Chapter 2
Functions and Objectives of Corporate Liability for Transboundary Environmental Harm

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2.1 Introductory Remarks

The goal of this chapter is to understand the functions and objectives of environmental liability law. This task requires going beyond the traditional perspective of the judge or the lawyer to a certain extent, as these roles are usually concerned with the restitution of or compensation for environmental damage that has already occurred, a repressive perspective which is typically contrasted with the preventive 1

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function of environmental liability.[1] In line with the latter function, liability law can be considered as a regulatory approach to cope with environmental problems and thus as a complement or alternative to other instruments of international law which are designed to minimise or eliminate environmental risks.

2 To understand the extent to which liability law can be considered a meaningful policy alternative in this sense, it is useful at the outset of this chapter to recapitulate, first of all, what goals an instrument of international environmental law should strive to achieve to be considered functional. Secondly, such an understanding of the potential and limitations of liability law can be based on whether it can effectively achieve these goals. Against the background of a policy-oriented perspective on environmental liability, two questions arise in this regard: What are the factual obstacles and challenges related to the regulation of transboundary environmental problems that environmental liability has to address? And in what ways could environmental liability contribute to the enforcement of environmental standards and further evolution of international environmental law?

3 With this in mind, the present chapter aims to provide a description of the conceivable functions of trans- and international environmental liability law. It first sets out the central goals of international environmental law and then briefly discusses three ideal-typical ideas about how regulatory approaches to protect the environment may work internationally to trigger further evolution in environmental law. Building on this analysis, the properties and effects of liability law that may help to meet regulatory challenges and provide support for further legal development can be clarified.

2.2 Objectives and Strategies of Reform in General International Environmental Law and Governance

2.2.1 Objectives of International Environmental Law

International Rights and Principles

4 Environmental problems and their impacts are frequently not confined to the territory of the State of origin. International law addresses different constellations of such cross-border, or even global, impacts. First of all, environmentally detrimental behaviour often causes transboundary harm, meaning that the effects of an activity in one State cause damage on the territory of another. The protection of the environment in an individual State or the lack thereof, thus can have transboundary effects.[2] Second, environmental harm, irrespective of where it originates, can also affect areas beyond national jurisdiction—such as the high seas or Antarctica.[3] The concept of

[1] Cf. Wolfrum and Langenfeld (1998).

[2] Epiney (2017), p. 6.

[3] Cf. Dupuy and Viñuales (2015), p. 84; Bodansky et al. (2008), p. 11.

common areas legally addresses such territories as universally accessible spaces or resources that cannot be appropriated by single States.[4]

The Prevention Principle 5
The obligation of States "to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or areas beyond the limits of national jurisdiction" forms an important principle of international law.[5]

Third, environmental damage can also have international relevance when the damage *and* its causes prima facie take place within the territory of a single State. Such damage frequently concerns goods, conditions, adverse effects or environmental resources which may be legally conceived as common concerns, such as biodiversity, plant genetic resources for food and agriculture and climate change, which are considered to affect the international community as a whole, even though the respective resources, goods or adverse effects themselves may be situated on the territory of a State. The idea of common concerns in international law is described as a normative concept to address collective action problems and compensate for lack of appropriate global institutions by expounding enhanced obligations of States to cooperate, but also the obligation to take action at home and the right to address particularly serious environmental problems such as climate change by measures having extraterritorial effect.[6] 6

The fourth and final point also reflects the universality of interests and obligations regarding the protection of environmental goods. Environmental problems frequently affect fundamental rights.[7] Pollution of air, soil or water affects the health of people, degradation of natural resources or the destruction of habitats may impair the basic needs of human beings. Many lawsuits and vivid legal discourses point to this close and potentially momentous relationship between human rights and the environment.[8] 7

[4] Modern environmental regimes, such as UNCLOS correlate the access and use of these commons with duties to ensure its protection. Cf. Dupuy and Viñuales (2015), p. 82.

[5] Principle 2 of the Rio Declaration on Environment and Development. Cf. Proelss (2017), pp. 75–84.

[6] Cottier et al. (2014).

[7] Human rights are *per definitionem* of international concern, even if they materialise locally. With respect to environmental common concerns, on the contrary, it remains unclear, to what extent individual States legally owe obligations to protect such resources *erga omnes*—that is, under customary international law and to the international community as a whole, Bodansky et al. (2008), p. 11.

[8] This issue will be further discussed in Sect. 4.3.

8 **The Bhopal Tragedy**
The Bhopal tragedy dramatically illustrates the existential implications of environmental hazards: In 1984, large amounts of the toxic gas methyl isocyanate leaked out of the American Union Carbide Corporation's chemical plant in the Indian town of Bhopal. The accident killed at least 3800 people immediately and caused significant morbidity and premature death for many thousands more in the years that followed. It still is a prominent reference point for arguments concerning the human rights implications of environmental damage.

Environmental Rule of Law

9 The implementation and enforcement of environmental laws and regulations too often fall short of what is required to effectively address environmental challenges. [9] Such problems are frequently associated with the globalised economy and its impacts on the environment. Although naturally, States may directly cause pollution and exhaust natural resources, most environmental problems result from activities which qualify as private rather than governmental.[10] Whereas it is true that "virtually all human activity [. . .] contribute[s] to environmental problems",[11] economically oriented actors play a characteristic and important role as the ones most often causing these problems. Private enterprises intensively exploit natural resources, the mass-production of goods is increasingly leading to the depletion of resources and pollution on an unprecedented scale, environmental harm caused by waste takes on whole new dimensions when its management is driven by economic motives.[12] Such detrimental dynamics of economic activities are a consequence of what economists classify as market failures with respect to environmental goods and interests, for example so called negative externalities. An externality occurs when an economic transaction by some parties causes losses or gains to a third party which are not taken into account by the economic calculations of the acting parties. If the externality results in a loss of welfare, e.g. in damage to public goods, it is a negative externality.[13]

10 **The Polluter Pays Principle**
Environmental law attempts to deal with negative externalities by means of the polluter pays principle, which requires that the cost of environmentally

(continued)

[9] Cf. UNEP (2019), p. viii.
[10] Bodansky et al. (2008), p. 6.
[11] Bodansky et al. (2008), p. 7.
[12] Cf. Kampffmeyer et al. (2018), pp. 37–39.
[13] Daly an Farley (2011), pp. 165–192, p. 184; Endres (2013), p. 43.

> detrimental behaviour not be borne by society or directly affected individuals uninvolved in the hazardous interactions but by the entity causing the damage. Legal instruments which implement this principle thus are meant to promote the internalisation of environmental costs: e.g. they impose the costs of measures necessary to address pollution caused by specific products to the company which produces these products. The company then is supposed to pass on these costs to the consumers which then, naturally, impacts demand for whatever the company offers in the market.[14]

11 The weight and importance of private actors as polluters cast light on a significant aspect of how environmental challenges transcend national borders. It is not only that the effects of privately generated environmental damage are not limited to the territory of the States in which the polluters operate. Rather, as a consequence of economic globalisation, major private actors have themselves become highly flexible and are able to evade the full force of both, environmental law and governance, which are still, in many ways, confined to the territory of the nation States. The reason is, that political and regulatory globalization have not kept up with economic globalization. International law—at least traditionally and continuously in the field of public international environmental law—governs inter-State relations and typically does not address private actors as legal subjects.[15] Even if relevant international rules exist, their effectiveness thus still hinges on the implementation and enforcement by States. However, many States seem to lack the political will, the technical capacity or the institutional structures and resources to ensure the effective implementation of environmental laws on their territory.[16]

12 As neither international institutions nor a coordinated implementation of rules by the States would guarantee homogeneous legal conditions for the global economy, the operations of global economic actors will continue to take place on an uneven regulatory playing field,[17] which is problematic for a number of reasons. The existence of a level playing field is, on the one hand, considered a matter of fairness in terms of economic competition as regulation may, at least in the short term, affect firms' competitiveness in negative ways.[18] Companies operating in accordance with high regulatory standards may, therefore, find themselves at a disadvantage when competing with enterprises that only have to comply with lower standards.

[14] Dupuy and Viñuales (2015), p. 82.

[15] Epiney (2017), p. 35. For a more detailed discussion see Sect. 4.2.

[16] Simons and Macklin (2014), pp. 7–8.

[17] Cf. Hudec (1996).

[18] Cf. Dechezleprêtre and Sato (2017).

13 **Consequences of an Uneven Playing Field in a Globalised Circular Economy**

Challenges regarding the environmental regulation of transnational online trade illustrate the problematic implications of an uneven playing field.[19] According to German and European waste legislation, manufacturers have to comply with numerous obligations concerning issues such as the notification and registration of environmentally problematic packaging and the marketing of batteries (see Section 4 BattG, Section 6 ElektroG; Section 9 VerpackG). These requirements regarding registration and disclosure ensure that all manufacturers who sell their goods into the German market contribute to the costs for collection and disposal of WEEE,[20] discarded batteries and packaging waste. Manufacturers from third countries who directly sell their products cross-border via the internet frequently do not register. They thus can circumvent these obligations and shift the costs of dealing with waste from their products to the duly registered manufacturers. This leads to both uneven competition and also negatively affects the effectiveness and legitimacy of the legislation.

14 From the perspective of enterprises, on the other hand, the lack of a level playing field can also turn into an advantage, when they use the flexibilities of globalised markets. Transnational or multinational corporations can invest and set up subsidiaries where business conditions are economically beneficial for them. Enterprises looking for the cheapest option for production can outsource their production to third countries with low environmental standards or weak enforcement.[21] The flexibility and mobility of key economic actors may narrow down the States' regulatory leeway in different ways. The mobility of transnational enterprises for example is often diagnosed as leading to problematic competition between States as it is seen to induce a regulatory 'race to the bottom' because foreign direct investment is considered to be essential for many States. The possibility for enterprises to move their operations is suspected to exert pressure on governments to compete with each other by lowering their respective environmental standards to attract international business and capital.[22]

15 Due to the economic globalisation companies often do not need to be concerned about bearing the consequences of environmentally detrimental behaviour. As such,

[19] Cf. Hermann et al. (2020).

[20] WEEE is the non-official denomination of the European Directive 2002/96/EC and refers to "Waste of Electrical and Electronic Equipment".

[21] This phenomenon is described by the so-called 'pollution-haven theory', cf. Levinson and Taylor (2014).

[22] This may of course be different when various national governments engage in cooperation to coordinate their environmental policies and regulations. National policies can prevent the lowering of environmental standards by subjecting imports from emerging countries to regulation, cf. Urpelainen (2010).

globalisation has opened new doors for those seeking to exploit corporate impunity: Inadequate policies, standards and procedures of transnational companies in their relations with international suppliers and subsidiaries can contribute to environmental damage in countries where the impact of their operations is governed by weaker environmental regulations. Legal obstacles can make it difficult to attribute such violations to the parent company or buyer.[23] The consequence is that corporations may benefit from the operations of their third-country subsidiaries or contractors, while not being held directly responsible for any abuses committed in the course of their operations.[24]

Coping with Complex and Uncertain Environmental Risks

Although the magnitude of pollution, climate change and other environmental threats to life and human well-being are increasingly well-known and accepted,[25] scientists cannot offer conclusive answers to many questions about the exact nature and forthcoming impacts of such problems.[26] Causes, consequences, solutions and costs related to environmental problems often cannot be unequivocally explained or predicted. At the same time, the technological, social and economic causes and contexts of environmental problems, as well as scientific knowledge about them, may change over time[27] as the problems and their related risks are dynamic. Decisions thus must be made in the face of uncertainty.[28] **16**

The interdependencies of States related to common concerns and common areas described above exacerbate the complexity of environmental problems.[29] Common concerns can be affected when environmental damage is caused by multiple, cumulative actions or omissions, especially when activities in several States cause damage to the environment. An example of a complex case is the greenhouse effect, which results from the cumulative effect of ozone depletion, global air pollution, acid rain, deforestation and unsustainable land-use patterns.[30] The environmental problems caused in the context of the globalised economy and increasingly interconnected societies also add other dimensions of complexity to the challenges for environmental law and governance: For example, the transnational mobility of companies can result in spill-over effects such as so-called 'carbon leakage', which may occur if, for reasons of costs related to climate policies, businesses transfer production to other countries with laxer emission constraints. This can lead to an increase in their total **17**

[23] See Chap. 6 ¶ 106 *et seq* (Sect. 6.8.3).

[24] Augenstein et al. (2010), p. 8.

[25] Percival (2010), p. 47.

[26] For a systematic approach to challenges of complexity and uncertainty of environmental challenges cf. Underdal (2010).

[27] Cf. Herbst (1996), pp. 25–26.

[28] Bodansky et al. (2008), p. 7.

[29] For examples on complex, i.e. "wicked" problems see Batie (2008); Kirschke and Newig (2017).

[30] Cottier et al. (2014), p. 19.

emissions.[31] In general, the regulatory capacities of States may also be hampered by the high complexity of the social, technological and economic dynamics causing environmental damage: globalized economy, as well as science and technology and other spheres of society are highly differentiated and specialized. The creation of general environmental laws or standards which are sufficiently adapted to these varied technical, social, economic and regional specifics of governance problems therefore in itself is sometimes considered highly problematic.

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The Precautionary Principle
The legal processing of environmental risks characterised by high uncertainty is one of the central objectives of environmental law. Prominently, according to the precautionary principle, appropriate measures to prevent environmental degradation need to be taken, even if there is a lack of full scientific certainty that serious or irreversible damage will occur. It may justify protective measures notwithstanding a lack of evidence of harm or straightforward causal relationships. In practice, it addresses decisions under uncertain conditions by waiving the requirement to prove causality between the behaviour and environmental damage.[32]

2.2.2 Entry-Points for Legal Reform

19 The interdependencies and common responsibilities with respect to environmental goods and interests illustrate the need for globally effective solutions which can process the transnational complexity of risks for these interests. This also holds with respect to the task to effectively regulating private activities: A legal policy that aims to preserve and protect (environmental) human rights and global commons has to find a means of requiring States to regulate or otherwise influence the behaviour of relevant non-State actors within their borders or it must find globally effective instruments to engage private actors more directly.[33] Despite a growing consciousness of these objectives, however, serious gaps in international law and governance persist. A huge and diverse body of scientific literature reflects on explanations for these shortcomings and tries to clarify the potential options for and barriers to effective environmental governance reform:[34] Such explications give rise to different arguments on causality about the sources of particular problems which, in turn, may suggest different political and legal strategies on how to resolve those problems

[31] Cf. details on the website of the European Commission on carbon leakage: https://ec.europa.eu/clima/policies/ets/allowances/leakage_en, last accessed on 17 Mar 2022.

[32] Science for Environment Policy (2017).

[33] Cf. Bodansky et al. (2008), p. 7.

[34] Newell (2008), p. 508. From a perspective of international relations theory cf. Dyer (2017). Cf. Heyvaert (2018), p. 55.

in the service of the posited goals.[35] In the following, such strategic approaches will be briefly presented in order to be able to contextualise and assess the suitability of liability instruments within the debate on the proper regulation of transboundary environmental damage. It should be noted that these considerations outline ideal-typical approaches—this does not contradict the idea that regulators should use complementary combinations of instruments and actors, to build on the strengths of individual mechanisms, while compensating for their weaknesses.[36]

Incentives for States as Self-Interested Actors

The first strategy focuses on States as the principal agents of effective regulation of the transnational economy and of addressing the complexities of environmental change[37] and the interdependencies with respect to global commons. Exponents of such approaches find the underlying reasons for the deficits and solutions in the behaviour of States as rational and utility-oriented actors. The argument goes that States, on the one han should seek effective international cooperation in their own, rational interest: "Practically speaking, States' interdependence in terms of both contributions and solutions would demand cooperation in addressing collective environmental concerns. Legally speaking, individual States lack rights that they could effectively invoke to demand protection of a commons located within other States. That's why, traditionally, international environmental law has tended to consist of efforts to build multilateral, treaty-based regimes."[38] Conversely, however, this rational incentive often does not work in practice because of the economic properties of many environmental goods as commons: Self-interested users often are found to use shared resources in ways that run contrary to the public interest. Theories that see States as utility-maximising agents explain the lack of collective action on the environment by drawing on, for example, game theoretical models such as the prisoner's dilemma, where both sides benefit from cooperation, but each party has an incentive to defect. With respect to environmental problems, the gain from environmental cooperation is a public good and all States share in that gain irrespective of whether or not they participate in producing it.[39] **20**

Such explications of the drivers and impediments of legal change make certain approaches to legal reform seem more workable than others. A strategy that builds on such economic theories of international law will need to centre on the question of how to motivate States, harnessing their utility-maximising attitude with a regime of 'sticks and carrots'[40] to encourage them to act in ways that protect and enhance **21**

[35] Slaughter (1995), p. 718.
[36] Cf. Gunningham and Sinclair (1998).
[37] Underdal (2010).
[38] Bodansky et al. (2008), p. 11.
[39] Bodansky et al. (2008), pp. 10 ff.
[40] Bodansky (2010).

global commons.[41] Agreements that stipulate the payment of damages, the institutionalised posting of bonds,[42] the threat of import restrictions[43] or trade benefits[44] as incentives, hence try to make it in the "rational" interest of States to change their behaviour and protect the environment.[45]

Non-State Actors as Co-Regulators

22 An alternative strategy finds the levers for change in international law and governance not in the States as centres of regulatory power, but in regulatory activities "undertaken by subunits of a complex and decentralized system".[46] Quite often, business enterprises are considered to constitute these subunits—global corporations are envisioned as the "providers of environmental regulations".[47]

23 This approach thus counts on the regulatory instruments that transnational companies have at their disposal as levers to manage or resolve environmental problems. It builds on a specific understanding of the function and the dynamics of international and transnational law: The regulatory weight of global firms is often seen as a consequence of the diminishing influence of States. Globalisation and the issues it brings, lie ever-increasingly beyond the bounds of immediate State control. An aspect of this loss of control scholars often emphasise is the complexity of environmental law and governance as a consequence of the evolution of highly differentiated and specialized social spheres, such as the global economy or technology.[48] The absence of effective international regulation and institutions which could satisfy the requirement for legal guidance for transnational companies, accordingly leads to the growing relevance of particular, e.g. economic, technological or scientific interests or "logics". This growing systemic complexity of a fragmented global system is causing new normative complexity. Transnational norms and standards, such as ISO norms,[49] as well as standard contracts of global corporations or environmental certification schemes, such as forest certification,[50] are seen as private regulation inspired and made possible by the lack of international regulation.[51] Scholars also highlight the influence of non-State actors on formal laws and treaties, as legislation

[41] Newell (2008), p. 508; Sykes (2004), p. 7, pp. 12–25.

[42] Sykes (2004), p. 21; Barrett (1997), p. 273.

[43] E.g., the EU has instituted a carding system via Regulation (EC) No. 1005/2008 with the goal of incentivising fish and fish products (fish) exporting countries to the Union to take action to reduce illegal, unreported and unregulated (IUU) fishing in their waters. Failure to curb IUU fishing will result in a ban in the export of fish to the EU via the issuance of a red card. Cf. Sumaila (2019).

[44] Cf. European Court of Auditors (2015).

[45] Barrett (2008).

[46] Cf. Underdal (2010).

[47] Cf. Orsini (2012), p. 961.

[48] Cf. Fischer-Lescano and Teubner (2004).

[49] Cf. Dilling and Markus (2016), p. 6.

[50] Meidinger (2003).

[51] Cf. Fischer-Lescano and Teubner (2004); Grabowski (2013); Gritsenko and Roe (2019).

and policies develop within multiple arenas and in an interplay of diverse actors of varying influence who pursue their own particular objectives and strategies.[52]

A common denominator of these explications is that they find a reason for 24
regulatory challenges in international environmental law and governance in the decisive influence of sector-specific, most importantly economic interests or 'logics' on the norms and regimes which are relevant for the protection of environmental goods and interests. The norms and standards shaped or established by these private entities then reflect their specific economic interests, instead of a (global, environmental) common good, which traditionally is the focus of States and their authorities.[53] An important goal from an environmental policy perspective is to induce self-interested regulatory actors to 'internalise' such common objectives which may be considered as 'external' from their point of view. Such strategies, similarly to the State-centred approaches outlined above, thus concentrate on ways to oblige or motivate the specific actors who seem to possess the means to take action to do so in a manner that takes common interests into account.

Steering-problems of State-centred approaches to regulation caused by the rising 25
complexity and growing weight of economic and other specialized actors lead to particular governance configurations. Legislators have turned towards decentralised,[54] or consensus-based[55] modes of environmental legal policy: For example, problems of technical, organisational and economic complexity are addressed by entrusting "the attainment of specific policy objectives set out in legislation to parties which are recognized in the field [...] [and by drawing] on the experience of the parties concerned".[56] Such regulatory configurations exist in a great variety and range from genuine self-regulation to "mixed" systems of "quasi-or co-regulation",[57] combining obligations underpinned by sanctions with broad leeway for the addressees of the rules regarding the modes of implementation.[58] These regulatory mechanisms can be considered to be decentralised rather than State-centred because they, at least to some degree, are meant to be implemented by the addressees of the provisions themselves as these are considered to be closest to the functions and factual conditions of the sectors and regional contexts being regulated.

Approaches Focused on Individual or Collective Rights and Access to Justice

A third strategy to cope with the fundamental drivers and impediments of 26
evolution in global law seeks to address legal innovation and reform in a manner that understands actors and institutions in a strikingly different way**.** It turns away from the idea of utility-maximising agents as the norm addressees and exclusive

[52] Newell (2008), p. 522; Heyvaert (2018), p. 1.

[53] Cf. Renner (2011), pp. 87 ff.

[54] Or "polycentric", cf. Heyvaert (2018), p. 197.

[55] Cf. Newell, p. 523.

[56] European Commission (2017), p. 109.

[57] Cf. Jentsch (2018), pp. 5–10.

[58] Cf. Elsholz (2017), p. 23. For a discussion of home State regulation of Environmental Human Rights Harms As Transnational Private Regulatory Governance, cf. Seck (2012).

factors, such as economic rationale, as the drivers of change. This third type of approach views actors' conduct as being shaped not only by a utilitarian logic where actions are rationally chosen to maximise material interests but considers rationality to be heavily mediated by normative aspects, such as "a logic of appropriateness".[59] Such normative motives can be important determinants of social behaviour in many contexts. For that reason, the idea, for example, that environmental or human rights norms would be entirely inconsistent, e.g. with self-regulations of transnational corporations because of their predominant *economic* functions and objectives, would be too rigid.

27 This view has practical implications for policy strategies that focus on the reform of international environmental law. State-centred approaches building on such an alternative understanding may emphasise the role of norms and doctrines for how States choose to address their environmental problems and to act collectively.[60] For an effective reform of international environmental law, a lesson is that shared normative understandings must be gradually cultivated and deepened. This requires regimes to be designed in a way that they maximise the opportunities for normative interaction and pressure States to justify their conduct in light of applicable standards.[61]

28 Such strategies do not necessarily have to focus on States as agents of legal reform. Normative dynamics may be pushed forward "bottom-up" by transnational actors like NGOs or grass roots movements and international institutions which can influence State behaviour through rhetoric or other forms of lobbying, persuasion, and shaming.[62] At the same time, practices of "scandalization" are not necessarily directed at states as addressees, but can also put pressure on private actors to employ higher environmental or human rights-related standards.

29 Such normative developments have been prominently described with respect to the recognition of new international human rights norms that have their origins in 'bottom-up' discourses on social justice.[63] Comparable claims or instances of grass-roots 'scandal-mongering' about justice and rights are, however, increasingly also made with respect to environmental problems and their consequences for fundamental human needs and interests.[64] "Rights-based approaches to environmental protection"[65] are intended to utilise this potential as a means to make an impact on political institutions and to trigger public deliberation on environmental issues.

30 An obvious opportunity for normative deliberation and the bringing to bear of institutional and moral pressure on States and corporations is the assertion of a

[59] Slaughter (2013), p. 4. Also cf. Bodansky et al. (2008), p. 12.; Mantilla (2009).

[60] Haas (2010).

[61] Bodansky et al. (2008), pp. 12 f.

[62] Slaughter (2013).

[63] Cf. Fischer-Lescano (2005).

[64] Cf. Sect. 4.3.

[65] Cf. Pathak (2014).

violation of rights or disputes via claims before a court. Access to justice of the victims of human rights violations, which are increasingly connected to environmental damage, can lead to an evolution of new norms, for example in the form of case law, regarding environmental rights and duties. Access to justice can, therefore, be seen as means to systematically enable a development "bottom up" of environmental norms.[66]

A rights-based approach thus is complementary to strategies that aim at (predominantly economic) incentives for "rational" actors to pursue objectives of a common good: Instead of incentivising powerful self-interested actors to internalise 'external' goals, "rights-based" strategies focus on empowering those, whose interests typically coincide with the goals of environmental protection. Relevant rights can be enforced via administrative law as well as via tort law and civil procedure and aim at the promotion of public interests by private parties in national civil courts, e.g. as instances of public interest litigation.[67] **31**

2.2.3 *Levels of Legal Reform: National or International Regulation?*

Strategic entry points for legal reform may be accessed by using both international and national instruments. Given the interdependence of the causes of and solutions to global environmental problems and the need for a 'level playing field',[68] it makes sense, that instruments that ensure the environmental accountability of enterprises are employed at the international level—either by integrating directly binding obligations for private actors into international public law or by coordinating national laws between States. Both of these perspectives regarding international public law will be further analysed in this book with respect to recent debates and developments.[69] **32**

Sometimes, however, national laws designed to have extraterritorial effects may constitute a plausible alternative or complement to such international strategies. For example, economic theories of international law promote the idea that unilateral measures, such as trade restrictions, can be used to deter the breach of international norms and could also be used as means to promote the effectiveness of environmental rules.[70] Concerning the interdependencies that arise due to dispersed or shared environmental effects, lawyers also discuss the use of extraterritorial **33**

[66] Cf. Percival (2010), p. 63.

[67] Giesen and Kristen (2014), p. 8: Public interest litigation in environmental matters is characterised by an attempt to influence governmental policies, their future oriented nature, the concern for interests broader than the private interests of the parties involved, their focus on idealistic interests and their orientation towards changing the societal status quo.

[68] ¶ 12 *et seq*.

[69] Cf. Chaps. 3 and 4.

[70] Bodansky (2010), p. 234.

instruments, such as the exercise of jurisdiction for conduct on foreign territory, as rational incentives for political cooperation or the negotiation of international regimes.[71]

34 A decentralised rationale of co- or regulated self-regulation can be observed with respect to current legislation on compulsory environmental or human rights due diligence, which are designed to have extraterritorial effects: Businesses are being obliged to install supply chain due diligence policies, adopt risk management procedures and integrate auditing mechanisms with respect to the transboundary implications of their economic practices and to publicly report about these processes. Obligations of private actors may also constitute incentives to improve the States' regulatory cooperation, for example, if the access of goods from producing States to key markets is conditioned by compliance with environmental standards.

35 A rights-based strategy focusing on national courts or other institutions also can have extraterritorial implications. The decisions of domestic courts or institutions regarding subjective rights frequently decide on cases of transboundary damage and/or apply international norms within the framework of their national law. Domestic decisions can contribute to legal developments that transcend national jurisdictions. For example, national constitutional courts in their decisions often refer to the interpretations of rights and legal concepts by foreign constitutional or international courts.[72] National and international human rights courts may consciously work towards co-ordinating their approaches.[73] Such reciprocal effects between international and national norms will be further outlined below [74] and may be particularly relevant in cases concerning liability for transboundary environmental damage.

2.3 What Is Environmental Liability?

36 Before we deal with the question of if and based on what properties, transnational liability law may be suited as an instrument to harness the strategical entry-points outlined above, some basic clarifications of these properties are necessary. Liability, in the legal sense, is the obligation of a legal entity, such as a natural person, company or State, to provide compensation for damage caused by an action for which that legal entity is responsible.[75] In this broad understanding, liability law can, in principle, play a role in any of the regulatory approaches outlined above.

37 Beyond this very general characterisation, the concepts and preconditions of regimes in the system of transnational liability law vary widely as they consist of or are formed by different national, international and transnational legal systems

[71] Trachtman (2008), p. 55.

[72] Waldron (2005): p. 129; also cf. Mahlmann (2011), p. 473; Fauchald and Nollkaemper (2012).

[73] Boyle (2012).

[74] ¶ 66 *et seq.*

[75] Cf. IICA (2007), p. 7.

which may diverge even with regard to basic legal concepts and principles. An explanation of the overall function of liability should concentrate on certain similarities between the diverse systems and regimes while simultaneously establishing some preliminary distinctions. Keeping this in mind, some basic aspects with respect to an overall concept of liability law have to be clarified before its functionality can be explained.

2.3.1 Strict vs. Fault-Based Liability

The first, fundamental feature of liability regimes, which is important to understand their function, concerns the distinction between two different basic models that can be employed: According to the first model, namely strict liability, an entity's liability can result from the causation of damage as a consequence of behaviour, which is in and of itself not prohibited by law.[76] Under strict liability the party causing damage cannot defeat liability by either excuse or justification.[77] Strict liability thus does not presuppose faulty or illegal behaviour and is commonly stipulated for damage resulting from very hazardous activities. In contrast, according to the second general model—fault-based liability—the breach of norms is a precondition for liability. Liability norms thus determine the legal consequences of intentional or negligent infringement of primary norms, e.g. of environmental due diligence.[78] It therefore can be said that norms which establish fault-based liability can be characterized as secondary legal norms against "creating an unreasonable risk" of violating a primary legal norm.[79] **38**

With respect to fault-based liability, the norms and standards which regulate prohibitions, requirements or permissions in relevant normative orders must be taken into account. In cases concerning environmental liability, the breach of a duty or standard of care often plays a decisive role.[80] Article 4:103 of the Principles of European Tort Law holds that such a duty to act "may exist if law so provides, or **39**

[76] Cf. ILC General Commentary on Principle 1 of the Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, para 6. The Principles on Liability stated in the Draft Principles accordingly are concerned with primary rules. Also cf. Fitzmaurice (2001), pp. 233–244.

[77] Coleman (1992), p. 219.

[78] Fitzmaurice (2001), p. 224. Cf. ILC General Commentary on Principle 1 of the Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, para. 5. Our usage of the concepts 'primary' and 'secondary' norms coincides with the concepts of international law. However, this distinction also applies to torts laws: By secondary norms we mean to cover 'remedial norms', i.e. those legal rules, rights, duties, powers and liabilities which constitute the law's response to the breach of a primary duty, see Penner and Quek (2016); Keating (2012).

[79] Simons (2002).

[80] Meyerholt (2010), p. 117, ¶ 66 *et seq.* and Sect. 6.8.

if the actor creates or controls a dangerous situation, or when there is a special relationship between parties or when the seriousness of the harm on the one side and the ease of avoiding the damage on the other side point towards such a duty."[81]

2.3.2 Horizontal vs. Top-Down Approaches of Liability

40 Approaches explaining the function of liability law typically understand it to address horizontal relationships between the entity causing damage and the victim of the damage: State liability under Public International Law regulates the restitution or compensation of damage between States while civil liability typically provides for compensation or restitution of damage between private persons. In contrast to such a horizontal concept, lawyers sometimes also identify vertical or 'top-down' approaches of liability: So-called 'administrative' liability which is found, for example, in international environmental liability regimes, gives public authorities the competence to directly address polluters that are responsible for activities that pose a threat to the environment. This public authority may request the polluter to provide information on imminent threats to the environment, to take preventive action or to take remedial action if damage has already occurred.[82] While we will not preclude such top-down instruments from our analysis in the following chapters, it is important to keep in mind that many of the functions traditionally attributed to liability refer to a horizontal understanding and, in fact, explicate these functions as opposed to 'top-down' accounts of regulation. For the sake of having a clear understanding of liability and its particular functions, we differentiate in the following chapters, between (horizontal) liability regimes and administrative or State-centred, 'top-down' approaches to regulation.

2.3.3 Liability Law as a Broad Concept and Multi-level Phenomenon

41 Environmental liability law, especially from a transnational perspective, is a multi-level phenomenon where norms form part of international, transnational and national legal regimes. To grasp the variety and diversity of the given regimes and to ensure the adaptability of its concepts to new developments, this book encompasses a broad understanding of international environmental liability law: It focuses the primary norms concerning the requirements and prohibitions to prevent or mitigate

[81] The determination of the relevant standard of care is the part of a court's judgment where soft law or self-regulation, particularly with respect to CSR and corporate due diligence, gain legal relevance as they inform the court about what can be considered to be acceptable corporate behaviour; cf. van Dam (2011), p. 237, p. 246 and ¶ 66 *et seq.*

[82] IICA (2007), pp. 9–10.

environmental damage as well as the secondary norms of the liability regimes considered, which provide for legal consequences in case of damage occurred.[83]

With respect to legal concepts and doctrine, the concepts of international liability law form a plausible starting point. International norms are the legal foundation of State liability, they can also form the legal grounds for national norms on civil liability. Concerning the addressees of environmental liability, the following chapters consider State liability as well as the liability of private actors but emphasise liability of companies and corporations. Given this focus on private actors, tort law rules and principles in national as well as international civil liability conventions[84] play a major role. We also consider alternatives for such tort law norms, such as administrative law instruments which stipulate liability for environmental damage occurred. The common element of the different bodies and levels of law observed is their potential focus on the global or transboundary consequences of pollution or environmental damage. This means that irrespective of the scope of application of a given regime of liability law which may be limited to the territory or the national legal subjects of a State, these laws aim at effects such as the prohibition of environmentally hazardous practices or the protection of globally relevant natural resources with an extraterritorial or global range.[85] **42**

The law locates the functions and principles of diverse regimes of liability law in typical constellations: The liability of private actors is regulated by national laws[86] and aims at the compensation or restitution for damage caused by private actors by means of direct legal action of the persones affected before national courts.[87] International liability law[88] traditionally addresses only States; private actors are addressed indirectly, as States can be responsible for damage caused by private operators under their jurisdiction. International private liability conventions[89] oblige States to create private liability norms for damage under their jurisdiction. Whereas international liability determines 'strict' obligations to compensate for damage caused by the legal behaviour of the States,[90] national civil liability laws can stipulate rules for strict liability as well as rules of fault-based liability. **43**

These typical configurations (Table 2.1 below) however are subject to dynamic change. For example, Sect. 4.2.3 of this book deals with recent initiatives designed to **44**

[83] Chapter 3 ¶ 3 *et seq* (Sect. 3.2).

[84] Chapter 5.

[85] Such a regulation of matters related to factual environmental effects on foreign territory is permitted by international public law according to the principles of personality and territoriality, i.e. if obligations of national legal persons (e.g. corporations) are stipulated, or if activities (or major effects) on the territory of the regulating State are addressed, cf. PCIJ (1927); see. Krajewski (2018), p. 113.

[86] Cf. Chapter 6.

[87] Meyerholt (2010), p. 112.

[88] Cf. Chap. 3.

[89] Cf. Chap. 5.

[90] Cf. ILC General Commentary on Principle 1 of the Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, para. 5. The law of State responsibility deals with the consequences of breaches of primary international environmental law, cf. Schmalenbach (2017), p. 216, p. 237.

Table 2.1 Levels, regimes and addressees of environmental liability law

Transnational sources of environmental liability	Primary norms (Duties to act or to refrain)	Addressees of primary norms	Secondary norms (e.g. regarding compensation)	Addressees of secondary norms
International Law	International Agreements, Customary International Law International (strict) State Liability International Civil Liability Conventions OECD-/ UNEP-/ WHO-Standards and Concepts	States Direct international human rights obligations for transnational corporations and other enterprises?	International Law on State Responsibility International Conflict of Laws, Procedural Rules National tort law: international rules or standards concerning private actors as an objective level of 'due' care in liability cases before national civil courts	States States (Implementation of liability of private actors in national laws) Private actors?
National/Supranational Law	National Environmental Law/Standards; National Strict Liability Regimes, (e.g. German UmwHG)	Private Actors, Public Actors	Tort law Criminal liability; administrative liability	Private actors, State (public liability)
Private (Transnational) Norms	'Multi-Stakeholder Initiatives', Industry Standards: E.g. Global Reporting Initiative (GRI), ISO 14000/ 26000; Global Organic Textile Standard (GOTS)	Private Actors: Corporations and Enterprises.	National Tort law: Private rules or standards as an objective level of 'due' care in liability cases before national courts.	– Private actors: Corporations and Enterprises.
'Mixed Regimes'	National/ Supranational Laws which integrate private rules and standards. E.g. value chain legitslation: EU Timber Regulation, EU Conflict	Private Actors: Corporations and other business enterprises	Mixed regimes may explicitly integrate liability norms (cf. French law on the duty of vigilance). National laws of delict/tort: Primary norms or standards of 'mixed regimes' help national courts to determine the	– Private actors: Corporations and enterprises.

(continued)

Table 2.1 (continued)

Transnational sources of environmental liability	Primary norms (Duties to act or to refrain)	Addressees of primary norms	Secondary norms (e.g. regarding compensation)	Addressees of secondary norms
	Mineral Regulation.		objective level of 'due' care in liability cases.	

Source: author

introduce direct obligations for private transnational corporations under international law, which could also imply rules regarding corporate liability. It also has to be taken into account, that transnational private regimes, such as certification schemes or technical standards which create primary norms addressing private actors on the international level, may become legally relevant when national courts determine an objective standard of care in liability cases.[91]

2.4 Functionality of Liability Law: Decentralised, Rights-based Internalisation of Negative Externalities

According to our outline of the strategic 'entry-points', the suitability of a legal instrument required to cope with the global challenges of environmental law and politics may be evaluated using a few key criteria: Firstly, whether they are suitable to incentivise States to deepen their cooperation to implement and enforce environmental laws. Secondly, whether they are likely to succeed in influencing companies to prevent environmental damage. In this regard, one way to approach this is to effectively induce influential non-State actors to orientate their (self-)regulatory capacities towards the goals of environmental policy. The third and final key criterion is whether the legal instruments used can empower agents, who autonomously pursue environmental objectives (for example, because these agents are affected by environmental problems), in dynamics of norm-production 'bottom up'. **45**

The effects and functionality of liability law are traditionally analysed with respect to private perpetrators of damage. Given that the main focus of this book is on business enterprises, this focus on liability law as an essentially 'private' mechanism[92] seems appropriate—the question, if the relevant functions are valid and **46**

[91] Cf. Glinski (2018), pp. 75–95 and ¶ 66 *et seq.*

[92] Shavell (1983), p. 1.

relevant for State-centred approaches will be taken into consideration whenever it arises.

2.4.1 The Economic Functionality of Liability Law

Liability Law as a Decentralised Strategy of Environmental Regulation

47 A regulatory strategy counting on environmental liability may be seen as a decentralised approach to solve environmental problems in various respects.

48 First, liability is seen to establish autonomous incentives for potential tortfeasors to prevent environmental damage: From a legal perspective, the primary function of delict and torts law is often seen in the compensation for losses that already have occurred.[93] Economic theories of law, in contrast, emphasise the preventive function of liability. Liability accordingly is intended to provide incentives for potentially liable parties to avoid creating risks for others and society. From this viewpoint, liability can be considered as a strategy of internalisation: Ideally, environmental liability law would induce economic actors to calculate the external environmental consequences of their behaviour as an internal cost related to their activities, in effect, treating it as another production cost.[94] This internalisation is supposed to result in a deterrent effect with respect to the hazardous behaviour of self-interested 'rational' actors; rules, which stipulate the compensation for damage, are considered to deter unjustified harmful conduct.[95] Where companies anticipate the possibility of a liability case being brought against them, this may encourage more environmentally responsible investments.[96] As indicated above, there are good reasons to criticise a narrow focus on 'rational' actors as the behaviour of human agents is not exclusively determined by cost-benefit analyses. Nevertheless, within the context of the global economic system, the idea that the vast majority of enterprises will at least predominantly base their actions on calculations of the premise of gain versus loss is very much plausible.

49 **The Cascading Effects of Environmental Liability**

In the context of recent liability cases such as *Lliuya v RWE,*[97] cascading economic consequences might be observed: Claims for damages resulting from losses to property against CO^2 emitters not only can lead to increased

(continued)

[93] Wurmnest (2003), p. 94 ff.

[94] Endres (2013), p. 80.

[95] Posner and Landes (1980), p. 854.

[96] Cf. Newell (2001), p. 91.

[97] Essen District Court *Lliuya ./. RWE*, Judgment of 15 Dec 2016, 2 O 285/15, Appeal Case 5 U 17/15, Hamm State Appellate Court (ongoing), also see Chap. 8.

liability risks, because in principle, emitters will have to expect high numbers of such claims given the dispersed and diverse nature of damage caused by climate change.[98] Importantly, these claims also affect obligations according to corporate law. Government officials, corporate lawyers and insurance companies intensely discuss obligations regarding transparency and disclosure regarding the financial risks resulting from climate change, in particular as a consequence of climate-change-related litigation. The infringement of such obligations can, for example, also lead to new cases of shareholder litigation.[99] Transparency and disclosure obligations can also have an impact on the decisions of financiers regarding investments that are CO^2-emission intensive because they elucidate such liability risks.

50 The deterrent effect of liability pursues the same objective as the prevention principle and is in line with the rationale of the polluter pays principle in environmental law, which rests upon the assumption that polluters, when they are allowed to pass on the costs of environmentally detrimental behaviour to others and therefore keep these costs out of their calculations, have little incentive to avoid hazardous behaviour.[100]

51 Second, liability is considered to be able to cope with dispersed information and thereby to process complexity: As highlighted above, the complexity related to environmental problems and the difficulties to determine responsibilities, causal factors and effects of environmental damage are important features of global environmental law and governance.[101] The availability of information about risks regarding damage and appropriate precautionary measures necessarily varies between actors. Economic theories of (liability-) law[102] propose criteria for "rational choices" between regulatory instruments of which differences in knowledge or 'information asymmetries',[103] about risky activities between public authorities and private parties are considered to be major determinants of the "desirability of liability [versus state-centred] regulation".[104] Under certain circumstances, e.g. when there is a lack of information about the contributions of various polluters, about the intensity of risky activities, the probability of damage occurring or the magnitude of damage should it occur, the internalisation of external effects by means of State-centred regulation may fail.[105] The chances to find an optimal standard to cope with environmental risks then may be better when the case is subject to a liability regime,

[98] Cf. Rumpf (2019).
[99] Cf. Munich Re (2010), p. 17; also Chap. 8.
[100] Proelss (2017), p. 96.
[101] Cf. Posner and Landes (1980), p. 865.
[102] Cf. Feess and Seeliger (2013), p. 155.
[103] Faure (2001), p. 129.
[104] Shavell (1983), p. 1.
[105] Cf. Wagner (1990), p. 49.

as it incentivises the would-be injurer to use his own, potentially superior information to take all efficient precautionary measures to reduce risks.[106]

52 Third, environmental liability may be seen to establish a decentralised mechanism of enforcement of standards**:** Liability law can also be considered to take the rationale of regulatory decentralisation[107] one step further as it concedes the enforcement of relevant obligations to affected parties who can take legal action against infringements of their rights before courts. The over-exploitation of common environmental goods is frequently attributed to the fact that a large proportion of the resulting damage to the rights and entitlements of individuals or the public remains uncompensated.[108] State-centred practices of control and enforcement of public environmental law are traditionally criticised for not being able to ensure that infringements are sanctioned effectively and adequately.[109]

53 In certain cases, environmental liability is considered to be able to mitigate or resolve this situation due to its decentralised enforcement mechanisms. This is seen in the fact that aside from State-centred approaches to environmental law or concepts of 'co-regulation', liability law relies on enforcement by injured parties on-site who, in their own self-interest, will claim compensation for their losses. In addition, just like the injurer, victims may well be better informed than the relevant public authorities, about who is causing harm and its extent. For that reason, they are seen as appropriate enforcement agents, suggesting the suitability of liability for effective regulation.[110] Liability law may thus be seen to consistently retrace the transnational complexity of environmental risks or damage, not only because it counts on the decentralisation of implementation of environmental policies, but also by leaving enforcement to injured parties instead of State authorities that sometimes might have limited resources for control and regulatory oversight at their disposal.

Strict Liability, Fault-based Liability or State-centred Instruments? Functional Criteria of Choice

54 Based on their model of utility-maximising economic actors, and mainly conditional upon the informational complexity of the cases to be regulated, advocates of an economic theory of law propose several determinants for 'rational choices' between regulatory options. Depending on these determinants, 'top-down' types of regulation, namely administrative regulation or environmental taxes, or one of the two basic models of liability that can be classed as either strict liability or fault-based liability,[111] are considered to be 'socially desirable'.[112] As the environmental risks

[106] Faure (2001), p. 139.

[107] Cf. ¶ 22 *et seq*.

[108] Wagner (1990), p. 50.

[109] Rehbinder (1976).

[110] Kaplow and Shavell (1999), p. 23; Wagner (1990), p. 49.

[111] ¶ 38 *et seq.*

[112] Cf. Shavell (1983).

and regulatory problems discussed in the following Chapters are diverse and may call for well-adapted measures, it makes sense to keep some of these functional conditions in mind.

Allocation of information: As previously mentioned, liability law is considered a well-suited means of legal governance for environmental issues when information about regulatory problems and solutions are complex and dispersed. According to this rationale, 'top-down' or State-centred modes of regulation[113] have to be considered as the option of choice if the State,—e.g. due to publicly funded research—has superior information about the issues and circumstances likely to rise in certain activities. Setting environmental standards in regulation may then, according to advocates of an economic theory of law, be seen as means to pass on information about the environmental technology required. Hence, there are undeniable 'economies of scale' advantages in statutory standards, e.g. regulation in public environmental law.[114] **55**

The allocation and availability of information also provide, according to economic theorists, arguments for the desirability of rules of strict liability instead of fault-based liability: Under the approach of strict liability—i.e. if injurers have to pay for damage caused regardless of whether there was a breach of standards and regardless of their fault—actors disposing of superior information can be motivated to better assess the true costs of reducing risk and the true benefits in terms of expected savings from the anticipated reduction in damage caused.[115] Strict liability thus is supposed to strengthen incentives to invest in damage prevention rather than dispute the existence of fault after damage has occurred.[116] **56**

If liability is established using a fault-based liability regime whereby injurers are held responsible for harm only if their level of care falls short of a standard of 'due care', the situation becomes more demanding: those causing injury would, in principle, be led to exercise the appropriate level of care under the condition that the courts in cases involving damage can acquire sufficient information by learning about the relevant incident, to be able to determine the adequate level of due care, and the parties anticipate this.[117] On the one hand, these premises emphasise the functional role of legal and factual conditions for the effective pursuit of claims, particularly regarding rules of evidence. On the other hand, it indicates that fault-based liability may lead to appropriate results only in contexts where rules and standards regarding the level of due care are discernible for a court as any determination of fault presupposes the existence of rules that have been violated.[118] **57**

[113] Such as public environmental law or environmental taxes.

[114] For all cf. Faure (2001), p. 132.

[115] Cf. Shavell (1983), p. 5.

[116] Cf. Albers (2015), p. 245.

[117] Shavell (1983), p. 5.

[118] Cf. Wolfrum et al. (2005), p. 505.

58 The chance that injurers may not face the threat of lawsuits for harm done: Obstacles to effective access to justice clearly imply that liability may not result in the desired incentives to reduce risk.[119] If lawsuits to compensate damages have little chance of success, liability loses its deterrent effect. State-centred regulation may be better-suited to ensure standards of care. Impediments to the effective pursuit of liability claims prominently will concern legal conditions of such claims. Economic theories of law thus frame the legal conditions of liability claims as aspects of the deterrent effect of liability law: First of all, fundamental obstacles to effective internalisation of negative externalities by means of environmental liability may arise, if environmental damage cannot be apprehended as a violation of rights protected by tort law. Environmental damage may impair public goods and then does not, or at least not directly or traceably affect individual interests and goods such as the health or the property of a person.[120]

59 Second, it may be difficult to proof that an activity or omission of a defendant has caused environmental damage in a complex chain of events. This question is a crucial issue in many of the cases relevant for this book: It may be hard to prove causation associated with environmental damage that evolves as an effect of the cumulative actions of many contributing polluters or as a consequence of a complicated interplay of natural events potentially triggered or worsened by certain activities.[121] In such cases, administrative instruments may be better-suited deal with environmental damage.[122]

60 Scholars looking at the preconditions of functional liability law highlight further reasons which may inhibit liability suits being brought: Injurers may escape liability when harm is thinly spread among a number of victims and there is insufficient incentive for each individual to bring a suit.[123] Furthermore, time-lags between human action and environmental damage may be very long;[124] in such cases, much of the necessary evidence may be either lost or unobtainable or the injurer could have gone out of business.[125]

61 With respect to lawsuits between private actors, questions about the forum, i.e. jurisdiction of national courts, and conflict of laws are of crucial relevance for the effectiveness of environmental liability. National or supranational rules regarding the authority of national courts to decide about transboundary or global effects of the activities of corporations, their suppliers or subsidiaries, determine if a lawsuit

[119] Shavell (1983), p. 9.

[120] Cf. Section 823 para. 1, para. 2 of the German Civil Code (BGB), Section 1 of the German law on environmental liability, UHG.

[121] Meyerholt (2010), p. 117; cf. Chaps. 6 and 8.

[122] Rules or case law which ease or reverse the burden of proof of the victim in certain cases can resolve some of these issues. Meyerholt (2010), p. 120 ff.

[123] Faure (2001), pp. 130–131.

[124] Cf. Underdal (2010).

[125] Faure (2001), pp. 130–131.

can be successfully realised.[126] The same is true for conflict of laws which stipulates the applicability of national law for legal disputes: The environmental regulations in the home State of a corporation may be more demanding than the corresponding rules abroad. If the weaker rules available are used to determine the liability for environmental damage, the chances that corporations escape meaningful liability for environmental harm done are high.

The magnitude of hazards: If compensation for damage that could potentially arise from a given activity is so high that it would exceed the wealth of the individual operator, rules stipulating strict liability are, in principle,[127] considered not to incentivise operators sufficiently to limit the risks of the activities they engage in. The reason is that the costs of due care are directly related to the magnitude of the expected damage. If the expected damage is much greater than the individual wealth of the operator, the operator supposedly will only take the care necessary to avoid risks equal to his wealth, which can be lower than the care required to minimise the risk. **62**

This situation is considered to be different for fault-based liability: Under a regime of fault-based liability, taking due care means an operator can avoid having to pay compensation to a victim. An operator will still have an incentive to take the care required by the legal system as long as the costs of taking care are less than the operator's wealth.[128] Assuming that the State has sufficient information about the risks, State-centred instruments, if effectively enforced, may be able to solve this problem and induce the potential injurer to comply with the regulatory standard, irrespective of his wealth.[129] **63**

Regulation of legal activities (e.g. emissions): According to economic models of 'rational' incentives for action, State-centred regulation as well as fault-based liability can be suboptimal modes of regulatory action if the goal is the reduction of legal but hazardous activities. For example, obligations to install smoke scrubbers in a factory will not reduce its level of emissions. As a result, prohibitive or prescriptive rules may not create incentives to moderate the level of activity sufficiently. In contrast, under a strict liability regime or the introduction of environmental taxes, operators pay for harm done, which is more likely to lead to them moderating their level of activity.[130] This traditional assessment of course may change, if valid standards prescribe a specific mitigation pathway for hazardous activities, as has been assumed with regard to obligations to reduce CO2 emissions. **64**

[126] Cf. van Dam (2011), p. 229.

[127] Provisions regarding mandatory insurance can somehow mitigate this disadvantage, as costs for premiums may be lowered when risks are adequately addressed. Hence, in such cases, specific incentives to decrease risks might arise.

[128] For all cf. Polinsky and Shavell (2007), p. 169; Faure (2001), p. 141.

[129] Faure (2001), p. 130.

[130] Shavell (1983), p. 24.

Courts could then draw upon such standards as primary norms to determine a standard of care.[131]

65 Cost efficiency: Finally, liability regimes seem to have an advantage concerning the costs of effective regulation: Contrary to the costs related to operating 'top-down' regimes, especially regarding subsequent control and enforcement by public authorities, the administrative costs of the court system are only incurred if damage has actually occurred. A main advantage of tort law is seen to be that many accidents that would otherwise happen are prevented because of the deterrent effect of functional liability standards. In cases involving safety regulations, the costs of passing the regulation and of constantly enforcing it are always there, whether there are accidents or not.[132]

2.4.2 Transnational Focus of Liability Law

66 Fault-based liability assumes fault or negligence if, despite the predictability and avoidability of damage, no appropriate precautionary measures were taken. To determine the appropriate level of care, civil courts refer to objective standards, such as 'reasonable care' ("im Verkehr erforderliche Sorgfalt") in German delict, or 'the reasonable man' in British common law.[133] Given this kind of reconstruction of an objective standard of care by the courts, norms from various sources can serve as primary norms which determine the relevant obligations to prevent risks or to omit hazardous behaviour.[134] State legislation, social norms of different origin, such as entrepreneurial self-regulation, industry standards or best practices, thereby may be applied to define fault and, in turn, are 'translated' into binding due diligence norms.[135]

67 While this adaptability of liability law towards primary norms of different origin will be analysed in more detail in the course of this book, at first glance it seems to hold some potential. First of all, it indicates that strategies of 'top-down' regulation and 'decentralised' liability law are not mutually exclusive but can complement and mutually reinforce each other. A judge deciding on liability arising from environmental damage may accept a finding of negligence as soon as a public regulatory standard has been breached. Hence, public law not only passes on information to the parties regarding the efficient standard of care but also provides information to any judge who has to evaluate the behaviour of the injurer in a liability case.[136] Second,

[131] As happened in the case of District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379.

[132] Faure (2001), p. 131.

[133] Glinski (2018), p. 77; pp. 75–96.

[134] ¶ 41 *et seq.*

[135] Glinski (2018), p. 92.

[136] Faure (2001), pp. 130–131.

liability cases and the relevant case law can, as Faure notes with respect to the legal situation in European States, provide for a kind of 'fine-tuning' of rather abstract and general State-centred regulations. This is particularly relevant with respect to permits or licences which lay down the conditions under which potentially detrimental or hazardous behaviour is allowed. Following such a regulatory standard does not necessarily exclude a finding of liability. The basic idea is that an administrative authority when granting a licence and setting permit conditions, cannot take into account the possible harm the licenced activity may cause to all possible third parties. Under such conditions, liability is supposed to give the potential injurer incentives to take all the necessary precautions, even if this requires more than just following the minimum required to obtain a licence.[137] Third, the relationship between primary norms as well as standards and secondary liability norms is of particular interest when the necessity of globally effective measures is taken into account. The interdependency of primary norms, which define environmental standards and the secondary norms, which determine the liability of actors who infringe those standards illustrates that national jurisdiction or legislation do not necessarily conflict with a policy aimed at globally harmonising standards: Judgements of national courts and evolving case law concerning the liability of international corporations may refer to international standards, to soft law or private self-regulation, all of which define the technical or scientific state-of-the-art of certain operations. As Glinski sets out, such norms and standards may then lead to an evolution of national tort law when civil courts have to determine the obligations of transnationally active companies and corporations. At the same time, the national doctrines of tort law have to further specify, what such non-binding rules imply for legal obligations and thereby may contribute to a further development of transnational or international norms, e.g. concerning businesses' due diligence.[138] The evolution of more ambitious standards in any of these kinds of ordering may thus have a positive effect on what can be expected from corporations as regards their diligent behaviour in transnational business operations.[139] By increasing the practical relevance of such transnational standards, liability law might contribute to the emergence of a level playing field.

2.4.3 Liability Law as a Rights-based Approach to Environmental Law

The overlapping and complementary relationship between liability, as an element of the tort or delict law in national civil or common law systems, and human rights have **68**

[137] Faure (2001), pp. 130–131.
[138] Glinski (2018), pp. 90–95.
[139] Cf. van Dam (2011), p. 238.

long been highlighted by legal scholars.[140] Tort law has been identified as the most important private law enforcer of human rights and contributor to the privatisation of constitutional law: While it is still questionable whether corporations have obligations based on international human rights law, it is beyond doubt that in tort or delict law they are obliged not to infringe citizens' rights to life, physical integrity, health, property, freedom and exercise of other rights.[141] Equivalent ties on the level of national civil law refer to a violation of tort rights brought about by environmental damage. The parallels between human rights and tort rights and their interrelation with the environment will be of further interest in later chapters.[142]

69 A rights-based perspective on environmental liability not only focuses the role of victims of damage as enforcement agents of environmental standards. Liability law may, rather, be a particularly effective manifestation of a normative strategy of 'bottom-up' legal innovation, as outlined above.[143] On the one hand, this productive potential is a consequence of legal mechanisms of norm-concretisation and precedent. Particularly the close connection to human rights, on the other hand, may increase this potential of liability as a driver of normative development of effective environmental regulation. For example, regional and domestic 'environmental rights' claims have served the purpose of pushing forward doctrinal discourses about when environmental harm constitutes a human rights issue.[144] More concretely, liability claims regarding human rights obligations of transnational companies can trigger debates about adequate standards of care, e.g. for suppliers or subsidiaries and lead to new, more demanding precedents. Given such practical developments, legal action of individuals or groups because of rights violations as consequences of environmental damage are seen as catalysts of development for environmental norms from the 'bottom up'.[145] The implementation of norms to improve access to justice for victims of environmental damage can trigger such dynamics of legal innovation.

70 In the *Vedanta* case, 2000 farmers from Zambia alleged personal injury and environmental damage caused by discharges from a copper mine into waterways they use for drinking, bathing and agriculture. A UK High Court decision, which was recently upheld by the Supreme Court,[146] allowed the farmers to sue the British parent company of the Zambian mine operator and

(continued)

[140] van Dam (2011), p. 254.

[141] van Dam (2011), pp. 243, 254.

[142] Chapters 4 and 6.

[143] ¶ 26 *et seq*.

[144] Osofsky (2010), p. 209.

[145] Percival (2010), p. 62.

[146] See UK Supreme Court *Vedanta Resources PLC and another (Appellants) v Lungowe and others (Respondents)* Judgement of 10 April 2019, UKSC 20, [2017] Appeal Case EWCA Civ

thereby recognised that companies potentially hold a duty of care to third parties whose rights have been infringed by a subsidiary. An already existing rule under common law that companies, under certain conditions, have due diligence obligations vis-à-vis employees of a subsidiary was thereby extended. The precedent is understood to form a model for future cases in which individuals' rights are affected by the actions of a subsidiary. While the extent to which a parent will owe a duty of care will depend on the facts of each particular case, this model of liability can potentially extend beyond the corporate group and into the supply chain.[147]

71 In addition to such legal dynamics, rights-based legal action is seen to exert normative pressure for the innovation and implementation of environmental norms and standards. Legal disputes about the individual consequences of environmental damage are prominent forums for normative conflict and public discourse about an appropriate distribution of the private gains and the individual or social costs arising from the exploitation of environmental goods. Lawsuits regarding infringements of 'tort/delict rights', especially in cases dealing with transboundary damage, demonstrate the global dimensions and the interdependences related to environmental damage and its effects.[148] Such conflicts, which are frequently labelled as seeking 'environmental justice',[149] are increasingly pushed into the public's line of sight as NGOs and multinational corporations fight battles over environmental liability 'in the court of the public opinion'.[150]

72 A focus on liability according to a rights-based approach thereby might correspond to employing a strategy that aims to effectively implement environmental standards by transnational enterprises as Co-Regulators.[151] In contrast to the economic strategies highlighted above,[152] rights-based strategies offer an alternative approach of internalisation: Litigation strategies based on liability claims that arise as a consequence of environmental damage and the violation of human rights form the basis for additional, normative pressure seeking to alter injurers' practice as part of more comprehensive (political) strategies pointed at shareholders or the public.[153] This pressure exerted by liability cases can also lead to the reform of State-centred regulation: for example, scholars have described how the Bhopal incident has prompted action not only by corporations but also by governments. The latter

1528, on appeal from: [2017] EWCA Civ 1528, available at https://www.supremecourt.uk/cases/docs/uksc-2017-0185-judgment.pdf, last accessed 23 March 2022.

[147] Cf. Smit and Holly (2017).

[148] Cf. WBGU (2018), p. 18.

[149] Osofsky (2010), pp. 189–210.

[150] Percival (2010), p. 62.

[151] ¶ 22 *et seq*.

[152] ¶ 24.

[153] Osofsky (2010), p. 209.

accordingly have responded by promulgating new environmental legislation or by making existing legislation more stringent.[154] Even when cases are not successful in securing compensation for the victims of corporate negligence, the act of bringing cases against corporations can still produce positive reform.[155]

2.5 Conclusion

73 This chapter was intended to examine theoretical perspectives on how the functioning of corporate liability regimes for environmental damage could, under certain conditions, contribute to the solution of transboundary environmental problems.

74 This potential appears to be considerable. Environmental liability regimes can help to achieve the objectives of international environmental laws, i.e. to prevent transboundary environmental harm and damage to global commons, as well as environment-related human rights violations, to hold polluters accountable for the environmental costs of their behaviour and contribute to the emergence of global environmental standards.

75 Effective liability regimes can result in an internalisation of the negative externalities that follow from transnational economic activities and thus provide economic incentives for potential polluters to avoid risks to the legal interests concerned. This internalising effect has obvious advantages, particularly in transnational contexts, as it could perform a gap-filling function where there is a lack of effective and sufficiently concrete environmental standards. This becomes evident when environmental problems arise as a result of complex effects and interactions and under regionally and sectorally diverse conditions, when international instruments remain insufficient to address such problems and State authorities can not effectively provide comprehensive control and enforcement of environmental law.

76 In addition to this economic function, however, another normative function of environmental liability should be highlighted: Liability cases deal with rights violations, damage and costs caused by globalised modes of business and consumption as well as their effects on the environment and climate. The issue of whether and in what way environmental damage is compensated as well as which actors are responsible for prevention and compensation in global value chains concerns fundamental principles of global justice. In the deliberations between plaintiffs, defendants and courts in liability cases, standards are negotiated which concretise these general principles with regard to environmental risks and make them manageable in practice.

77 The examination of the theoretical potentials of transnational environmental liability is not to suggest that environmental liability would already meet such potential *de lege lata*. Even theoretically a variety of conditions for fulfilling these

[154] Cf. Sripada (1989), p. 550; Newell (2001).

[155] Newell (2001), p. 86.

functions have to be met and in many constellations, other regulatory instruments may be better suited to protect the environment than environmental liability regulation. The following chapters further explore these preconditions on different legal levels and with reference to practically important fields of environmental liability—namely supply chain regulation, climate change litigation and geoengineering.

Specifically in these practical fields, dynamic and sometimes spectacular legal developments in recent times show that it is worthwhile, both from a legal and a policy perspective, to take a closer look at corporate liability for transboundary environmental harm. 78

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