Legal Obligations of Enterprises and Investors in the Face of Climate Change

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1 Introduction

Unabated climate change poses extremely serious threats to the environment, humankind, and in the upshot, the economy. According to an emerging view, earlier estimates about the pace and consequences of climate change were rather optimistic, even if States would be able and willing to keep global warming below 2°C.

China and many other countries and regions are already experiencing the consequences of unprecedented natural calamities—extreme droughts, torrential rainfall and hurricanes, even though it is very difficult, if possible at all, to prove a causal link between specific natural events and climate change.¹

1 See in more detail National Academies of Sciences, Engineering, and Medicine, *Attribution of Extreme Weather Events in the Context of Climate Change* (The National Academies Press 2016) <https://www.stat.berkeley.edu/~aldous/157/Papers/extreme_weather.pdf> accessed 23 April 2018. About China, see Joint Global Change Research Institute and Battelle Memorial Institute, *China: The Impacts of Climate Change to 2030* (National Intelligence Council 2009) <https://www.dni.gov/files/documents/climate2030_china.pdf> accessed 23 April 2018; and Chris BUCKLEY, 'Chinese Report on Climate Change Depicts Somber Scenarios' *New York Times* (29 November 2015) <<https://www.nytimes.com/2015/11/30/world/asia/chinese-report-on-climate-change-depicts-somber-scenarios.html>>. The present note has borrowed from earlier writings on the same topic, in particular Jaap SPIER, 'The Principles of Climate Obligations of Enterprises: An Attempt to Give Teeth to the Universally Adopted View That We Must Keep Global Warming Below an Increase of 2 Degrees Celsius' (2018) Uniform Law Review (forthcoming) <<https://doi.org/10.1093/ulr/yny010>> accessed 7 May 2018; Jaap SPIER, 'The Oslo Principles and the Enterprises Principles: Legal Strategies to Come to Grips with Climate Change' (2017) 8(2) Journal of European Tort Law 218. See also Philip SUTHERLAND, 'Obligations to Reduce Emissions: From the Oslo Principles to Enterprises' (2017) 8(2) Journal of European Tort Law 177; Expert Group on Climate Obligations of Enterprises, *Principles on Climate Obligations of Enterprises* (Eleven International Publishing 2018) ('the Commentary');

Most politicians and business leaders realise the looming threat. Time and again they have expressed the urgent need to prevent cataclysmic climate change, pledging to take the necessary measures to stem the tide. Indeed, quite a lot has happened. The Paris Agreement² is a major step forward; it is the very best that could be achieved at the time and goes way beyond what was expected. Sadly though, as a matter of fact, global emissions have barely been reduced since, let alone to the extent needed.³ In the (unrealistic) scenario that all states will honour the pledges made in the context of the Paris Agreement, global temperature will rise by at least 2.7°C.⁴ That would seriously jeopardise the life and wellbeing of the younger and future generations.

Legal strategies might contribute to stem the tide. That cannot be achieved unless it is possible to discern the legal obligations of the respective major players: states, enterprises and investors. Admittedly, there is a lot of discussion, also in the legal arena, about climate change, but so far, the discussion does not provide much guidance for defining concrete reduction obligations: say, how much should the Netherlands or General Motors, Bayer or Shell reduce their greenhouse gas (GHG) emissions and what other obligations they have. The picture changes for the better if we focus on disclosure obligations and on the obligations of investors.

Two documents have been drafted over the past three years mainly to spur the debate on the legal obligations of diverse relevant actors in the face of climate change: the Oslo Principles (hereinafter OPs) and the Principles on Climate Obligations of Enterprises (hereinafter EPs).⁵

The OPs, launched in March 2015,⁶ drafted by a large group of international experts, aim to discern the legal obligations of states. The main focus is on reduction obligations, but they also map a series of other obligations. The EPs, drafted by a smaller group, aim to discern the legal obligations of enterprises and investors. The EPs offer 30 principles, which are based on an amalgamation

the Principles and the Commentary are also on the group's website at <<https://climateprinciplesforenterprises.org>> accessed 24 April 2018.

2 Paris Agreement, in Annex of decision 1/CP.21 (12 December 2015) FCCC/CP/2015/L9/Rev 1.

3 See Bob BERWYN, 'Global CO₂ Emissions to Hit Record High in 2017' (13 November 2017) <<https://insideclimatenews.org/news/12112017/climate-change-carbon-co2-emissions-record-high-2017-cop23>> accessed 24 April 2018.

4 See Climate Action Tracker at <<http://climateactiontracker.org/>> accessed 24 April 2018.

5 See for both the OPs and the EPs and their commentaries (n 1). About the working method of both groups, see the commentary to the OPs 17 and 18 and the Commentary (n 1) 17–19.

6 Expert Group on Global Climate Change, *Oslo Principles on Global Climate Obligations* (Eleven International Publishing 2015); also available at the website mentioned above (n 1).

of legal sources.⁷ Here again, they are accompanied by a detailed commentary.⁸ Both sets of principles serve multiple purposes. They will hopefully promote the debate about legal obligations of enterprises and investors, could serve as a source of inspiration for international negotiations, legislators, courts and financial regulatory authorities, and could stimulate politicians and business leaders to scale up their actions to come to grips with climate change.

Both the OPs and the EPs put emphasis on steps that have to be taken to hold the increase in global average temperature below 2°C.⁹ They are not about compensatory damages.¹⁰

Both the OPs and the EPs are non-government initiatives. They are similar in origin to the other sets of principles such as the IUCN World Declaration on the Environmental Rule of Law¹¹ and the Global Pact for the Environment.¹² That means that our principles are not law. They are based on our interpretation of the law as it stands or will likely develop. In the absence of clear and pertinent law such an exercise is quite a challenge. Our interpretation may be mistaken, although we believe that it makes sense, as is emphasised by the 76 endorsements by eminent experts, among them top judges from all continents. At the end of the day, the proof of the pudding is in the eating.

2 Discerning the Legal Obligations of Enterprises

An emphasis on the legal obligations of enterprises can make a difference. If enterprises do not comply with their obligations, they can be sued, and not only in courts in their 'own' country; that is particularly the case for global

7 Commentary (n 1).

8 Also available at the website mentioned above (n 1).

9 The group focused on the 2°C target, although the 1.5°C aspiration of the Paris Agreement would have been a possible alternative. See the Commentary (n 1) 50.

10 See Jaap SPIER, *Shaping the Law for Global Crises: Thoughts about the Role the Law Could Play to Come to Grips with the Major Challenges of Our Time* (Eleven International Publishing 2012) 181, for a discussion of damages as a response to climate change.

11 See IUCN World Commission on Environmental Law, 'Environmental Rule of Law' <<https://www.iucn.org/commissions/world-commission-environmental-law/our-work/environmental-rule-law-1>> accessed 11 May 2018. The IUCN is a hybrid governmental/non-governmental body; the members of its Commissions serve in their personal capacity.

12 The draft Global Pact for the Environment was developed through an informal international network of experts from around the world; see <<http://pactenvironment.org/>> accessed 11 May 2018. The Pact was the subject of a UN Resolution in May 2018: 'Towards a Global Pact for the Environment', A/72/L.51. See also Edith M. Lederer, 'UN votes to take first step toward a global environment pact,' *Washington Post* (10 May 2018).

enterprises. That is not to say that such litigation will be a walk-over. Some legal obstacles will need to be removed, whilst it may be a challenge to enforce the obligations of the group by suing a subsidiary or seizing the enterprise's assets. In addition, enterprises that do not fulfil their legal obligations will become increasingly unpopular among investors and financiers, which may have an adverse impact on new investments (expansion of production facilities, mergers and take-overs).

The definition of enterprise was discussed at length by the drafters of the EPs. Accordingly, 'enterprise' refers to:

- (a) a business, company, firm, venture, organisation, operation or undertaking that is private unless it can be shown that it does not carry on commercial or industrial activities, or
- (b) any non-private entity when and to the extent that it carries on commercial or industrial activities, or
- (c) any other entity when and to the extent that it carries on activities that generally fall into category (a) or (b) in the same country even if it does not do so in the particular circumstances.¹³

Enterprises are not necessarily of a private nature. It follows from (b) that state-owned enterprises carrying on commercial or industrial activities are covered by the EPs.

Like the OPs, reduction obligations are the backbone of the EPs. It was quite a challenge to determine a convincing yardstick for enterprises. The better solution seemed to stay close to the obligations of the state in which the relevant enterprises operate (Principle 2). After all, as a rule of thumb, states will only be able to meet their reduction obligations if enterprises under their jurisdiction reduce their emissions at the same rate.

Under the OPs, the global 'carbon budget' is determined each year on the basis of the precautionary principle and the 2°C threshold (Principles 3 and 6).¹⁴ The globally permissible emissions in a given year are divided by the world's population in order to determine the permissible quantum per person (Principle 4). That figure is multiplied by the number of inhabitants of a specific country to calculate the carbon budget of that state (the permissible quantum of GHG emissions). There are two categories of states: states that exceed their carbon budget—Above Permissible Quantum (APQ) states—and states that emit less than their carbon budget—Below Permissible Quantum (BPQ) states.

¹³ Commentary (n 1) 103–105.

¹⁴ For a discussion on the precautionary principle and the 2°C yardstick, see the Commentary (n 1) 23, 24 and 50.

APQ states are required to reduce their emissions to the permissible quantum within one year (Principle 13). This reduction obligation, expressed in a percentage of emissions reduction, extends to the activities of enterprises in that APQ states (EPs Principle 2). BPQ states do not have any primary GHG emission reduction obligations.¹⁵ Hence, enterprises in those countries do not have primary reduction obligations (EPs Principle 2).

We realise, of course, that not all enterprises can be lumped together. Some enterprises manufacture or provide basic goods and services, others merely luxury products; some have already reduced their emissions significantly, others have not; the enterprise's emissions may be below or above those of its competitors. According to the EPs, it should be left to the relevant states to address this issue. Principles 3 and 4 provide the necessary flexibility. They list a series of factors that must be taken into account when a State aims to reduce (or increase) the reduction percentage of one or more enterprises. States complying with their own obligations obviously have a wider margin of appreciation compared with non-complying states. The latter States still have some flexibility as long as all enterprises, taken together, comply with Principle 2. This may cause injustice if a state fails to apply Principles 3 or 4, as the case may be. In such a scenario, domestic law may offer solutions.

Another nuance to Principle 2 relates to the subsidiaries of major multinational enterprises which are located in BPQ countries.¹⁶ Such subsidiaries have reduction obligations even if other local enterprises do not—they have to reduce the emissions from their activities in BPQ states at the rate the world at large has to reduce its emissions (Principle 5).

All enterprises would have to take any measures to reduce GHG emissions that can be taken without additional cost (Principle 7). This could include switching off power-consuming equipment when not in use and switching from a public electricity supplier whose energy is based on fossil-fuel to a supplier whose electricity is based on renewable energy, if that can be achieved at no cost. In addition, Principle 8 requires enterprises to take measures to reduce GHG emissions that incur additional costs, if the cost will, beyond reasonable doubt, be offset by future savings or financial gains within a reasonable time period.

15 Some have no-cost and other obligations and the obligation to take all reduction measures where no additional cost or where offset financially.

16 Principle 1 defines a global enterprise as follows:
an enterprise or a group of enterprises that manufactures products or offers services that are, for a significant part, consumed in multiple APQ countries. However, an enterprise in a BPQ country is considered to be a global enterprise only if it is, directly or indirectly, a subsidiary of an enterprise based in an APQ country.

Principles 12 and 13 provide some relief if the obligations cannot be fulfilled, whilst Principle 15 emphasises that the reductions obligations, emanating from the Principles, cannot be set aside by less stringent domestic law.

In addition to the primary obligations to reduce emissions from the enterprise's activities to a certain percentage, enterprises must avoid carrying out activities and/or making available products or services that cause excessive GHG emissions, without making countervailing measures to offset the excessive emissions (Principles 9 and 10). Activities such as operating coal-fired power plants and extracting oil from tar sands are so GHG-intensive that they can be assumed to be excessive. In less obvious cases, emissions will be excessive if they are higher than those of competitors or if more efficient choices could have been made at an affordable cost. The concept of affordable cost leaves enough room to cope with the different situations of APQ and BPQ states. Principle 11 provides an escape route if the activity, product or service can be shown to be indispensable.

Principle 7, which obliges enterprises to take GHG reduction measures where no additional cost is involved, and Principle 8, which allows for offsets, barely place a burden on enterprises. They are both reasonable and necessary in light of the deleterious consequences of unabated climate change. Even if all enterprises comply with their primary reduction obligation (Principle 2 and 5, as the case may be) and the obligations emanating from Principles 7–10, many states will not reduce their GHG emissions to the extent required. Hence, additional measures are unavoidable. For practical purposes, Principles 9 and 10 shift the reduction burden to buyers, including persons and entities not covered by the EPs. It appears fair to require that products and services implying excessive emissions will be phased out and replaced by more sustainable ones, even if that comes at a price for the buyers.

The fact that the GHG emissions of almost, if not all, individual enterprises represent but a small share of global totals does not relieve enterprises from compliance with the EPs (Principle 14). Any other approach would mean that climate change would be a lawless realm.¹⁷ This question could have some

¹⁷ See also Jaap Spier, 'Injunctive Relief: Opportunities and Challenges' in Jaap SPIER and Ulrich MAGNUS (eds), *Climate Change Remedies: Injunctive Relief and Criminal Law Responses* (Eleven International Publishing 2014) 3, 10. The many initiatives, conferences and writings by—among many others—senior members of the judiciary, underscore that ever more judges do understand that they cannot abstain, see 'Global Pact for the Environment' (24 June 2017) <<http://www.leclubdesjuristes.com/wp-content/uploads/2017/05/Draft-project-of-the-Global-Pact-for-the-Environment-24-June-2017.pdf>> accessed 24 April 2018. The growing number of Environmental (Green) courts and the Global Judicial Institute on the Environment may serve as an illustration of this broad

implications for questions of compensation, which are not addressed in these two sets of Principles.¹⁸

To the extent reasonably and feasibly possible, enterprises must ascertain and take into account their suppliers' emissions when selecting their suppliers: how the emissions of suppliers compare to alternative suppliers should be seriously investigated by the buying enterprise and the results of this investigation must be reflected in the final choice (Principle 17). The words 'reasonably and feasibly' contemplates a form of cost-benefit analysis.

3 Disclosures and Impact Assessments

Principles 18 to 23 define the obligations of enterprises in relation to disclosure of information.¹⁹ Enterprises have to assess the impact of climate change on their business from various angles. In many instances, the assessment will show the need for subsequent action to lower the impact. According to Principle 18, an enterprise must evaluate:

- (a) the vulnerability of its facilities and property to climate change;
- (b) the financial effect that climate change will or is likely to have on the enterprise;
- (c) the actions of the enterprises to increase its resilience to climate change; and
- (d) the technically and financially feasible and cost-effective options available to reduce GHG emissions.

Enterprises must also publicly disclose the information mentioned above and ensure that it is readily accessible to those who are or are likely to be directly or indirectly affected by the activities of the enterprise, including investors, shareholders, clients, financiers, employees, securities regulators and the public (Principle 19). They must also publicly disclose information:

- about their performance in complying with their obligations under the EPs to reduce the GHG emissions from their activities and ensure, in particular,

trend; see e.g. Michael D WILSON, 'Climate Change and the Judge as Water Trustee' (2018) 48 *Environmental Law Reporter* 10235. In addition, as noted above, several senior members of the judiciary have endorsed the EP.

18 See the Commentary (n 1) 43. For elaboration, see SPIER (n 10) 181.

19 See also the ground-breaking Task Force on Climate-related Financial Disclosures (TCFD) report, 'Recommendations of the Task Force on Climate-related Financial Disclosures' (June 2017) <<https://www.fsb-tcfd.org/publications/final-recommendations-report/>> accessed 24 April 2018.

- that this information is readily accessible to those that are or are likely to be directly or indirectly affected (Principle 20) and
- about the GHG emissions connected to the enterprise's products and services and how these emissions compare to those connected to the products and services of other enterprises; this information should be readily accessible to users, consumers and customers (Principle 21).

The content and manner of disclosure required by Principles 18 to 21 should be proportionate to the relevant products and services and the enterprises concerned (Principle 22), which means that the obligations diverge between major and small enterprises and enterprises in developed and developing states.

Principle 20, requiring disclosure of performance in complying with the EPs, arguably overstates its case, as we openly admit in the commentary. Our group is not a legislative body and our interpretation of the law may be mistaken. Hence, enterprises would only have to comply with the EPs if our interpretation of the law is correct. If it is not, that does not mean that enterprises do not have obligations. If an enterprise were to challenge our submission, it should explain what it believes to be its (reduction) obligations. Surely, enterprises in APQ states cannot argue that they have no reduction obligations. Both political and business leaders have emphasised the urgent need to take much more ambitious action to avoid crossing the 'fatal' threshold. Our view aligns with theirs. 'Much more' can only be achieved if major players enhance their current actions to mitigate climate change.

There is an emerging view that most fossil fuels should stay in the ground.²⁰ That, in turn, affects the value of the fossil fuel industry. Principle 23 is attuned to this view. It requires the disclosure of the risk of stranded fossil-fuel assets: an enterprise whose activities include fossil fuel production must accordingly assess the impact of any limitations imposed on the future extraction or use of fossil fuels, consistent with a 'carbon budget' implied by the 2°C target.

Principle 24 requires that environmental impact assessments consider the consequences of climate change for the enterprise if the latter aims to develop a major new or expand an existing facility.

4 The Obligations of Financiers and Investors

Unabated climate change will have a significant adverse impact on financiers and investors. Luckily, they are increasingly active in pressuring enterprises to

20 For more details see <<https://www.carbontracker.org/>> accessed 24 April 2018.

reduce their emissions and to take other useful steps to avoid the passing of the threshold of 2°C.

4.1 *The Obligations of Financiers*

Financiers (essentially, providers of money, mostly banks) for major projects should ask themselves whether the loans can be expected to be repaid. That is an increasingly uncomfortable question because society has to change to keep global warming below the 2°C threshold. Principle 25 is consistent with this truism:

banks must ascertain and take into account the GHG emissions of any project that it considers financing, and the likelihood of the borrower's ability to repay the loan granted in light of the GHG emissions caused.

'[M]ust ascertain and take into account' goes well beyond ticking the box. As a rule of thumb, short-term loans will not generally be jeopardised by climate change, but financing shale-gas operations, coal-fired power plants or infrastructure for new coals mines is more likely than not to face increasing regulatory risks. In those realms, financiers should take a very cautious stance; investing in these activities requires a compelling justification.²¹

4.2 *Obligations of Investors*

The principles put considerable emphasis on investors in light of their power and influence to bring about the extremely urgent need for change. It would be unrealistic and unfair to require that they solve the problem entirely. That can only be realised if all major players—states, enterprises and others—join forces.²²

Principles 26 to 29 focus on investors that should have a long-term view, such as (re)insurers²³ and pension funds. Pension funds must be able to meet their long-term obligations, and obviously, sufficient funds need to be available to pay the retirement benefits. Insurers also must be able to pay losses covered by their insurance policies, some of which entail very long-term obligations. If the global community is unable to keep global warming (well) below 2°C, the economic toll will be very high, which will adversely affect investments. That

²¹ See the Commentary (n 1) 207.

²² For a slightly different view, see the High-Level Expert Group on Sustainable Finance, 'Financing a Sustainable European Economy' (July 2017) <https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf> accessed 24 April 2018.

²³ These institutions are major investors.

is exactly the reason why these investors cannot be indifferent to the consequences of climate change. To the extent reasonable and feasible, they must try to manage their investments in such a way that they can meet their future obligations, which in turn impacts on their investment decisions and the need to incentivise non-complying states and enterprises to meet their obligations.

The legal debate to date on the obligations of investors offers three rather diverging views; these differ from the position outlined above:

- (1) investors do not have obligations in the face of climate change;
- (2) they are allowed, but not obliged, to take 'sustainability issues' into account; or
- (3) they must divest from fossil fuel and related companies (the stranded asset maxim).²⁴

The Principles take the view that investors which should have a long-term view, such as pension funds and insurers, must take sustainability issues into account in their investment strategies. Principles 26, 27, 29 and 30 apply to all forms investment. This explicitly includes government bonds (Principle 26). In principle, the low-hanging fruit is to refrain from buying bonds issued by badly performing states or equity from poorly performing enterprises. That, however, is easier said than done. Such equity may—and some bonds still do—generate returns,²⁵ whereas there are probably insufficient adequate return-generating alternative investments.²⁶

Under Principle 26, an investor must ascertain and take into account whether or not the entity in which it aims to invest, or has already invested, be it a state under the OPs or an enterprise under the EPs, complies with its obligations under the OPs or the EPs as part of its long-term strategy. According to Principle 27, investing in a non-complying entity requires a justification that the investor must provide on request to those who are or could be directly or indirectly affected by the investment.

Principles 26 and 27 are cautiously formulated. 'Must ascertain and take into account' means that the relevant factors must be given appropriate weight. We would have overstated our case by submitting an obligation to stay away from non-complying entities altogether. First, it is very much up to debate whether there are sufficient and sufficiently-attractive alternative investments. Secondly, if all investors who should have a long-term view sold shares or bonds of non-compliers concomitantly, these assets would be bought by hedge funds

24 For more detail, see the Commentary (n 1) 218, 236 and 237.

25 Compare for example bonds issued by the United States with those issued by most European states.

26 Pension funds also need a return on investments to pay the current pensions.

and other less scrupulous investors. The latter would acquire them at bottom prices; returns would be guaranteed. The investees may be under less pressure to reduce their GHG emissions, making society at large even worse off. This leaves unchanged the fact that long-term investors would be best served if they refrained from buying or keeping equity issued by the worst actors, whilst the 'best in class' may offer opportunities.²⁷

An emerging view is that investors should, or even must refrain from investing in fossil-fuel companies. There may well be sound economic reasons for this stance. The drafting group does not think that there is a sufficiently sound legal basis for such a far-reaching position. One of the reasons why the fossil fuel industry is so unpopular is that many people believe that they are the one and only cause of climate change. This would mean that only this branch of industry would have to reduce its emissions and would have to refrain from putting oil and gas on the market. In that scenario, there is not the slightest chance to achieve the reductions globally required.

We are not suggesting that investing in the fossil fuel industry can, or cannot, be justified; that is largely an economic question. To that effect, reasonable expectations about the demand for fossil fuels carries weight. We fully endorse the view that the greater part of fossil fuel resources should stay in the ground, a matter that investors may also consider as relevant to their investment decisions in the energy sector.

Principle 28 is the corollary of Principle 23. It reads:

Investment by a prospective investor in coal-fired power plants or enterprises engaged in energy generation from other comparatively excessively emitting fossil fuels requires a compelling justification.

This recognizes the fact that there may be sound reasons to keep investments in non-complying entities. That is only allowed if the investor promotes compliance by the entities in question with the obligations under the EPs by making use of its power as investor (Principle 29).

Finally, Principle 30 paints disclosure requirements of pension funds. The disclosure is about its investment portfolio, its investment strategy in light of the threat of climate change and to whom it has entrusted the asset management, as well as its guidelines or instructions to the asset manager, unless it provides a justification for not disclosing such information.

²⁷ 'May' because the prices may well become very high if investors would have to compete to buy this kind of equity. See the Commentary for elaboration (n 1) 227ff.

5 The Legal Bases of the Principles

Both the OPs and the EPs are based on an amalgamation of legal sources. The EPs are based on the broadest possible set of legal sources: international, human rights, constitutional, environmental and tort law, authoritative reports, pledges and declarations issued by leading politicians, international organisations, central banks and business leaders, a series of codes of governance, listing requirements of stock exchanges, case law and legal doctrine. We are not saying that all these sources are law in themselves. Some of them are soft law, others are simply a potential source of inspiration; but they may—and should—colour the interpretation of hard law.

The legal sources mentioned above serve as a sound basis for the submission that the world at large must reduce its GHG emissions to ensure that global warming will not exceed 2°C. The next step is to figure out what that means for states and enterprises. We do not deny that the obligation laid down in Principle 2 does not necessarily follow from positive legal sources, but it is the logical consequence of the per capita approach. We could not think of any better solution than to tie the reduction obligations of enterprises to those of states in which they operate, with some flexibility on the part of the respective states to modify them (Principles 3 and 4).

That enterprises should take measures which involve no or little costs (Principles 7 and 8) and should avoid carrying out activities causing excessive GHG emissions (Principles 9 and 10) can be more directly derived from existing legal obligations. The urgent need to come to grips with climate change and its cataclysmic consequences if we cannot keep global warming below 2°C barely leaves room for a more lenient interpretation of the law. Likewise, obligations relating to disclosure and impact assessments (Principles 18 to 23) are in line with legislation in ever more states.²⁸

We are mindful that several principles are, to some extent, open-ended or are based on legal notions that have to be interpreted in the context of specific

28 See also TCFD report (n 19); Sean WHITTAKER, 'The Right of Access to Environmental Information and Legal Transplant Theory: Lessons from London and Beijing' (2017) 6(3) *Transnational Environmental Law* 509; Global Reporting Initiatives, 'Shining a Light on Human Rights: Corporate Human Rights Performance Disclosure in the Mining, Energy and Financial Sectors' (7 December 2016) <<https://www.globalreporting.org/information/news-and-press-center/Pages/Shining-a-light-on-human-rights-disclosure-.aspx>> accessed 25 April 2018; Claire JEFFERY, 'Comparing the Implementation of the EU Non-Financial Reporting Directive in the UK, Germany, France and Italy' (November 2017) <http://corporate-responsibility.org/wp-content/uploads/2017/12/FB_Comparing-the-EU-Non-Financial-Reporting-Directive_FINAL-2.pdf> accessed 25 April 2018.

cases. We welcome suggestions and criticism. Our Principles are thus not the final word. We hope they will stimulate the debate.

6 Concluding Observations

As indicated above, our group is not a legislative body. Hence, our principles are not 'law'; they are an interpretation of the law as it stands or, in our view, as it will likely develop.

The EPs, and to the extent they rely on the OPs, the OPs themselves, may and almost certainly will be challenged. It is to be expected that the formula determining the primary reduction obligation of states, developed by the OPs, will be scrutinised by several states, enterprises and courts. They may be right in doing so. It can only be hoped that they will realise that it is of utmost importance to secure the goal that global average temperature does not rise by more than 2°C. Hence, if states contend that enterprises in their jurisdictions should do less than advocated by the EPs, they will hopefully ask themselves the question: how else can we achieve a situation in which the fatal threshold will not be passed? Is it realistic to assume that others are going to do more? If, after this, the leaders of a state still believe that enterprises in their country should do less than what is suggested under the EPs, they would then do the world a great favour by persuading the international community to accept their view, which would imply that other states and the enterprises under their control should be bound by more stringent obligations.

If the EPs are challenged, it can only be hoped that those taking that stance:

- (1) will not shy away from taking, in their view, the required steps to avoid global average temperature rise of more than 2°C;
- (2) will not postpone far-reaching reductions, betting on future technology such as carbon capture and storage;²⁹
- (3) will resist the temptation to postpone their actions because some states and enterprises fall short of meeting their GHG reduction targets;
- (4) will explain and justify why they believe that the reductions they are prepared to achieve and the other obligations they are prepared to fulfil amount to the legally required minimum.

29 For more details and further references, see European Academies Science Advisory Council, 'Negative Emission Technologies: What Role in Meeting Paris Agreement Targets?' (February 2018) <https://easac.eu/fileadmin/PDF_s/reports_statements/Negative_Carbon/EASAC_Report_on_Negative_Emission_Technologies.pdf> accessed 25 April 2018.