number of meetings, the number of participants and the range of issues deliberated, and hence to assess their impact and influence in decision-making. What is clear is that discussion in this sphere did not encompass the planning and execution of the intervention or the content of the environmental report, but only implementation stages and the resettlement conditions and schedule.

Notably, the community mobilised and achieved some victories in terms of housing and urban rights in the negotiation with the municipality. These included the acquisition of plots of land in the nearby area for resettlement, change in size of the new residential units, and a higher price for the bid in order to attract construction

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[945] The project was not identified amongst the CMDUA's minutes of meetings for the period. In addition, Castello informs that Tronco Avenue is part of the city's Integrated Plan of Transport and Urban Mobility, which was presented before the CMDUA in 2012 (Minute n. 2525); however, the specific project proposal was not submitted for appreciation. Castello (n 870) 128.

[946] Communication from Housing Department informs that meetings were carried out to discuss the compensation schemes with the community (approximately 25 meetings – SER at 48-67, dated 27 April 2012). Nevertheless, it does not offer clear information on the number of meetings, number and profile of participants or minutes available.

[947] Available at <http://comitepopularcopapoa2014.blogspot.co.uk/>; <http://rio.portalpopulardacopa.org.br/>; <http://www.forumreformaurbana.org.br/>; <http://terceiramargem.me/2014/10/29/avenida-tronco-voz-nucleo-de-estudos-da-cidade-porto-alegre/>.

companies for the social housing programme. Nevertheless, the municipality, although engaging to some extent in dialogue through these meetings, opted for negotiating with the affected families only with regards to their choice of compensation and on an individual basis. Hence, there was no formal channel for those affected by the development to influence the development consent decision.

7.6 Case Analysis Conclusion

In terms of the thesis' analytical framework, the content analysis carried out in this case study shows that, despite the high socio-economic, urban-environmental and socio-spatial impact of the project upon the affected community and surrounding neighbourhood, as well as upon city's urban development in general, the EA procedures had limited reach in addressing urban-environmental justice considerations both substantially and procedurally. This is because the simplified environmental study conducted did not include analysis of relevant elements that a full EIA or NIS would have encompassed and did not allow for public participation mechanisms to take place. The local authority could have made the project subject to EIA or NIS under its discretionary power, due to the project's scale and complexity, but this decision was not challenged.

With respect to the nature and range of information provided, although good quality assessment of environmental issues, social justice aspects were poorly taken into account. Not only was very little space devoted to socio-economic issues in the context of the Terms of Reference and consequently in the environmental report, but also the analysis was superficial in this respect. Although there was some indication of socio-economic issues, no quantification or disaggregate analysis of relevant impacts on population changes, income, employment, local economy, and well-being was carried out. Despite the large resettlement scheme, the environmental report did not mention land tenure rights, housing conditions, community sustainability or urban landscape. This means that the social conflict regarding access to housing and urban services was limited to the spheres debating the resettlement programme. As a consequence, such issues did not inform the environmental licenses issued.

The procedure adopted also limited participation, raising issues of procedural justice. The affected community had no opportunity to participate in the screening and scoping processes related to the EA procedures, nor to discuss the resulting environmental report. Therefore, agenda setting did not take into account inputs on perceptions of local sustainability or community cohesion in terms of identifying the 'affected community' and of defining 'significance'. Also, these aspects were not considered within impact analysis. As a consequence, despite minor achievements during the negotiation process, there was no direct, short or medium-term, benefit for the affected community.

To sum up, it seems that the EA procedures in this case, for being carried under a specific political rhetoric unfolding on the scale of the city governance (the need for strategic infrastructure work in the context of the World Cup 2014), had its operationalization conditioned in terms of agenda setting and procedural justice. It not only remained opaque to highly relevant spatial and socio-economic elements, which therefore failed to permeate the impact analysis, but it also failed in performing its democratic function. In other words, strong contextual aspects influencing the institutional practice of the EA conditioned and limited the practical operation of its legal framework.

CHAPTER 8
EIA PROCEDURES AND SUBSTANTIVE OUTCOMES OF DEVELOPMENT CONSENT: CASE STUDY ON FOOTBALL ARENA/REAL ESTATE DEVELOPMENT

8.1 Introduction

In this Chapter I examine a case study on the building of a large-scale real state development centred on a football arena, a project that was also advanced in the context of the preparation of the city of Porto Alegre for hosting the FIFA's World Cup 2014. This case is particularly important to the theoretical and empirical analysis developed in the thesis because it offers an example of a full EIA procedure governed by the local authority (according to the EA regime discussed in Chapters 5 and 6), whereas other urban projects submitted to consent in the same period were subject only to a simplified form of assessment (as in the case study previously analysed).

In addition, this case involves the practice of negotiating compensation measures towards nature preservation and the city's infrastructure within the environmental licensing procedure, as well as implicated the accommodating of land-use norms to fit the project. These particular aspects are directly related to EA giving support to decisions affecting the just distribution of benefits and burdens of urbanization. Importantly, the case also raises questions about the relationship between process and outcome since the agreement which fixed the compensation scheme, and hence which was at the heart of the decision granting the environmental licenses, was challenged through public civil action.

Content analysis was carried out on a range of legal materials linked to the development consent process, with a focus on documents corresponding to the environmental licensing procedure (see Table 15 in Appendix VI). The agreement negotiated between the local authority and the developer and the proceedings of the civil action also offer insights because they offer detailed information on the procedures leading up to approval being granted. Similarly to the previous Chapter, the analysis presented here comprises (i) an outline of the key elements of the case

study; (ii) the role of nature conservation and the influence of a range of information provided in environmental licensing in shaping outcomes (the choice of 'what' information); (iii) the interplay with land-use rules ('spatializing justice'); and (iv) the relevance of EA participatory mechanisms in voicing conflicts over urban development. In addition, great attention is paid to (v) how mitigating and compensation measures play a part in integrating distributional concerns into decision outcomes.

8.2 Outline of the Case Study

The case under analysis comprises a large-scale real estate development built around a football arena (owned by one of the local football clubs),[948] including residential towers and a commercial complex[949] (owned and explored by a private developer). According to the legal regime applicable (Section 6.4), application for development consent was submitted in 2009,[950] with the conduction of an EIA[951] (but not of a stand-alone NIS), and construction works began in 2010. The football arena was completed in 2012 and the first residential buildings were available for use at the beginning of 2016, although still pending final environmental and planning permits at the time of writing.

The development is located in the northern area of the city (District of Humaitá), in a strategic position close to the main access to the metropolitan region and to the city's airport. However, due to road network design, access to the project area was considered to be limited, for it was 'enclosed' within the river border and the convergence of major transport links axes.[952] Importantly, this area is part of the river basin, and therefore subject to occasional flooding,[953] and forms part of the buffer

[948] Grêmio Football Portoalegrense.

[949] The development covers a plot of land of 380,000 m^2. The residential complex comprises 20 residential towers in a total of 2,130 flats, and the commercial complex will receive a shopping centre, a hotel, a convention centre and space for offices.

[950] Procedure n. 002.3300372.

[951] Conducted under environmental licensing Procedure n. 002.261358.001.07869.

[952] Mainly BR 116, BR 290 and Avenue A.J. Renner, as well as the metropolitan overground train railway and fluvial dockyards.

[953] Rualdo Menegat (ed), *Atlas Ambiental de Porto Alegre* (3rd edn, EDUFRGS 2006).

zone of a conservation unit.[954] These features have legal implications to the EA process (see below).

The urbanization process of the area was marked by the implementation of social housing projects in the 1950s and 1990s, incentives for mixed uses with the installation of industrial manufacturers mainly in the 1970s, as well as by a landfill operating within the 1970s and 1980s.[955] Nevertheless, the area is presently characterised by the retention of large, undeveloped and vacant areas and unused public land, as well as by a number of low-income, informal settlements and derelict industrial buildings.[956] Recognising these constraints and characteristics, local government has put in place a development programme aiming at improving the region's social infrastructure and environmental conditions, including land regularization, income generation and improving of urban mobility.[957] The attraction of private large-scale urban interventions such as the one under study is part of this urban development strategy.

Notwithstanding, the consent process was not without controversy. This involved legal issues ranging from landownership[958] to land development transactions,[959] as well as contextual aspects associated with urban development choices. With regards to this latest aspect, for example, this football arena was not the official venue for the World Cup matches, being only used as training facility for the national teams that played in the city. Nevertheless, the municipality included works for the road access to the site within the financing scheme for the World Cup's infrastructure, as well as

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954 This is the State Park Delta do Jacuí, a conservation unit of integral protection (in the terms of Federal Law 9,985/2000), established by State Decree 24,385/1976 (amended by State Law 12,371/2005).

955 See: Porto Alegre, *Transformações Urbanas: Porto Alegre de Montaury a Loureiro* (Museu de Porto Alegre Joaquim Felizardo 2008). Celia F Souza and Doris Maria Muller, *Porto Alegre E Sua Evolução Urbana* (2nd edn, EDUFRGS 2007).

956 Iara Regina Castello, *Bairros, Loteamentos E Condomínios: Elementos Para O Projeto de Novos Territórios Habitacionais* (UFRGS 2008) 152–153.

957 Programa Integrado Entrada da Cidade (PIEC) <http://www2.portoalegre.rs.gov.br/smgae/default.php?p_secao=61>.

958 A series of legal mechanisms were employed to transfer the plot of land which was originally state-owned but donated to the use of a community association (State Law 4,610/1963) to private groups willing to invest (State Law 13,093/2008).

959 The EIA identifies as developer Novo Humaitá Empreendimentos Imobiliários Ltda., however, there is a number of independent legal entities that in fact operate as a group (OAS Group) representing the same business interests in contractual transactions (commercial and corporate transactions, property management and investment).

agreed on political and administrative arrangements for streamlining the development consent process in order to completion of construction work match up with the event's calendar.[960] This highlights the existence of heavy influence of factors external to legal processes, both economic (private interest) and political (political capital gain), which also reflect upon the dynamics of EA operations.

8.3 'What' Information Matters

This section examines the environmental licensing procedure the project was subject to, with a focus mainly on the content of the EIA report, but also including, to a lesser extent, the content of the Terms of Reference guiding the compilation of the EIA[961] and of the environmental licenses issued (which reflect the local authority's decision).[962] The aim is, via empirical analysis, to shed light on the function performed by the procedural control exercised by EIA in shaping substantive outcomes in development consent particularly in terms of the role played by the nature and range of the information it provides (see debates on these aspects in Section 3.1.2).

The EIA report for this case resulted in a four-volume, approximately 1,000-page long, document,[963] addressing an array of impacts substantively (environmental, socio-economic, and in terms of urban infrastructure and landscape) and identifying respective mitigating and compensatory measures.[964] This was a reflection of the observation of a detailed Terms of Reference document issued by the local environmental authority, which required the analysis not only of technical environmental aspects, but also of the close linkages between environmental issues

[960] Letters by the developer attached to the Administrative Procedure n. 002.261358.001 (dated 29 July 2008, 07 January and 18 March 2010) give information about arrangements between the developer and the Mayor's office for the streamlining of administrative routines (setting up of deadlines, simultaneous analysis and approval of different phases, and processing priority). In one of such letters, dated after the submission of the EIA, the developer approached the planning and environmental authorities to suggest the fixing of a schedule for analysis and approval of UVS and EIA (dates for the analysis by CMDUA and CAUGE, and for the issuing of environmental licenses).

[961] Terms of Reference n. 001/2009/SMAM.

[962] Preliminary License n. 0113343.24.06.2010 (issued on 24 June 2010).

[963] The EIA was submitted in two stages, on 03 November and 11 December 2009.

[964] Summary table of impacts and correspondent mitigation/compensatory measures is available in the EIA at 626ss.

and land-use rules in the urban context. In this respect, the analysis conducted in the EIA incorporated many of the elements that would fall under the scope of a NIS (which was not individually required in this case), and allowed for the notion of urban sustainability that permeates the city's master plan to inform the process. Notwithstanding, despite the EIA report having touched a wide range of issues related to the significant themes elected in the thesis's framework, the analysis seams to be limited in some key aspects, especially with regards to socio-economic impacts associated with urban development patterns.

Detailed mapping and technical analysis was carried out in terms of the physical environment (water, soil, air quality and noise),[965] both in terms of diagnosis[966] and impact assessment.[967] This includes, for instance, studies on soil composition, geology, and identification of solid waste dumping, waste management, hydrology/drainage, and noise mapping.[968] Special attention was paid to investigating the potential existence of solid waste disposal in the plot, in line with concerns local authorities expressed in the Terms of Reference, which was not confirmed. Interestingly, although not directly addressing climate change considerations, the EIA report mapped out and quantified atmospheric emissions related to the transport links in the area (due to increase in traffic).[969] In this respect, preventive and mitigation measures indicated in the EIA (which were mirrored in the conditions established in the preliminary license) encompass technical urban and engineering measures (use of material or technical options), compensation for vegetation clearing, the setting up of waste management schemes, water and air pollution and noise control.

With regards to the natural environment (fauna and flora),[970] the EIA report identified the ecological relevance of the area as a refuge for certain species (although it did not

[965] EIA at 27ff. In terms of geographical scope for analysis, the plot of land where the development is located is considered directly impacted area, and the river basin is considered undirected affected area (EIA at 19-25).

[966] Consideration of 24 topics, at 27-92 and 641-740 (164 pages).

[967] Consideration of 11 topics, at 367-396 and 641-758 (146 pages).

[968] EIA at 641-758.

[969] EIA at 373ss.

[970] For this purpose, the directly affected area was identified as limited to the plot, and the indirectly affected area was defined as a polygon of 10 km around the plot (EIA at 19-25). Consideration of 19 topics with regard to the diagnosis in 82 pages (at 93-175), and of 14 topics with regard to impact assessment in 33 pages (at 397-430).

identify and quantify these) and elaborated a detailed flora inventory (with identification of specimens specially protected). It also highlighted the relevance of the area for performing hydrologic functions (soil permeability and groundwater recharging), particularly due to its location in flooding grounds within urban territory.[971] All of these aspects informed impact analysis and provided an indication of suitable mitigation measures.[972] They were also reflected in the preliminary license, which includes conditions concerning, amongst others, compensation for vegetation clearing[973] and need for the development to keep free, vegetated, permeable areas.[974] Importantly, the EIA report identified the area of the development as within the buffer zone of a conservation unit, referring to the legal provisions that impose pecuniary compensation in this case (see further below).[975]

Notably, the EIA report addressed a series of issues related to the urban environment in different sections, both in terms of urban infrastructure and social and economic aspects. Importantly, when addressing locational alternatives,[976] it emphasized the complex interplay established between the installation of major urban developments and the social and infrastructure networks existing in their surroundings, in these terms:

> The urban network is formed by a group of public assets and values, built upon the implementation of a number of public policies. […] Besides the functional aspect, the urban network is also conceived with the purpose of improving the meeting of social and economic needs of the city. Therefore, it aims at quality of life in a collective sense. Through this relationship between a development and the urban network, the entire project interacts with the external socio-urban aspects of collective interest.[977] (author's translation)

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[971] EIA at 750-751.

[972] EIA at 397-426.

[973] According to Municipal Decree 15,418/2006.

[974] This is regulated by the master plan (Articles 96 and 112 (VI)), which recognizes the relevance of such areas for the maintenance and qualification of urban landscape, microclimate, and recharge of groundwater reservoirs. In a development such as the one under analysis, the law indicates 20% of vegetated area to be kept.

[975] EIA at 144. See letter by DEFAP (EIA in Annex 3 of Vol. II)

[976] The non-implementation alternative is said to contribute to the process of expansion of the irregular occupation by low-income communities (EIA at 18).

[977] EIA at 16.

In the space devoted to describing the 'anthropic environment',[978] the focus was on identifying land-use rules applied to the area and describing socio-spatial predominant characteristics (urban infrastructure, archaeology, public equipment, landscape and urban transport/accessibility). In this regard, according to the master plan, the area is located within a 'development corridor', strategically identified as allowing mixed uses (residential, commercial or industrial) and for the setting up of developments allowing for metropolitan polarization.[979] Notably, there was reference to the existence of a special land-use regime particularly applied to this very development (see below). Also, the operational capacity of public equipment such as schools, heath centres and open public spaces were identified with respect to potential increasing demand.

Interestingly, great attention was devoted to defining the urban landscape.[980] It was stressed that the physical delimitation of the area by the road network design and its relative isolation due to few points of connection with the main circulating roads, combined with the coexistence of different minor urbanization nuclei of social housing, low-income informal settlements, industrial facilities, and remaining vacant plots. The chapter in the EIA report on impact analysis concluded that this would be largely impacted by the building of a number of towers up to 72 metres high, in an area of 2-storey buildings at the time, and that the football arena would become the defining landscape landmark. In this respect, despite advantages brought by the process of urbanization to the area, this would reinforce the urban development pattern marked by the lack of coherent urban identity:

> This new profile, which has been consolidated in the neighbourhood of Humaitá, will likely be applied in the region in the coming years with the occupation of plots that allow for its implementation, replicating the logic that has become characteristic in Porto Alegre: the lack of a formal structure for the urban blocks, built over time, following successive, different legislations,

[978] EIA at 176-254. For this purpose, directly affected area is limited to two districts (Humaita and Farrapos), and indirectly affected area is defined as including a larger number of districts (Humaita, Farrapos, Navegantes, São João, Anchieta, São Geraldo) (EIA at 19-25). Consideration of 32 topics with regard to the diagnosis in 185 pages (at 176-361).

[979] Macrozone 2 (development corridor), UEU 008, subunit 2 (special area of institutional interest).

[980] The conceptual approach to perceptions on urban landscape is based on Kevin Lynch, *The Image of the City*, vol 11 (MIT press 1960). EIA at 196ff.

> resulting in the coexistence, not without some confrontation, of typologies, heights and buildings of contrasting uses.[981] (author's translation)

In terms of population changes, it was indicated that the implementation of the development would result in an increase in population numbers both resident (7,029 new residents for the residential complex) and temporary (average of 52,400 visitors for matches at the football arena).[982] However, no specific analysis on age, gender or socio-economic groups was offered. More importantly, the EIA report clearly indicated the existence of a tendency towards a change in the socio-economic profile of the neighbourhood, due mainly to the increase in the average income of incoming families and qualification of services and commerce. It was suggested that the average income *per capta* of the new residents would account for three to 4,5 times the current number of residents'.[983] Nevertheless, although mentioning that the residents would benefit from improved services and job opportunities, there was no quantification of potential employment generation or reference to opportunities for income increase in favour of the current low-income residents part of the affected community.

Additionally, a potential increase in property prices in the region was evaluated as positive. Absent, therefore, any analysis in terms of how the local population would benefit or would be negatively subject to potential induced economic displacement due to competing interests over land use. This is to say that land and housing rights, as well as neighbourhood impact in terms of well-being disruption are the key, neglected elements when assessing the impacts of the development in the urban context in this case.

Therefore, criticism may be raised due to the absence of any consideration about how environmental and socio-economic issues might impact negatively on community dynamics in the region and on access to housing for the low-income resident population. Additionally, because such aspects were considered to be overwhelmingly positive (increase in population, changes in population socio-economic profile and

[981] EIA at 442.
[982] EIA at 454ff.
[983] EIA at 455.

qualification of services), there was no indication of specific mitigation or compensation measures in this respect.

When it comes to impact assessment in this realm,[984] aspects subject to analysis included evaluation of the increased demand for green, open public spaces (e.g. squares and parks), public equipment, schools/nurseries, infrastructure and services (water and gas supply, sewage, street lighting, waste management). It also comprised analysis of impact on urban landscape, built areas, urban road network, traffic, journey patterns, shadowing, and population increase.[985] Mitigation measures indicated include improvement of urban services network infrastructure (e.g. green spaces, water and sewage system and schools) and accessibility to the area (e.g. opening or expansion of streets, new roundabouts and street-signalling, pedestrian access, public transport links). The EIA report indicated clearly that the area was suitable for the development only provided that such measures are implemented.[986] Most of these measures were corroborated by the local authorities' technical reports, which pointed out that they should constitute conditions for issuing environmental and planning licenses.[987] Indeed, the preliminary and installation environmental licenses incorporated that, placing correspondent obligations on the developer for most of them (see below).

However, despite the preliminary license having included the implementation of compensation measures towards urban infrastructure amongst the conditioning the development was subject to, it was stated that these would be detailed via an undertaking agreement to be signed afterwards.[988] Yet, in practice, no definition in this regard was settled when the second licence was issued (installation license),[989] in contravention of EIA regulations.[990] This meant that the first two environmental licenses – approving location and project design, and authorizing construction work -

[984] Consideration of 36 topics with regard to the impact assessment in 194 pages (at 431-625).

[985] Summary table in the EIA at 362.

[986] EIA at 17.

[987] See, for instance, technical reports n. 84/10 (Civil Inquest at 777-783) and n. 132/11 (Civil Inquest at 727) by CAUGE, and by SMOV (Civil Inquest at 309-311).

[988] Preliminary license, Clause 16, and 16.2.

[989] On 17 September 2012.

[990] Conama Resolutions 237/1997 (Article 8(II)) and 371/2006 (Article 5(§2)); Federal Law 9,985/2000 (Article 36); Decree 99,274/1990; Decree 6,848/2009.

were issued before the implementation of any of the mitigation and compensatory measures identified in the EIA process.

8.4 Land-Use Rules: Spatializing Justice

The case study under analysis raises important issues with regards to the coordination between local authority and private developer in the definition of occasional land-use changes to accommodate particular interests. This is because the development benefited from specific changes in land-use rules to the master plan in order to make it attractive to investors.[991] These allowed for higher construction and occupation rates and, therefore, added commercial value to the project, as well as established exemption from pecuniary compensation required under planning legislation in these circumstances.[992] In fact, this benefited not only the plot of land for the installation of the new development, but also the property that was the former venue of the football arena located in a different region of the city, which would be destined to further real estate investment. It is noteworthy that this discussion is documented in the development consent procedure: the developer, when addressing the planning authority in order to clarify which land-use rules applied to the development, mentioned the existing negotiations with the municipality about the proposed bill on land-use regime change, even suggesting adjustments to the technical report produced by the municipality's technical bodies.[993]

Later, the same land-use regime benefits were temporarily extended to other categories of developments under the argument of stimulating the building and refurbishment of a wide range of facilities that could also be useful in the context of hosting the World Cup. First, this was available for project proposals submitted by

[991] It is worth highlighting the existence of another legal change in favour of the development. Complementary Law 648/2010 (amending Complementary Law 605/2008) exempted from municipal taxes the works and services related to the building and refurbishment of the two local football arenas (Gremio Arena and Beira Rio), including parking areas and mitigation and compensatory measures with regard to urban infrastructure in the surrounding area. In addition, there was also exception from state level taxation (State Law 13,526/2010).

[992] For example, allowing for increase in height from 52 metres to 72 metres, and occupation index from 1,3 to 2,4. Complementary Law 610/2009.

[993] Developer's letter dated 29 July 2008, attached to the UVS procedure, referring to the conclusive CAUGE's technical report n. 131/08 (27 August 2008).

December 2012,[994] then by June 2013,[995] and, finally, by March 2014,[996] just a few months before the event. As a result, many other project proposals were approved under such rules,[997] meaning that the municipality permitted that developments not directly related to the sporting event gained opportunistically from land-use changes and streamlining in development consent specially tailored for that occasion.

This fact may be interpreted as a manifestation of localism: local spheres of decision-making allowing for the confluence of economic and political forces that represent certain sectors to interfere in urban-development law- and decision-making. Hence, it provides evidence of distributional socio-spatial, environmental and economic impacts of land-use decisions. More importantly, even though this issue did not form part of the EA process (it was actually documented in development consent procedures outside environmental licensing), it presents important aspects for the study of the operations of EA within development consent for urban projects in terms of urban-environmental justice. This is because competing views over urban development decisions that may have been originated elsewhere are voiced through EA process.

8.5 Public Participation: EIA as a Channel for Voicing Conflicts

The conduct of a full EIA in this case allowed for wider opportunities for the exercise of participation, with the discussion of the project and impact studies through diverse mediums. First, representative councils appreciated the UVS and the Terms of Reference for the EIA in both administrative spheres, planning and environmental. This relates to the regulatory requirement for control from representatives of different

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[994] Including sports facilities in general, clubs, government facilities, hospitals, hotels, convention centres, commercial centres, shopping centres, schools, universities, and worship places. Complementary Law n. 666/2010 (so-called 'Law of the World Cup'). Although the proposal for this legislation was submitted to the Municipal Council of Urban and Environmental Development (Procedure n. 001.039011.10.0/CMDUA/PMPA, Minute n. 2427, 28 May 2010), no public consultation procedures were put in place to discuss the potential wider impacts on urban development.

[995] It also included health clinics to the list of developments. Complementary Law 714/2013.

[996] Complementary Law 727/2014.

[997] See a list of the 16 projects approved before the CMDUA under this circumstance in Castello (n 870) 132–133.The author informs that these included only projects considered of high impact, and therefore the ones falling within mandatory appreciation by the council. Other proposals might have benefited from the rule but not submitted to appreciation.

governmental and civil society stances, in line with procedural aspects associated with the gathering of inputs from technical and political agents.[998] It may be questioned whether the short time passed between the submission of the technical studies and their appreciation and approval by the councils, as well as the pressure exercised by developer and municipality contributed to speeding up analysis, as it is documented. However, any assumptions about the fragile role of representative councils in this particular case based on textual analysis would be merely speculative.

Second, a number of stakeholders presented written motions in the course of development consent and of the environmental licensing process (exercise of the right to petition), specially just before the public hearing to present the EIA report took place.[999] The main subject of the motions was the adequacy of the mitigation and compensatory measures included in the EIA, leading to requests for clarification and, in some cases, consideration of alternatives. Interestingly, one of the motions presented in the context of planning permission referred to the need for the conduction of NIS due to the range and scale of urban impacts, for which there was however no direct response.[1000] Although the final technical opinion of the environmental authority on the EIA mentions these motions in general terms, the extent to which such motions influenced decision-making is unclear from content analysis alone.

Third, and, most importantly, the EIA report was presented and discussed at a public hearing,[1001] at which 33 written questions were submitted and 10 oral statements were presented. Notably, despite the fact that many questions addressed environmental issues (11 questions including, e.g., trees clearing, sewage system capacity, solid waste management and flooding prevention), there was much attention paid to socio-economic impacts. In this regard, there were questions about whether there would be

[998] The EIA report was presented before the local environmental council on 29 October 2009 and approved on 23 March 2010. The UVS was submitted to the Urban-Environmental Development Council on 18 May 2010 and ended up approved in two weeks, on 1st June 2010 (Procedure n. 002.0261358.00.1, CMUA/PMPA, Minute n. 2412, dated 1st June 2010).

[999] Public Hearing on 22 April 2012.

[1000] Written motion presented by a community member and non-governmental organisation's representative in the context of city planning forums, dated 22 April 2010, which is attached to the UVS procedure.

[1001] The chair of the public hearing emphasized in the opening of procedures that the purpose was 'to present the EIA, address questions and gather suggestions'. Transcription of the hearing at 01.

any commitment to employ local residents, in particular young people, and to building community spaces for sports and leisure (eight questions); on the schedule for relocating schools and nurseries (seven questions); on investments on housing (five questions); and on the potential increase of property prices in the area that could affect negatively the residents (one question).

Moreover, questions were raised about the ownership of the land, especially considering the plot consisted of public land donated to private owners and then had been transferred to the developer, with the terms and conditions of this transfer remaining obscure (five questions). Also, there were doubts raised about whether the developer was enjoying benefits due to land-use changes (see above) in the absence of any planning compensation (one question). Furthermore, community members mentioned that many of the mitigation and compensation measures included in the EIA had already been foreseen as part of social programmes for the area (housing and urban mobility programmes) but not yet implemented, meaning that the measures imposed to the development in the EIA would not bring any other particular benefits to the community (two questions).

These aspects raise a highly relevant issue: the defining of mitigation and compensation measures in the context of the EIA process. Such an issue refers to how urban-environmental impacts of the development are addressed under the EA regime, as well as in association with the application for planning permission (land-use changes that add value to the project). Arguably, mitigating and compensation measures in the latter category should have been imposed on the developer due to the donation of the public area or resulting from social programmes. Unfortunately there was little clarity and some overlapping between these cases. In this regard, the questions voiced during the hearing showed a general feeling that the community was losing out because the measures announced under different compensation schemes or social programmes were conflated.

This shows how participatory mechanisms in the context of EIA provide a channel for the expression and communication of wider, latent demands by the community which are not necessarily limited, or directly related, to the subject matters addressed in the EIA report. As the representations made during the public hearing show, central to

this case is a dispute about different perceptions of urban development, raising questions about who has a voice in decision-making in this realm and who benefits? For example, one of the community members questioned: 'Why this area? Why this community?'[1002] Another pointed out the lack of consultation on whether the community was willing to receive the development.[1003] Notably, most of the representations related to how the community would benefit from the development. These issues concern urban development policies and planning decision-making, and do not necessarily, or satisfactorily, fall within the boundaries of impact assessment tools.

This function of EA to act as a conduit for discounted views about the nature and direction of development encapsulates one of the most unsettling criticisms of EA in Brazil. The concern is that EA becomes a stage for heated debates and as a consequence possibly generates litigation about a range of social problems and public policies deficiencies, especially through the negotiation over mitigation and compensatory measures[1004] (see Section 6.3.1.2). Nevertheless, the fact remains that in this particular case the legal form of EA allowed for the identification of what interests were losing out in terms of environmental impacts, confronting competing interests within the process.

8.6 Redefining Mitigating and Compensation Measures

Despite the good quality of analysis in the EIA process, the granting of environmental licenses was questioned via public civil action.[1005] Under judicial challenge was the definition of mitigating and compensation measures, which had been outlined in the

[1002] Transcription of the hearing at 11.

[1003] Transcription of the hearing at 15.

[1004] Bim (n 746).

[1005] Public Civil Action n. 001/1.13.0012134-4 (before the 10th Court of the Public Treasury of Porto Alegre/RS), filed on 17 January 2013, and having as defendant the municipality, the football club and companies of the OAS group. It is approximately 1,500-page long, with a 116-page statement of claim. This civil action was anticipated by investigative procedures (Civil Inquest n. 00833.00045/2010 and Petition n. 00833.00011/2010) and by Injunctive Action n. 001/1.12.0111605-9 (for production of evidence). There is also an administrative procedure before the State Court of Auditors to investigate the implications of the agreement to public administration liabilities (Special Inquest n. 001.843-0200/13-6).

EIA but later negotiated in different terms through an undertaking agreement.[1006] This had been drawn up without public scrutiny, and only then attached as a condition to environmental licensing. This raises difficult questions about the relationship between process and substance in the EA's legal form and is highly relevant to the thesis' analytical framework. Besides debates about the limits of judicial review of administration discretion, procedural justice (because the content of the EIA that was presented in public fora was not reflected in the agreement) and justice of outcomes (due to the sharing of financial burdens and benefits) are at the heart of the controversy.

Considering the constraints flowing from the primarily procedural nature of EA, the key question is whether the content of the EIA may somehow bind the environmental authority, thus limiting administration discretion because of the integration and permeating of certain reasons for decision-making. In this case, the central argument advanced in civil action was that the content of the undertaking agreement did not follow the outline of mitigating and compensation measures presented in the EIA and appreciated by technical reports within the local administration, therefore detracting from what was, according to the prosecutors, an integral part of the rationale for the decision. The claim was for the annulment of part of the agreement, suspension of the operation license of the football arena, and suspension of the issuing of environmental licenses and planning permits that would authorize construction work for other phases of the development.[1007]

To sum up, the measures or conditions foreseen in the EIA report and later subject to the agreement were of two different legal natures, with relevant implications for substantive outcomes both in terms of environmental protection and distributional aspects. One related to imposing legally established environmental compensation, in accordance with conservation law requirements for high impact developments. The other referred to the mitigating and compensatory measures towards environmental quality and urban infrastructure imposed upon the developer in the context of the EA

[1006] Negotiated in the context of Administrative Procedure n. 22613580017880, signed in April 2012, and registered as a public contract under Registry n. 48892 (Book 744 at 239).
[1007] Operation license by the environmental authority and construction license by the planning authority.

legal form (for the greater demand for, and impact on, urban structures, which were identified in the EIA).[1008] The civil action questioned that the conclusion of the agreement modified the content in the first case, and the sharing of responsibilities in the second case; hence these worked to exempt the developer from many of the obligations highlighted in the EIA report.

With regards to the first set of measures, Brazilian conservation law establishes that development proposals potentially causing significant negative environmental impacts (thus the ones subject to EIA) shall include pecuniary compensation to fund conservation initiatives, specifically the creation or maintenance of conservation units.[1009] The regulatory purpose of such a provision is to preserve natural ecosystems of ecological relevance and scenic beauty in the context of development.[1010] This is, arguably, associated with environmental justice in its intergenerational and ecological dimensions. Thus it does not have a redressive nature. Instead, Brazilian doctrine considers this as compensation *ex ante* for any consequential impacts on natural resources or environmental quality, based on the polluter-pays principle.[1011] This is a legal requirement to be observed within EIA procedure, consisting of a condition on the grant of consent (to be subject of an agreement to be signed before the granting of the second environmental license).[1012] The implementation of such a mechanism in the case under analysis was challenged in the civil action on two grounds.

On the first ground, the case was challenged for allegedly violating statutory procedural requirements relating to the definition of the beneficiary and to compulsory consultation. While legislation establishes that the monetary compensation shall be used for the creation and maintenance of conservation units[1013]

[1008] Conama Resolution 01/1986, Articles 6(III) and 9(VI), and Conama Resolution 237/1997, Articles 1, 8(III) and 19.

[1009] Article 36, Federal Law 9,985/2000. This is in line with constitutional provisions established in the Article 225(§1) related to protection of essential ecological processes (I) and biodiversity (II); and to the duty to create special protected areas (III and IV).

[1010] Erika Bichara, *Licenciamento E Compensação Ambiental Na Lei Do Sistema Nacional Das Unidades de Conservação (SNUC)* (Atlas 2009) 163–169 and 195.

[1011] Leme Machado (n 751) 827.

[1012] Resolution Conama 371/2006. Article 5(§2). See also Marcelo Abelha Rodrigues, 'Aspectos Jurídicos Da Compensação Ambiental' 46 Revista de Direito Ambiental 135.

[1013] Priority uses, according to regulation: land regularization, management plan, needed assets and services. Decree 4,430/2002, Article 33 (amended by Decree 6,848/2009).

(the EIA report indicated the use for supporting the special protected area within which buffer zone the project is located), the agreement provided that the money would also be used for the building of a solid waste screening/recycling centre.[1014] This would imply misuse of powers.[1015] This also meant that statutory provisions on consultation (statutory consultees and community) and the need for authorization granting (from the affected conservation unit management body – meaning that development consent is more difficult to obtain when special protected sites might be affected by the development)[1016] would not have been complied with. This would have occurred during the EIA process (lack of manifestation of the representative body of one of the protected sites within the boundaries of the buffer zone), and no publication on the Official Gazette.[1017] Furthermore, management bodies and environmental authorities, as well as communities living in the conservation unit area, were not consulted with regard to the undertaking agreement. Even the prosecutors were informed of agreement only months later. This relates closely to procedural justice, since the non-observation of such provisions resulted in limited opportunities for questioning and challenging decision-making.

On the other hand, the civil action challenged the application of regulatory criteria for calculating the amount of compensation. This aspect relates, in fact, to the adequacy of discretionary choices, for it gives scope for discretion of the decision-maker's technical judgement. The statutory criteria for the calculation is based on the formulae *reference value (cost of project's implementation) x degree of impact (scope of the negative, irreversible environmental impacts)*.[1018] The action challenged the definition of both variables. With respect to project's costs, prosecutors pointed that

[1014] Clause Four, paragraph four.

[1015] The prosecutors argue that the municipality is deviating the financial resource for addressing its legal responsibility toward urban solid waste management, as established by Law 11,445/2007 and Law 12,305/2010.

[1016] As required by Article 36(§6), Federal Law 9,985/2000 and Article 20(VIII), Decree 4,340/2002.

[1017] Decree 4,340/2002, Article 31-B(§1)

[1018] Federal Law 9,985/2000, Article 36 c/w Decree 4,340/2002 (amended by Decree 6,848/09, which determines the 'maximum' of 0,5% for the computation of the degree of impact in contrast to the 'minimum' of 0,5% established in previous legislation) and Resolution Conama 371/2006.

the developer had submitted conflicting figures and would have omitted certain costs which cannot be classified as exemptions. [1019]

In terms of the degree of impact, this will be defined by the local authority up to a maximum percentage, taking into account aspects such as the impact on biodiversity and habitats, and geographical and temporal scope.[1020] However, whilst the EIA report indicated that compensation would be calculated on the basis of maximum provision, the environmental authority applied a lower parameter.[1021] In this respect, prosecutors questioned the adequacy of the information provided in the EIA regarding certain categories of impacts, which would influence the technical analysis. They particularly highlighted the insufficiency of information on impacts on the built environment (how new urban infrastructure and intensification of the flow of services, activities and population would impact on changing the district's character and altering its relation with the conservation area), and on social and community values attached to the area. Additionally, they questioned the weighting of information provided by the environmental authority in the definition of the degree of impacts. Specifically, the attribution of a zero mark for the impact of the development on local biodiversity despite the EIA report having identified the relevant ecological role of the area as a refuge for certain species and for performing hydrologic functions. In this regard, the applicants claimed for the maintenance of the maximum percentage, as indicated in the EIA.

In respect to mitigating and compensatory measures towards the maintenance of urban-environmental quality and urban infrastructure, according to the EIA report,[1022] which was corroborated by the technical bodies, these encompassed construction works with regards to environmental impact mitigation, urban mobility and

[1019] Exemptions include: investment in plans and programmes required as mitigation measures in the environmental licensing procedure should not be added to the computation basis. Decree n. 4,340, Article 31(§3).
[1020] For criteria for the definition of the degree of impact, see the Annex of Decree 4,340/2002 (amended by Decree 6,848/2009, Article 31(§1)).
[1021] The technical report by SMAM concluded for BRL613,564,000.00 (value of reference) x 0.2214% (degree of impact) = BRL1,358,427.31 (Civil Inquest at 279-281).
[1022] EIA at 17.

accessibility to the area of the development, imposed mostly on the developer.[1023] However, the undertaking agreement contradicted what had been approved in the context of the EIA process, and thus that provided the basis for issuing environmental licenses. It is not that the nature or adequacy of the measures were substantially modified, but rather that the agreement promoted a rearrangement of the sharing of responsibilities between public and private actors. As a result, the municipality assumed obligations that had been previously assigned to the developer. The municipality substantiated this approach by arguing that costs should be shared between public and private investors on the basis of the great relevance of the project for benefiting the city's development broadly, as well as because improvement in urban infrastructure was linked to other urban mobility projects in the same district.[1024]

The main legal argument advanced in the civil action was that, in this case, the content of the EIA had considerable relevance over the substance of the decision. In this regard, despite EIA being informative (not binding upon decision-making outcomes or aiming at providing a means to impose a conditional consent), the content of the EIA report with respect to mitigating and compensatory measures would have integrated the reason for the decision (in the context of the duty to give reasons), and therefore the decision itself. This was because the acceptance of the measures proposed in the EIA report meant that these constituted conditions to secure development consent.[1025] Consequently, these could not have been altered according to the administration's discretion powers after the granting of environmental permission.

Also importantly, the prosecutors claimed that the agreement was not made available for consultation, when it should have been submitted to further scrutiny once it had been amended following consideration of technical opinions and the views of the general public. In this regard, the assumption made public was that the decision to

[1023] Clause Four of the undertaking agreement refers to the construction or expansion of roads and secondary streets in the surrounding area, a tunnel, a bus terminal, and taxi rank. In addition, Clause 3 details other obligations on the municipality, such as relocation and resettlement of communities residing over the new roads/street design.

[1024] According to Clause Four of the undertaking agreement, financing for this would come mainly from the federal budget and a minor part from the municipality.

[1025] Holder (n 412) 277.

grant the environmental license (the final decision) was taken on the condition that the developer bear the burden of realizing the measures required (a matter of fact). Therefore, judicial review was authorised on the ground that the process had been violated. This situation is reminiscent of cases in the UK in which the role played by EIA in displaying mitigating and compensation measures facilitated the overcoming of objections to the development, a matter of what Holder refers to as the 'rematerialization of environmental assessment':

> It is clear that procedural rules are not entirely abstract, formal and immune from partisanship. Instead, the environmental assessment procedures offered a means by which the developer could, by the identification of mitigation measures, help to secure development consent. […] such measures might well have been identified in the course of normal planning procedures, but the manner of presentation in a formal environmental statement is arguably more persuasive, because of the apparent objectivity of the document.[1026]

This issue might be interpreted through the lens of administrative law doctrine with regards to the duty to give reason in public administration decision-making. In this respect, administrative law scholars in Brazil understand that the facts/motives that provide a reason for the decision establish the boundaries of discretion (the so-called 'theory of the decisive facts').[1027] The same applies to environmental decision-making, where the content of EIA limits the analysis and motivation for consent.[1028]

This is particularly the case with regards to the role of EIA in pursuing or failing fairness in environmental law and planning governance. If one considers that mitigation and compensation measures represent redistribution mechanisms within environmental assessment (towards affected community, a neighbourhood or the urban development broadly) allowing for the internalization of environmental negative externalities, the definition and calculation of mitigation and compensatory measures is closely intertwined with the redistribution of burdens and benefits of development proposals. In this regard, the linkage between the polluter-pays-principle

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[1026] ibid 280.

[1027] Celso Antonio Bandeira de Mello, *Curso de Direito Administrativo* (26th edn, Malheiros 2009) 398. Helly Lopes Meirelles, *Direito Administrativo Brasileiro* (35th edn, Malheiros 2009) 200.

[1028] See: Solange Teles Silva, 'Ato Administrativo Ambiental' in Odete Medauar and Vitor R Schirato (eds), *Os Caminhos do Ato Administrativo* (Revista dos Tribunais 2011). Benjamin (n 756) 35. Benjamin and Milaré (n 761) 90.

and environmental justice emerges, as pointed out by Pedersen,[1029] and this linkage greatly informs environmental assessment regulatory goals. The relevant redistributive function of the polluter-pays principle in environmental law affirms that the developer shall support the burden of the internalization of costs related to the mitigating and compensation measures, rather than the government or the local community.

Although a convincing case was made by the applicants, no judicial decision was issued in this case, because an agreement was reached in the course of action between public prosecutors, the municipality and the developer.[1030] This agreement centred on an increase of the amount of the environmental compensation.[1031] However, importantly there is no clear indication of the destination of the compensation and the obligation to install a solid waste recycling facility remains (which does not relate directly to the maintenance of the special protected sites affected).[1032] Also, it was decided that the developer would implement the equivalent of 70% of the cost of urban mobility works (road system infrastructure) included in the EIA report.[1033] The public prosecutor's option for agreeing on reducing the developer's obligations was based on the potential for long-running litigation, whereas the measures should be implemented immediately, as well as on the recognition that many of the urban mobility works established were actually demanded previously or due to a later infrastructure development, meaning that the municipality should take part of the economic burden (a defence argument initially rejected by the prosecutors).

Lately, however, the municipality announced that it would not issue the final planning permit for the first completed buildings of the residential complex on the grounds that the developer had not satisfactorily carried out measures agreed on (only one out of eight measures were completed). Curiously - if not tragically - the developer was put into administration after being involved in an investigation concerning a large-scale

[1029] Ole W Pedersen, 'Environmental Principles and Environmental Justice' (2010) 12 Environmental Law Review 26.

[1030] Agreement in the Public Civil Action n. 001/1.13.0012134-4, copy attached to the UVS procedure at 325ss. The magistrate homologated the agreement on 22 January 2015 (information on Notice n. 12/2015 available at <www.tjrs.jus.br/search>).

[1031] Clause Sixth.

[1032] Clause Eight (§1)(d).

[1033] Clause Second.

corruption scheme ('Car Wash' investigation).[1034] The municipality had its requirement to be included in the priority list of creditors, on the basis of the undertaking agreement, rejected.[1035] Therefore, at the time of writing, uncertainty remains about whether the developer would comply with the agreement's obligations or the municipality would have to take responsibility for the remaining measures still to be implemented.

8.7 Case Analysis Conclusion

This case provided a means to analyse the 'value added' aspect of a full EIA procedure to development consent decision-making, drawing upon the urban-environmental justice framework developed in this thesis. First, the carrying out of an EIA allowed for a thorough investigation of the urban-environmental impacts related to the development, including aspects which fall under the scope of NIS regulation (e.g. impacts on urban infrastructure, services and landscape). This is in contrast with the impact analysis carried out in the avenue expansion case (Chapter 7), in which, despite proper consideration of environmental concerns via the environmental report, issues related to impacts on urban infrastructure and to the relocation of a affected community were dealt with separately. Notwithstanding, as it was pointed out above, in the EIA report for the football arena case issues such as an analysis of the potential impacts on different population groups and negative impacts on community character and access to land rights were not satisfactorily addressed. This dimension of EA is clearly associated with the process-outcome and procedural-substantive justice debates to the extent that the nature and range of information elicited influences the exercise of decision-makers' discretion when they are weighing up different considerations and interests.

[1034] See Joe Leahy, 'What is the Petrobras Scandal that is Engulfing Brazil?' *Financial Times* 31 March 2016 <http://www.ft.com/cms/s/2/6e8b0e28-f728-11e5-803c-d27c7117d132.html#axzz46ZE1K0ML> accessed 4 April 2016; 'Why is Brazil's Government in Crisis? The Guardian Briefing', *The Guardian* 17 March 2016 <http://www.theguardian.com/world/2016/mar/17/brazil-government-crisis-briefing-dilma-rousseff-lula-petrobas> accessed 4 April 2016.

[1035] 'Prefeitura suspende Habite-se para condomínio da OAS ao lado da Arena' *Zero Hora* 06 January 2016 <http://zh.clicrbs.com.br/rs/porto-alegre/noticia/2016/01/prefeitura-suspende-habite-se-para-condominio-da-oas-ao-lado-da-arena-4945608.html> accessed 4 April 2016.

Second, when compared to the first case study, the EIA process in this case encompassed a greater number of opportunities for public participation due to compliance with specific statutory requirements. In this regard, the EIA report was submitted to representative councils (environmental and urban municipal councils) and technical bodies, and presented in planning forums and public hearing. These allowed for wider control over procedural and technical aspects. Nevertheless, the process was not immune to controversy. The more detailed analysis carried out led to debate about the discretionary nature of decision-making, particularly with respect to defining and negotiating mitigating and compensation measures, which were subsequently challenged via a public action. Most relevant, practical arrangements for mitigation and compensation were included in an undertaking agreement outwith the environmental licensing process. Problematically, these arrangements were therefore settled without public scrutiny - and following the issuing of the environmental licenses necessary for project approval. These concerns about participation as a part of procedural requirements are related closely to procedural justice and to the shaping of potential substantive outcomes of environmental licensing decisions.

Controversy over the development was closely related to particular benefits derived from planning decisions. These relate to land-use changes negotiated with the purpose of adding value to the transaction and to benefiting from the improvement in the road network in the surrounding area, with no compensation required in the planning permitting forum. As Alfonsin observes, this involves a key urban policy guidance rule related to the need to ensure the return of public investment that results in private capital gain,[1036] a redistribution mechanism available through planning law. Although falling strictly outside the EIA decision-making context, these elements ended up permeating the debates advanced in the definition of compensatory measures imposed on the developer and were subject to criticism raised during the public hearing that took place.

Finally, the case highlights the regulatory impact of EIA in local planning decision-making in terms of the role to be played by public and private actors in development

[1036] Article 2(XI), City Statute. Alfonsin (n 843) 247.

consent. The procedural form of EIA taking shape in practice in this case clearly showed the 'teaming up' of municipality and developer, not only in favour of a development choice that had been already taken before consent application, but also in governing the timing of the process. The negotiation resulting in the sharing of responsibilities over mitigating and compensation measures reinforced the idea of the process being heavily influenced by private interests (commercial value of the development), although these were presented in name of broader public interests (boost in urban development for that area of the city).

In this respect, this case exemplifies the setbacks of localism and more profoundly, displays elements in line with the critiques of modern environmental governance approaches. According to Fisher, when modern environmental governance celebrates the role of the private sector in environmental regulation through the enhancement of partnerships and shared responsibilities, it does not necessarily address legitimacy problems regarding the pursuing of broader substantive constitutional and administrative goals, in particular here fairness and participation.[1037] Specifically, the case illustrates a situation where the association between private developer and municipality in decision-making through EA was directed to pursuing the granting of consent (in favour of the developer), following the acceptance of mitigating and compensatory measures which ended up financially split between private-public obligations (the alleged interest in urban development). A process heavily influenced by external factors to the legal form of EA is once again deeply embedded in the context of developmental strategies (hosting of mega-events).

[1037] Elizabeth C Fisher, 'Unpacking the Toolbox: Or Why the Public/private Divide Is Important in EC Environmental Law' [2001] FSU College of Law, Public Law Working Paper.

CHAPTER 9
CONCLUSIONS

9.1 Introduction

This research aimed to contribute to the field of EA studies in terms of theory and the development of regulatory strategies, as well as in terms of explaining EA practice in situated contexts. The key aim was to explore the extent to which project-level EA can assist in securing environmental justice in urban areas. To this end, in the substantive Chapters that integrate Part I (Chapters 2 to 4), the thesis introduced a theoretical and conceptual framework for urban-environmental decision-making through integrating environmental justice, social justice and spatial justice as key elements of law and policy in the consent regime for major urban projects. In Part II (Chapter 5 to 8), this was explored empirically by employing socio-legal methodology in the examination of Brazil's EA regime. This closing Chapter focuses on giving a critical appraisal of the interplay between the key theoretical and normative concepts developed in Part I and the conclusions drawn upon the case study analysis carried out in Part II.

I argue that having developed a critical appraisal of EA's potential distributional effects in urban-environmental decision-making, the thesis also offers a platform for investigating how EA is intertwined with, and may legitimise, certain urban development programmes. This emerges from the analysis of the relationship between EA theory/law and processes/praxis under particular circumstances. On the one hand, EA regulatory and institutional form is shaped by how theory and law frame key legal concepts. On the other, EA implementation itself forges a practical notion of these same concepts in action. Therefore, EA is not only informed by the body of environmental and urban law applicable, but it also legitimizes a particular urban development or environmental policy or programme. It is in light of this that the thesis debates the relevance of an environmental justice normative framework for EA operating within planning control in the Brazilian case.

9.2 Contribution Towards a Normative Guidance for an Urban-Environmental Justice-based EA

The thesis's contribution to theory development comes from further advancing, in the substantive chapters, a conceptual, grounded, understanding of environmental justice in urban areas to be employed as normative guidance for environmental governance and decision-making. The thesis departed from outlining a broad notion of environmental justice based on literature review on its social construction and law and policy developments (Chapter 2). This was progressively revised by the combination of diverse theoretical approaches to environmental justice, spatial justice and urban sustainability, and then organised and presented in the form of an urban-environmental justice matrix (Chapter 3). Finally, building upon this, a justice-informed normative framework for EA was discussed, with a focus on exploring how project-level EA law can be used to advance the objectives of the thesis's urban-environmental justice matrix (Chapter 4).

To sump up, the substantive chapters lead to the conclusion that justice is an abstract notion that demands localisation and contextualization in order to serve as policy and decision-making guidance in particular cases. Notably, the effort to build meaning into the concept of justice conducted in the thesis although placed within environmental law shall not be restricted to doctrinal analysis. Indeed, it relied on multidisciplinary approaches, combining political theory, environmental law and governance, political ecology, and law and geography scholarship. Also, the definition of the thesis's framework demanded unfolding the multiple dimensions and meanings of environmental justice both theoretically and in terms of environmental policies. As a result, the dimensions of distribution (social and spatial justice), procedural justice, inclusiveness and environmental sustainability were translated into a group of specific themes and subthemes. It is worth emphasizing though that this framework does not constitute a means of measuring policy and legal environmental instruments. It represents, instead, an effort to interpret manifestations of environmental justice in policy and legal terms. Most importantly, it provides a reference for the carrying out of empirical work.

The thesis can also contribute towards advancing law and policy, with potential to reach environmental law practice beyond the academic community by informing public administration as well as civil society strategies to improve development consent procedures. This derives from employing the notion of urban-environmental justice to the analysis of the legal form and practical operations of EA. In this regard, the thesis revisited debates on the potential for EA to have substantive effects to the extent to which procedural requirements may influence and shape the outcome of the decision - particularly due to the nature and quality of information provided and of the impact prediction carried out, as well as the role of public participation and of the definition of mitigating and compensatory measures. This allowed for highlighting the part played by these key EA regulatory features in shaping the outcome of development consent decision-making in terms of distributive justice and procedural fairness (Chapter 4).

In this respect, I argue that a substantive environmental justice agenda may inform EA legal regime by the introduction of procedural requirements to take into consideration correspondent concerns. These include, for instance, an enlarged status for socio-economic impacts and distributional aspects, consideration of climate change adaptation and urban sustainability elements, as well as consultation in the screening phase. This, however, does not consist of a strategy to monitor the content of decisions or to determine the weight to be given to certain considerations, which remains within the discretion granted to the decision-maker. Instead, it is an effort to ensure that this kind of information is available and therefore permeates the considerations that feed into decision-making. This is in line with the basic legal form of EA (regulation of the gathering of environmental information and technical and lay public inputs to ensure well-informed exercise of discretion), but would also envisage more substantive outcomes in terms of environmental justice.

It is timely to advance this debate in countries such as Brazil, where the EA regime is under scrutiny for having become increasingly sensitive to the tense interplay between the pursuing of development goals and the balancing of socio-environmental claims (Chapter 5). In Brazil, in the absence of environmental justice as an explicit policy or regulatory goal, normative aims established through a rights-based approach to environmental protection and urban development inform substantively the EA

procedural form and operations. As a result, the key EA regulatory aims of impact prediction and information gathering co-exist with considerations related to individual and collective rights enforcement (land rights, environmental rights, social rights and participatory rights), creating conditions for contest and conflict.

Finally, the thesis's analytical framework was applied to guide empirical socio-legal research on Brazil's EA legal regime and practice. This comprised content analysis of two full-range development consent and environmental licensing procedures for major urban developments (Chapters 6 to 8). Notably, despite the case studies carried out providing evidence of EA operations within planning control locally in a single Brazilian city, they were largely informed by theories of environmental justice (conceptual approach) and decision-making in environmental law (regulatory approach). In addition, they allowed for the testing and enhancing of the urban-environmental justice matrix, contributing to grounding theoretical-conceptual notions on empirical work. Therefore, I believe they offer general lessons that might reach beyond this specific geographic and institutional context, providing a foundation for further theoretical work (on the relationship between environmental justice, spatial justice and sustainability) and contributing to the analysis of legal and policy frameworks elsewhere (EA legal regimes in different settings). A detailed account of conclusions drawn upon case study analysis follows below.

9.3 Summary of Conclusions on Case Study Analysis

Content analysis on documental sources does not allow for capturing all the facts and nuances surrounding consent procedures of major, high impact urban development such as the ones represented in the case studies. Nevertheless, for the purposes of the thesis, and within the constraints of socio-legal inquiry reach and scope, this methodological approach offered an effective strategy. The choice for a small-scale sample of two similar cases, encompassing analysis of full-range development consent procedures, helped to casting light on the interplay between legal concepts, contextual aspects and EA's legal form and institutional practice in light of the thesis' analytic framework. The case studies showed that EA procedures played a relevant

yet very limited part in defining and accounting for urban-environmental justice outcomes when operating within planning control at the local level in Brazil.

First, a set of contextual issues unfolding on the scale of city governance influenced the role environmental and planning law and regulation performed in advancing urban development choices. The city of Porto Alegre has undergone a series of project approvals for large-scale urban developments recently due to a strategy of attracting investment and promoting economic development. This has impacted the environmental quality of the urban space, also raising disputes over land use and dimensions of the right to the city. In this respect, the case studies provide practical examples of how the rhetoric of sustainable development and localism are manifested through EA, particularly when deeply embedded in the context of developmental strategies (here, the association of the hosting of a sporting mega-event with urban development opportunities). Notably, they revealed the extent to which the procedural control nature of EA relates to the delivery of these ideas.

The main controversy relates to how the municipality articulated legal and institutional structures to respond to demands resulting from the political choice of coupling mega-events, economic growth and urban development. In the attempt to implement large urban infrastructure projects (avenue expansion) and stimulate private developments with a component of urban renovation (football arena/real estate) in the context of the World Cup 2014, it promoted casuistic changes in land-use rules and streamlined development consent through simplified or 'timed' EA procedures. Full understanding of the resulting spatial, socio-economic, environmental and symbolic changes operated in the city, including towards the local legal urban-environmental framework, still remains largely disputed and to be evaluated in the future.

Notwithstanding, some conclusions can be drawn with regards to the two developments under scrutiny. It seems that in these particular cases positive aspects related to promoting urban infrastructure improvement and socio-economic and environmental well-being were not combined with equal distribution of benefits and burdens (population in the affected areas supporting higher burden and not benefiting accordingly). This is because major impacting developments were given priority by

the municipality under the 'public interest' rhetoric, despite the scale of the impacts and constraints on timeframe. As a consequence, the processes deviated from debate on local sustainability perceptions and conflicts rooted in the places in which the impacts were felt.

Second, the examination of the EA regime shows that there are well established and consistent legal and institutional frameworks in place both at the national (Chapter 5) and local spheres (Section 6.4). Notably, the city of Porto Alegre has developed substantive grounds for environmental and neighbourhood impact assessment within development consent (including environmental, socio-economic and urban quality factors). This is due to the passing of municipal legislation (with provisions in the master plan and in environmental and planning laws and regulation) and the setting up of administrative structures (city's departments, technical bodies and councils). Nevertheless, the fragmentation of the development consent process between planning and environmental applications is an issue, despite the coordination efforts among the city's various departments which are involved. This adds tension to the process of harmonising the range of intertwined local urban-environmental legislation - which relates to the non-subjection of the cases analysed via NIS despite the existence of municipal regulation.

With respect to the legal form of EA, the system of listing categories of projects of special impact still allows for largely impacting developments being submitted to simplified studies. These however do not suffice, in some cases, to predict and assess complex urban-environmental impacts; the existence of EA also does not necessarily lead to mandatory public consultation (see the avenue expansion case). Furthermore, despite socio-economic impacts being included in the legal definition of 'environmental impact' and its analysis consisting in a requirement for the content of the EA report, there is no indication in EA regulation of the need for distributive of disaggregate impact analysis. Also absent in EA regulation is any clear requirement for climate change mitigation and adaptation consideration recognising differential and unequal impacts flowing from these.

Third, analysis of the practice of EA revealed that the EA tools applied to the case studies offered quality consideration of natural environmental aspects but remained

somehow opaque to the localized, highly conflictive urban-environmental, socio-spatial and economic implications. In this respect, key aspects which translate urban-environmental justice concerns, and which could have been considered in the EA studies carried out (considering NIS was not conducted), were absent or unsatisfactorily addressed. Particularly relevant in the case of the avenue expansion would have been the assessment of disaggregate spatial and socio-economic impacts on the population to be relocated (housing conditions and access to urban services and facilities), and of how community social networks would be affected, as well as consideration of land tenure rights. In the case of the football arena/real estate, the assessment of how the resulting increase in property prices in the surrounding area could threaten the permanence of low-income, long-term established residents. This aspect relates to decision outcomes depending on what information is available and how it is considered, and thereby how value judgement and different perceptions on priority-setting unfold.

The case studies also offered insights into the limited impact of EA procedures on decision-making even when governed at the local level. It can be concluded from the case analysis that the conduct of environmental impact studies made little difference to the decision to permit or refuse those particular applications, or even to project design. Greater attention was given, in fact, to mitigating and compensating measures, although many of these measures should in any event have been required within the scope of planning permission. It seems that in Brazil the legal and institutional process of environmental licensing (which follow the EA process) is central to decision making, rendering the environmental impact report far less relevant in practical terms. This is reminiscent of what Barlett concluded as early as 1990 when reflecting on EA through administrative theory: 'EIA can be "frozen out" from any real policy or institutional effectiveness if it is not sufficiently linked, formally or informally, to the ways problems are defined, structured and addressed'.[1038]

Finally, the dispute over who has a say about land-use rules and urban development choices permeated the implementation of EA processes. In this respect, EA provided

[1038] Robert V Barlett, 'Ecological Reason in Administration: Environmental Impact Assessment and Administrative Theory' in R Paehlke and D Torgerson (eds), *Managing Leviathan: Environmental Politics and the Administrative State* (Broadview Press 1990) 89.

an important channel for disputes and mediation between private (developers) and collective interests (community and users of urban equipment and public spaces, as well as public authorities). This reflects how two central elements of the EA legal form play out within an urban-environmental justice matrix. One is the role played by public participation in contributing to EA agenda setting and political judgements, as well as relating to a rights-based EA (access to information and participation). The other is the negotiation of conditions for consent in the context of environmental licensing, a means of balancing the promotion of private and public interests.

In a nutshell, EA offers a central stage for voicing urban-environmental conflicts: how the benefits and burdens of a development endeavour – economic, social, environmental, cultural - are unevenly shared among different population groups in the cities. If EA operating within development consent for urban development is to incorporate urban-environmental justice concerns, distributional aspects, land rights, participation and just distribution of benefits and burdens of urbanization have to be taken into consideration. Problems arise when the practice of EA fails to take such information into account or when the EA process is embedded in the use of development consent arrangements in order to ensure predictability for developers and speed up decision-making, even though this is to the detriment of a thorough impact assessment and consistent public participation.

9.4 Opportunity for Future Research

With regards to future research opportunities arising from this thesis there is potential to expand the reach of case study analysis to a larger selection of cases. I am particularly interested in replicating the analysis to a larger number of cases in similar contexts but in different settings (e.g. other cities hosting sporting mega-events in Brazil and elsewhere). This would likely provide evidence to further enhance conclusions about how the regulatory form of EA develops in practice in urban contexts from an environmental justice perspective, and how such a process is influenced by contextual aspects. Moreover, an extended body of research along these lines could offer insights into whether the scope and depth of analysis in EA procedures varies between local environmental and planning agencies (e.g. categories

of impacts considered and methodology applied) and the impact of this diversity on the substance of decision making.

In addition, a survey of a larger number of environmental impact statements was initially considered but then rejected. As explained from the outset, the option was to prioritize a small-scale case sample by carrying out a wide-ranging documental analysis in order to grasp the working and effects of key procedural and contextual aspects. Limiting the analysis to the statements, although consisting in reliable documental data, could be nevertheless misleading for the thesis's purpose. Moreover this would face practical difficulties in terms of data accessibility considering restrictions of time and resources. This is because Brazilian municipalities, in general, do not provide digital repositories of environmental statements. Thus, such a case study design would demand planned visits to a number of municipal archives to access hard copies (usually part of lengthy paperwork).

Notwithstanding, having the thesis introduced an analytical framework already, and with proper planning on time and logistics, this could consist exploratory work for further research projects. I would be interested in the opportunity to identify trends on how urban-environmental justice considerations are addressed by different environmental authorities at the local level, what could lead to conclusions about the need for agencies to issue guidance and policy documents in this regard.

Another strategy employed in the thesis, although to a lesser extent, was to investigate examples of environmental justice and EA law and policy in other jurisdictions, namely the USA and the EU. In this respect, although the thesis did not evolve as a comparative study, these elements were usefully drawn upon within the clear boundaries of enhancing the analysis on Brazil and of stressing that the research topic is strongly shaped by contextual aspects. However, more attention could also have been given to EA operations in these other jurisdictions. Therefore, further research developments could include analysis of similar cases in these other countries with the purpose of examining how their more advanced environmental justice policy and legal frameworks play out in terms of EA practice.

At the time of the submission of this thesis, Brazil was still in the international spotlight with the Paralympics 2016 taking place. This brings to a closing the recent cycle of hosting international sporting mega-events. The organisation of the football tournament in 2014 and the Olympics and Paralympics 2016 has been celebrated as successful, despite being focus of much dissent in the run-up. The long-term 'legacy' in terms of infrastructure improvement and socio-economic development, which was promised by local governments, has yet to be assessed. However, the distributional effects related to development consent for major urban projects associated with these events could be felt in the preparation process. Urban development choices and procedures adopted sparked concerns about the uneven distribution of socio-environmental and spatial costs and benefits. As explored in the thesis, examining EA operations within these settings casts light on the potential distributional effects of environmental and planning systems, and therefore on the relevance of an environmental justice framework for EA, as proposed.

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Appendix I

UK Research Reports

	YEAR	MAIN TOPIC	REPORT TITLE	AUTHOR INSTITUTION	SOURCE
1	2000	Access to Justice (judiciary system)	Environmental Court Project Final Report	▪ Malcon Grant ▪ Department of the Environment Transport and the Regions (UK)	Comment: http://jel.oxfordjournals.org/content/13/3/423.full.pdf
2	2000	Sustainability Indicators/Policy	Vision for Sustainable Regeneration, Environmental and Poverty - The Missing Link	▪ Sustainable Development Commission (SDC)	http://www.sd-commission.org.uk/data/files/publications/021001%20Vision%20for%20sustainable%20regeneration,%20environment.pdf
3	2001	Sustainability Indicators/Policy	Polluting and Poverty: Breaking the Link	▪ Friends of the Earth	http://www.foe.co.uk/resource/reports/pollution_poverty_report.pdf
4	2001	Sustainability Indicators/Policy	Environmental Justice: Rights and Means to a Healthy Environment for All	▪ Carolyn Stephens; Simon Bullock; Alister Scott ▪ Global Environmental Change Programme	http://www.foe.co.uk/resource/reports/environmental_justice.pdf
5	2001	Sustainability Indicators/Policy	Rainforests Are a Long Way From Here: The Environmental Concerns of Disadvantages Groups	▪ Kate Burningham; Diana Thrush ▪ Joseph Rowntree Foundation	http://www.jrf.org.uk/sites/files/jrf/1842631462.pdf
6	2002	Access to Justice (judiciary system)	Environmental Planning - 23rd Report of the Royal Commission on Environmental Pollution (RCEP)	▪ Royal Commission on Environmental Pollution (RCEP)	http://eeac.hscglab.nl/files/UK-RCEP_EnvPlanning_Mar02.pdf (Summary) Royal Commission on Environmental Pollution 23rd Report *Environmental Planning* Cm 5459, 2002, Stationery Office, London.
7	2003	Sustainability Indicators/Policy	Environmental Quality and Social Deprivation, R&D Technical Report E2-067/1/TR	▪ Gordon Walker; Jon Fairburn; Graham Smith; Gordon Mitchell ▪ Environment Agency (Social Policy	http://www.geography.lancs.ac.uk/envjustice/downloads/technicalreport.pdf

				Unit)	
8	2003	Access to Justice (judiciary system)	Modernising Environmental Justice, Regulation and the Role of an Environmental Tribunal	▪ Richard Macrory; Michael Woods ▪ Centre for Law and the Environment, University College London	http://discovery.ucl.ac.uk/12246/1/12246.pdf
9	2003	Access to Justice (judiciary system)	Civil Law Aspects of Environmental Justice	▪ Paul Stookes ▪ Environmental Law Study, a component of the Environmental Justice Project (Environmental Law Foundation, WWF, Leigh Day and Co. Solicitors), and funded by DEFRA	http://www.unece.org/fileadmin/DAM/env/pp/compliance/C2008-23/Amicus%20brief/AnnexDCivillawaspectsofEnvJustice.pdf
10	2004	Access to Justice (judiciary system)	Using the Law: Access to Environmental - Justice Barriers and Opportunities	▪ Maria Adebowale ▪ Capacity Global	http://www.capacity.org.uk/downloads/EJUsingtheLaw009Capacity04.pdf
11	2004	Access to Justice (judiciary system)	The Environmental Justice Report (EJR)	▪ Pamela Castle; Martyn Day; Carol Hatton; Paul Stookes ▪ Environmental Justice Project (Environmental Law Foundation, WWF, Leigh Day and Co. Solicitors)	http://www.ukela.org/content/doclib/116.pdf
12	2004	Sustainability Indicators/Policy (Evidence base on environmental inequalities and injustice in UK)	Environmental and Social Justice: Rapid Research and Evidence Review (SDRN)	▪ Karen Lucas; Gordon Walker; Malcolm Eames; Helen Fay; Mark Postie ▪ Sustainable Development Research Network (SDRN) - Commissioned by DEFRA	http://www.sd-research.org.uk/wp-content/uploads/envsocialjusticereview.pdf
13	2005	Environmental Assessment	Environmental Justice Impact Assessment: An Evaluation of Requirements and Tools for Distributional Analysis	▪ Gordon Walker; Helen Fay; Gordon Mitchell ▪ Friends of the Earth	http://www.foe.co.uk/resource/reports/ej_impact_assessment.pdf
14	2007	Sustainability Indicators/Policy (Urban Environment)	The Urban Environment Summary of the Royal Commission on Environmental Pollution's Report	▪ Royal Commission on Environmental Pollution	http://www.official-documents.gov.uk/document/cm70/7009/7009.pdf
15	2007	Environmental	SDRN Rapid Research and	▪ Sigrid Stagl	http://www.pik-

		Assessment	Evidence Review on Emerging Methods for Sustainability Valuation and Appraisal	▪ Sustainable Development Research Network (SDRN)	potsdam.de/news/events/alter-net/former-ss/2007/11-09.2007/stagl/literature/stagl_2007.pdf
16	2008	Environmental Assessment	Spatial Planning Workstream - Issues for the Practice of Sustainability Appraisal in Spatial Planning - A Review (Final Workstream Report)	▪ Sustainable Development Research Network (Prepared by Land Use Consultants and the Royal Town Planning Institute)	http://www.thepep.org/ClearingHouse/docfiles/Sustainable.Development.Research.Network.pdf
17	2008	Access to Justice (judiciary system)	Ensuring Access to Environmental Justice in England and Wales (The Sullivan Report)	▪ The Working Group on Access to Environmental Justice	http://www.wwf.org.uk/filelibrary/pdf/justice_report_08.pdf
18	2009	Access to Justice (judiciary system)	Costing the Earth: Guidance for Sentencers (1st ed. in 2002)	▪ Paul Stooks ▪ Magistrates' Associations	http://www.magistrates-association-temp.org.uk/dox/Costing%20the%20Earth%20for%20MA%20with%20cover.pdf
19	2009	Access to Justice (judiciary system)	Costs Barriers to Environmental Justice	▪ Radoslaw Stech; Robert Lee; Deborah Tripley ▪ Environmental Law Foundation ▪ BRASS	http://www.endsreport.com/docs/20100126.pdf
20	2010	Access to Justice (judiciary system)	Review of Civil Litigation Costs: Final Report (The Jackson Review)	▪ Lord Justice Rupert Jackson	http://www.judiciary.gov.uk/NR/rdonlyres/8EB9F3F3-9C4A-4139-8A93-56F09672EB6A/0/jacksonfinalreport140110.pdf
21	2010	Access to Justice (judiciary system)	Ensuring Access to Environmental Justice in England and Wales – Update Report 2010 (The Sullivan II)	▪ The Working Group on Access to Environmental Justice	http://assets.wwf.org.uk/downloads/access_to_environment.pdf
22	2010	Sustainability Indicators/Policy	Measuring Progress: Sustainable Development Indicators 2010	▪ Department for Environment, Food and Rural Affairs (DEFRA)	http://sd.defra.gov.uk/documents/SDI2010_001.pdf
23	2011	Access to Justice (judiciary system)	Consistency and Effectiveness – Strengthening the New Environment Tribunal	▪ Richard Macrory ▪ Centre for Law and the Environment, University College London	http://www.ucl.ac.uk/laws/environment/content/Consistency&Effectiveness_webfinal.pdf
24	2011	Access to Justice	Tackling Barriers to	▪ Carol Day	http://assets.wwf.org.uk/downloads/tackli

		(judiciary system)	Environmental Justice - Access to Environmental Justice in England and Wales: A Decade of Leading a Horse to Water	▪ WWF – UK ▪ Coalition for Access to Justice for the Environment (CAJE)	ng_barriers.pdf
25	2011	Access to Justice (judiciary system)	Aarhus Convention Compliance Committee (ACCC) Report - Compliance by the United Kingdom of Great Britain and Northern Ireland with its obligations under the Convention	▪ Aarhus Convention Compliance Committee (ACCC)	http://www.unece.org/fileadmin/DAM/env/pp/compliance/CC-31/ece_mp.pp_c.1_2011_2_add.9_adv%20edited.pdf

• Main topics:

Access to Justice (judiciary system)

Sustainability Indicators/Policy

Environmental Assessment

Appendix II

Table 6 – EA's legal framework Brazil, EU, USA

	Brazil	EU	USA
Legal provision	▪ Law 6,938/1981 ▪ Article 25, Constitution ▪ CONAMA Resolutions	▪ Directive 2011/92/EU (amended by Directive 2014/52/EU)	▪ NEPA, 1969 §102(2)(C) ▪ Council on Environmental Quality (CEQ) regulations
Nature	procedural	procedural	procedural
Type of EIA	project-level	project-level and SEA	project-level and for approval of regulations
Simplified studies	yes	no	yes
Steps	three-step process	no equivalent	no equivalent
Environmental authority	environmental agencies (federal, state or municipal level); govern the procedure and decide	defined by the member states	federal environmental agencies (for major federal action); govern the procedure and/or decide
Screening	▪ listing ▪ 'significance'	▪ listing ▪ 'significance' ▪ location (Habitat and Birds Directives)	▪ major federal action ▪ 'significance' (context and intensity)
Set of screening criteria	no	yes	yes
Screening decision subject to review	no	no	yes
Public consultation prior to screening decision	no	no	no
Terms of Reference (ToR)	yes	yes	yes
Public consultation on ToF	no	no	yes

	Brazil	EU	USA
Content of environmental report	▪ environmental and socio-economic impacts ▪ alternatives ▪ mitigating measures	▪ environmental and socio-economic impacts ▪ climate change impacts ▪ alternatives ▪ mitigating measures	▪ environmental and socio-economic impacts ▪ climate change impacts (CEQ guidance) ▪ alternatives ▪ mitigating measures
Technical opinion by environmental authority	▪ yes ▪ timeframe for submission	▪ yes ▪ timeframe for submission	▪ yes (open to public consultation before final decision) ▪ timeframe for submission
Consultation	▪ statutory consultees (e.g. agencies responsible for protection of historic assets, of indigenous groups, water) ▪ mandatory or facultative	statutory consultees (not specified)	▪ statutory consultees ▪ indigenous groups ▪ mandatory or facultative
Public participation	after the submission of the EIA	after the submission of the EIA	recommended during the preparation of EIS and mandatory after submission of a draft EIS
Access to information	mandatory (access to information and documents)	mandatory (access to information and documents)	mandatory (access to information and documents)
Monitoring	no provision	statutory provision	statutory provision
Environmental compensation	yes	yes	yes

Appendix III

Table 7 – EA reform proposals in Brazil

		Constitutional amendment	Statutory reforms			Non-statutory amendments
		PEC 65/2012	**Proposed substitution for PL 3729/2004 (Lower House)***	**PLS 654/2015 (Senate)**	**PLS 602/2015 (Senate)**	**Minute of Resolution (CONAMA's Working Group)**
	Year	2012	2004/2015**	2015	2015	2015
	Subject	Inclusion of a seventh paragraph in Article 225 of the Constitution on EIA	Establishment of a General Law of EA, regulating Article 225 (§1)(IV) of the Constitution	Establishment of special EA for infrastructure projects considered strategic and of national interest (identified by Decree)	One-stop-shop system for projects considered strategic and of national interest (consisting of a collegiate body at the federal level)	Harmonizing criteria and administrative procedures for EA by unifying CONAMA Resolutions n. 01/1986 (EIA) and 237/1997 (EA procedure)
Main proposals	**Types of EA**	----	▪ three-step (three licenses) ▪ 'corrective' (one license) ▪ simplified	▪ one-step (two licenses)	▪ three-step (three licenses) ▪ simplified	▪ three-step (three licenses) ▪ simplified
	SEA	----	To be included in the National Environmental Policy Act	----	----	----
	Term of Reference	----	▪ Consultation previously to the approval of the TR.	▪ TR shall include requirement for information on indigenous and traditional communities, cultural heritage and risk areas. ▪ No mention to previous consultation.	▪ Template TRs by type of development category, to be complemented case-by-case. ▪ No mention to previous consultation.	▪ No innovation to the current system. ▪ No mention to previous consultation.
	EIA	----	Mandatory for projects of significant impact (the bill includes criteria for the definition of 'significance' and indicates the minimum EIA content, which includes monitoring).	Mandatory EIA for projects of significant impact (no indication of definition criteria).	Mandatory EIA for projects of significant impact (to be indicated according to decision of the collegiate body).	EA is mandatory for projects listed (Annex), but there are no list or specific criteria for determining when EIA is required (discretionary decision of the environmental authority).
	Participation	----	Mandatory public hearing for	No mention to consultation or	Mandatory public hearing for	Mandatory public hearing

			projects of significant impact subject to EIA and online public consultation over all the phases, including planning stages.	public hearing. Instead, the developer will set up a 'communication programme' for receiving questions and suggestions (30 days minimum).	hydroelectric projects of significant impact. No mention to other categories of development.	for projects of significant impact subject to EIA (but it does not discipline the form and procedures)
	Key aspects	▪ Submission of a preliminary environmental impact statement as sufficient for immediate granting consent for infrastructure projects ▪ Restriction to judicial review	▪ More discretionary powers for the environmental authority to determine the type of EIA/studies required ▪ Cases of exemption from EA ▪ 'Self-declaratory' process for renewal of licenses (low impact developments) ▪ Proof of financial capacity may be required ▪ Environmental and planning permitting to be integrated for land-use projects subject to EIA ▪ Information included in previously submitted EIA for the same area may be used for other projects	▪ Fast-track procedure (to be completed in 8 months maximum) ▪ Non manifestation of statutory consultees within deadline implies tacit approval ▪ Non-compliance by the environmental authority with the legal deadlines for EA analysis implies the granting of consent ▪ Some activities can be exempted from EA (discretionary decision)	▪ Some activities can be exempted from EA or from technical studies (discretionary decision) ▪ Different timeframes at different process stages (e.g. for the analysis of environmental studies and issuing of licenses) ▪ Online system for EA procedure	▪ 'Self-declaratory' EA for low impact developments (by on-line subscription or registry) ▪ List of developments subject to EA (Annex) is exhaustive (rather than exemplificative, as in the current system) ▪ EA is not required for certain categories of projects currently on the list (e.g. urban developments) ▪ Eliminates fault responsibility of civil servants in the analysis of EA (changes in the Law of Environmental Crimes)
	Source	https://www25.senado.leg.br/web/atividade/materias/-/materia/109736	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=257161	http://www25.senado.leg.br/web/atividade/materias/-/materia/123372	http://www25.senado.leg.br/web/atividade/materias/-/materia/123104	http://www.mma.gov.br/port/conama/processos/1C237C1B/PropResol_Rev237e01_1oGT%20%282%29.pdf

*The substitution text for PL 3729/2004 mentioned here has encompassed proposals included in the other 15 bills on the EA statutory regime, which were attached to a sole legislative procedure (see Table below).
**The bill was first submitted in 2004, but the substitution text currently under analysis was presented in 2015

Appendix IV

Table 8 – Bills on EA statutory reform in Brazil*

Year	Bill	Subject-matter	Source
2004	PL 3729/2004	General Law of EA	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=257161
2004	PL 3957/2004	General aspects of EA	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=260606
2005	PL 5435/2005	To include requirement for risk management plan and civil liability insurance	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=290325
2005	PL 5576/2005*	Deadlines and enforcement powers of environmental agencies	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=292591
2007	PL 1147/2007	To include requirement for taking into consideration project's GHG emissions	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=352792
2007	PL 2029/2007*	Enforcement powers of municipal environmental agencies	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=367396
2011	PL 358/2011	Processing priority for projects related to conservation and improving environmental quality	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=491763
2011	PL 1700/2011	To include requirement for taking into consideration seismic risks	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=510438
2011	PL 2941/2011*	Deadlines for EA consideration by environmental authorities	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=531322
2013	PL 5918/2013	To include requirement for contamination control plan	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=584471
2013	PL 6908/2013	Environmental requirements for public financing of projects, including EA	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=603722
2013	PL 5716/2013	Enforcement powers of environmental agencies	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=579695
2014	PL 8062/2014	General aspects of EA	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=687823
2015	PL 1546/2015	General aspects of EA	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=1278949
2015	PL 3829/2015	Restoration Plan for mining projects	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=2057637
2016	PL 4429/2016	Special EA for infrastructure projects considered strategic and of national interest	http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=2077494

* All attached to the same legislative procedure for dealing with aspects related to EA statutory regime.
*The passing of Complementary Law 140/2011 (on enforcement powers of environmental agencies) addressed the main issues included in these bills.

Appendix V

Table 14 Case studies – Case analysis avenue expansion

Analysis criteria	
Social Justice +Inclusiveness + Env Sustainability	Process
√ = explicitly mentioned ∅ = not explicitly mentioned but could infer/interpret ⊗ = not mentioned explicitly or by reference // = irrelevant C = category | [+] = positive | [-] = negative Q = quantitative analysis | [√1] = quantified | [√] = not quantified G = geographic scope | L = local | N = neighbourhood | R = region T = temporal scope | S = short | M = medium | P = permanent | FG = future generation AG = aggregate changes | A = aggregate | D = disaggregate A = alternative	√ = satisfactory ∅ = unsatisfactory ⊗ = inexistent // = irrelevant

		EA						**Socioeconomic Assessment**						**License**					
	Elements	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A
SOCIAL JUSTICE	population changes	∅	[√]	L	M	A	⊗	⊗	[√1]	L	P	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	employment income	[+]	[√]	L	M	A	⊗	⊗	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	local economy	[+]	[√]	L	M	A	⊗	⊗	[√]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	health, well-being	[-]	[√]	L	M	A	⊗	⊗	[√]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	access to services	[+]	[√]	L	M	A	⊗	⊗	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	housing conditions	⊗	⊗	⊗	⊗	⊗	⊗	⊗	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	land uses, tenure rights	∅	⊗	⊗	⊗	⊗	⊗	⊗	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	resettlement, relocation	[-]	[√]	L	M	A	⊗	⊗	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	economic displacement	⊗	⊗	⊗	⊗	⊗	⊗	⊗	[√]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	compensation scheme	⊗	⊗	⊗	⊗	⊗	⊗	⊗	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	vulnerable groups	√	[√]	L	M	A	⊗	⊗	[√]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	in situ development	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	risk management	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗

		Screening/scoping	Consultation/participation	Compensation schemes
PROCESS	stakeholder identification	√	√	√
	definition of project-affected community	∅	∅	√
	Terms of Reference	∅	//	//
	publicity of documents	√	√	√
	public hearings	⊗	⊗	⊗
	other meetings	√	√	∅
	consideration of community concerns	∅	∅	∅

		EA						Socioeconomic Assessment						License					
INCLUSIVENESS	Elements	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A
	community character	⊗	⊗	⊗	⊗	⊗	⊗	⊗	[√]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	community stability	√	⊗	⊗	⊗	⊗	⊗	⊗	[√]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	sense of place	√	⊗	⊗	⊗	⊗	⊗	⊗	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	social mixing, cohesion	⊗	⊗	⊗	⊗	⊗	⊗	⊗	[√]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	mixed land uses	√	[√]	N	M	A	⊗	⊗	[√]	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	accessible public spaces	[+]	[√]	L	M	A	⊗	⊗	[√]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	gender equality	√	√	√	√	√	√	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	perceptions on SD	⊗	⊗	⊗	⊗	⊗	⊗	⊗	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗

		EA						Socioeconomic Assessment						License					
ENV SUSTAINABILITY	Elements	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A
	water soil	[-]	[√1]	L	M	A	[-]	//	//	//	//	//	⊗	[-]	[√1]	L	M	A	[-]
	air pollution	[-]	[√1]	L	M	A	[-]	⊗	⊗	⊗	⊗	⊗	⊗	[-]	[√1]	L	M	A	[-]
	waste management	[-]	[√1]	L	M	A	[-]	⊗	⊗	⊗	⊗	⊗	⊗	[-]	[√1]	L	M	A	[-]
	noise	[-]	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	[-]	[√1]	L	M	A	[-]
	flora fauna	[-]	[√1]	R	P	A	⊗	//	//	//	//	//	⊗	[-]	[√1]	R	P	A	⊗
	energy efficiency	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	risk areas	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	emergency response	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	CC mitigation	[-]	[√1]	R	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	[-]	[√1]	R	M	A	[-]
	CC adaptation	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗

Appendix VI

Table 15 Case studies - Case analysis football arena/real estate

Analysis criteria	
Social Justice +Inclusiveness + Env Sustainability	Process
√ = explicitly mentioned ∅ = not explicitly mentioned but could infer/interpret ⊗ = not mentioned explicitly or by reference // = irrelevant C = category | [+] = positive | [-] = negative Q = quantitative analysis | [√1] = quantified | [√] = not quantified G = geographic scope | L = local | N = neighbourhood | R = region T = temporal scope | S = short | M = medium | P = permanent | FG = future generation AG = aggregate changes | A = aggregate | D = disaggregate A = alternative	√ = satisfactory ∅ = unsatisfactory ⊗ = inexistent // = irrelevant

		EA						License						Agreement					
	Elements	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A
SOCIAL JUSTICE	population changes	[+]	[√]	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	employment income	[+]	[√]	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	local economy	[+]	[√]	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	health, well-being	[+]	[√]	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	access to services	[+]	[√]	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	housing conditions	∅	[√]	N	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	land uses, tenure rights	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	resettlement, relocation	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	economic displacement	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	compensation scheme	[+]	[√1]	N	P	A	⊗	[+]	[√]	N	P	A	⊗	[+]	[√1]	N	P	A	//
	vulnerable groups	∅	[√]	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	in situ development	∅	[√]	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	risk management	√	//	R	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//

		Screening/scoping	Consultation/participation	Compensation schemes
PROCESS	stakeholder identification	√	√	√
	definition of project-affected community	∅	∅	//
	Term of Reference	√	//	√
	publicity of documents	√	√	∅
	public hearings	⊗	√	//
	other meetings	⊗	⊗	⊗
	consideration of community concerns	∅	∅	∅

		EA						License						Agreement					
INCLUSIVENESS	**Elements**	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A
	community character	∅	//	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	community stability	∅	//	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	sense of place	∅	//	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	social mixing, cohesion	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	mixed land uses	[+]	[√]	N	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	accessible public spaces	[+]	[√1]	L	M	A	⊗	[+]	[√]	N	P	A	⊗	//	//	//	//	//	//
	gender equality	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	perceptions on SD	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//

		EA						License						Agreement					
ENV SUSTAINABILITY	**Elements**	C	Q	G	T	AG	A	C	Q	G	T	AG	A	C	Q	G	T	AG	A
	water soil	[-]	[√1]	L	M	∅	⊗	[-]	[√1]	L	M	∅	⊗	//	//	//	//	//	//
	air pollution	[-]	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	waste management	[-]	[√1]	L	M	A	⊗	[-]	[√1]	L	M	A	⊗	//	//	//	//	//	//
	noise	[-]	[√1]	L	S	A	⊗	[-]	[√1]	L	S	A	⊗	//	//	//	//	//	//
	flora fauna	[-]	[√1]	R	FG	A	⊗	[-]	[√1]	R	FG	A	⊗	[-]	[√1]	R	FG	A	⊗
	energy efficiency	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	risk areas	[-]	[√]	R	P	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	emergency response	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	CC mitigation	[-]	[√1]	L	M	A	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//
	CC adaptation	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	//	//	//	//	//	//