Strategies to keep global warming below 2 degrees and to avoid devastating liability

Prepared for PRI in Person Conference, San Francisco 2018

By Professor Dr. Jaap Spier
Jaap Spier (1950) graduated from Erasmus University (Rotterdam) in 1973. He was attorney at the Rotterdam Bar until 1977, lecturer of private law, Leyden University (1977-1981), company lawyer Unilever NV (1982-1989) and professor of private law, Tilburg University (1989-1999; after appointment in the Supreme Court part time). Between September 1997-September 2016, he served as Advocate-General in the Supreme Court of the Netherlands (equivalent to Supreme Court Justice). He held an honorary chair at Maastricht University (1999-2016; currently emeritus). Since his retirement, he has held an honorary chair at the University of Amsterdam (from September 2016) and an extraordinary chair at University of Stellenbosch (from 1 July 2016). Jaap is senior fellow Global Justice Program, Yale University.

He received a PhD (Doctor iuris), Leyden University 1981.

Jaap is founder and honorary President of the European Group on Tort Law and co-founder (with Prof. Thomas Pogge, Yale University) of an expert group working on climate change principles (this group launched the Oslo Principles; he served as rapporteur), and co-founder of the Expert group on Principles on Climate Obligations of Enterprises (reporter and author of the commentary). He is fellow of European Institute for Tort and Insurance Law (ECTIL), Vienna.

Jaap is (co-) author or editor of 28 books and hundreds of articles and case notes on tort law and legal aspects of climate change.
1. Introduction

One cannot tell the fortunes. It is, however, crystal clear that climate change entails many challenges for investors with a long-term view. The risks posed by unabated climate change will have a significant impact on the value of their assets, be they bonds, shares or other equity.

This note focusses on equity issued by corporations. That is not to say that bonds issued by states will not be affected by climate change. Whether that is going to happen is rather speculative. Many countries will be impaired by global warming: the adverse impact on the global economy, natural catastrophes, floods, sea level rise, the cost of reduction of GHG emissions and of adaptation. This may have consequences for the willingness or ability to repay bonds. Investors could use their power as (prospective) buyer of such bonds to advocate far-reaching reductions of GHG emissions by the relevant states.

2. The major risks

The risks faced by corporations – and, by the same token, investors – are manifold:

a) the vulnerability of their facilities and property to climate change;
b) the financial effect that climate change will, or is likely, to have on the enterprises’ products and services;
c) the impact on their suppliers and the consequences of such impact on the relevant corporations;
d) the liability risk.

In addition, many enterprises will have to incur often quite substantial costs of mitigation and adaptation (e).

Putting a price tag on these risks and costs is, to some extent, quite a challenge. Much depends on the scenario chosen and the expectations by the best experts in the respective fields. Investors and enterprises would be best advised to take potentially significant financial risks into account, even if the chance that they will materialise is relatively small (the precautionary approach). Enterprises should disclose relevant information about these risks.

Ad (a): The vulnerability of the enterprises’ facilities and property to climate change

Natural catastrophes such as torrential rain, floods, excessive droughts and hurricanes increasingly scourge countries around the globe. They affect enterprises in various ways: their premises may become inaccessible for a period of time, products required for their manufacturing process cannot reach their destination, it may be difficult or even impossible to deliver goods and services to buyers, essential products such as water, electricity and gas may be unavailable for some time or buildings may need to adapt.
Ad (b): The financial impact of climate change on the enterprises’ products and services

As time progresses, ever more stringent reduction of greenhouse gas (GHG) emissions will be required, the demand for energy inefficient products and services will decrease, in part caused by eco-labelling, and an increasing demand for sustainable products or legislation will arise. At some stage, energy-efficient products and services need to be phased out. It is both a challenge and an opportunity to put new and more energy-efficient products and services on the market.

The unavoidable adaptation of products and services comes at a price. Not every enterprise will be able (or willing) to pay that price. Corporations unwilling to attune are doomed to disappear; coal is the perfect example. Enterprises taking the lead to adapt their products and services will likely be market leaders.

Ad (c): The impact on buyers and suppliers

A) and b) will also impair suppliers and buyers. Some of them will go bankrupt. This, in turn, has adverse consequences for enterprises dependent on their goods or services or the sale of their products and services.

Ad (e): The cost of mitigation and adaptation

In the short term, the cost of mitigation may well be very limited. A lot can be achieved by increasing energy efficiency and other no-cost measures such as lowering air conditioning and heating, switching off lighting when not in use and using video conferences instead of extensive travelling. In the foreseeable future, further cuts in GHG emissions may be costly. If corporations postpone curbing their emissions, ever steeper reductions will have to be achieved that may jeopardise their profitability or make it impossible to generate profits any longer.

The aggregate cost of worldwide adaptation will likely be colossal. The city of New York claims that after hurricane Sandy, it “launched a $ 20 billion-plus multi-layered investment program in climate-resiliency.” These are the alleged expenses incurred by one, albeit major, city. The amounts will multiply if all cities, countries and other alleged victims claim the cost of adaptation, even more so if the most recent and rather

---

2 The City of New York v BP and others, United States District Court Southern District of New York, July 19, 2018, decided by Judge John F. Keenan, p. 6; it follows from p. 7 that more is to come. A native village in Alaska sought US$ 400 million from ExxonMobil and other major fossil fuel emitters “to pay for the relocation of their village necessitated by the loss of ancestral lands to sea level rise caused by climate change”, Sarah Barker (Minter Ellison), The Carbon Boomerang, Litigation Risk as a Driver and Consequence of the Energy Transition, http://2degrees-investing.org/wp-content/uploads/2018/01/me_2ii_carbonboomerang_v0.pdf p. 32; the claim was dismissed, but the amount is telling.
alarming messages from climate change scientists become reality, or if we are unable (or unwilling) to keep the rise of global temperature below 2 degrees C.

3. The reduction of GHG emissions

According to the Paris Agreement, the rise of global temperature should be kept “well below” 2 degrees Celsius, a number that will already be a major challenge. If countries comply with their Nationally Determined Contributions under the Paris Agreement, global temperature will rise by at least 2.6 degrees C (https://climateactiontracker.org).

Hence, a swifter transition towards renewable energy is vital (the global economy needs to reduce its carbon intensity five times faster than is currently the case). Most states and many enterprises should be more ambitious about reducing their GHG emissions; a lot would already be gained if enterprises would put lower energy consuming products and services on the market.

No doubt enterprises will reduce – and would already have reduced – their emissions and will take other steps towards carbon-neutrality if they know their legal obligations. For the time being, enterprises are in the dark about the extent of the reductions they have to achieve, and, to a lesser extent, their other climate-related obligations. Investors and the corporate sector would be well advised to promote in-depth research on these obligations. The Principles on Climate Obligations of Enterprises (EP) attempt to discern these obligations; these principles are drafted by a group of international legal experts and are endorsed by 83 distinguished experts from all continents.

Enterprises should not bet on permits, lack of pertinent legislation or case law. It is very unlikely that they do not have legal obligations in the face of climate change. More likely than not, they are bound to curb their GHG emissions, to refrain from putting excessively GHG-emitting products and services on the market and to disclose relevant facts related to climate change. That uncomfortable truth is caused by several inter-related factors:

i) In spite of the almost universally adopted view that far-reaching cuts of global GHG emissions are necessary and urgent, over the past years global emissions have stabilised at best.

ii) The national pledges under the Paris Agreement are insufficient to keep global warming (well) below 2 degrees Celsius. Hence, much more must be done. That cannot be achieved without a major contribution by enterprises.

---

4 PRI, Developing an Asset Owner Climate Change Strategy, https://www.aegon.com/contentassets/4f2ff28004384e7ca6a68bd1fd9f18be/developing-asset-owner-climate-change-strategy.pdf p. 5 referring to the IEA and PwC.
5 Their disclosure obligations are, by and large, well understood. See in more detail the commentary to the Principles on Climate Obligations of Enterprises, www.climateprinciplesforenterprises.org p. 166 ff.
6 See www.climateprinciplesforenterprises.org under resources.
7 See, also for elaboration, EP 2-8, 9-11 and 18-23 and the commentary to these principles.
which is not to say, of course, that enterprises are the only cause of emissions, or that all reductions must be achieved by the corporate sector.

iii) At some stage, legislators will enact legislation or courts will deliver judgements to urge corporations to reduce their emissions to the extent necessary by then. At that stage, steep and costly reductions will be required.

4. **Interim conclusion**

The consequences listed under 2 a-c and e are hardly revelations. The devil is in the details. It will often be difficult to calculate these risks. The calculations may be mistaken, in which scenario the relevant enterprises may face unanticipated – and potentially very costly – consequences. The liability risk is relatively new. It deserves further elaboration; see 5 – 7 below.

5. **The liability risk**

The risk of liability for climate change related losses is no longer a phantom: it is real. It is against the odds that it is not going to materialise at all. See elaboration under 6. Perhaps with the exception of the fossil fuel companies, it is very unlikely that enterprises will face crushing liability in the short term. The many unknowns lie within both ends of the spectre (no liability and crushing liability).

The main unknowns are the potential targets of litigation⁸, the amounts that could be recovered (the scope of liability), the countries where the risk could enfold and when it will materialise. The most obvious bases for liability are insufficient (past and present) GHG reductions and inadequate disclosure. According to an emerging view, GHG emissions can be attributed to the corporation that put the relevant products and services on the market. See elaboration under 6.

It should be reiterated that it is highly unlikely that enterprises do not have legal obligations in the face of climate change, in particular the obligation to reduce their GHG emissions. Such a statement is, however, not overly helpful because it does not shed light on the extent of the reductions that have to be achieved by individual enterprises. Without a clear understanding of one’s obligations, it is impossible to comply. By the same token, it is difficult—not necessarily impossible—to assess whether a specific corporation runs a liability risk. If a corporation did not and still does not reduce its GHG emissions at all, or only to a very limited extent, it is quite likely that it did not comply with its legal obligations, albeit that it is unclear to what extent it violated its obligations; that, again, depends on its legal reduction obligations.

⁸ See extensively Sarah Barker, The Carbon Boomerang, Litigation Risk as a Driver and Consequence of the Energy Transition, o.c.
This paper focusses on the liability risk for losses caused by GHG emissions. Other potential liabilities are not examined.

6. Why liability for climate change losses is a real risk

In his famous presentation “Breaking the tragedy of the horizon”, Governor of the Bank of England Mark Carney signals the liability risk. More recently (November 2017), Anne le Lorier, sous-gouverneur (deputy Governor) of the Banque de France, issued a similar warning. Already in 2010, Munich Re quotes an expert:

Plaintiffs’ lawyers are quite explicit about using a mass-tort and contingency-fee model for future climate change cases. One lawyer representing plaintiffs in the Comer case, for example, was quoted recently as saying: “What’s good about the approach ... is that [it] demonstrates that one case can cause a gigantic litigation problem for corporations. (...) The courts may be waiting to see if federal and state legislatures take firm action to address climate change issues through new statutory laws (...). If clear action is not taken soon, courts may be willing to open the door to private litigation claims that could cost corporate defendants many millions—if not billions—of dollars.

One year earlier, Swiss Re wrote:

While greater public awareness of climate change is fundamentally to be welcomed, this shift has brought with it a number of lawsuits relating to climate change liability aimed at public entities and corporations. For private companies, action has sought redress on various grounds, including the notion of public nuisance or the use of D&O liability. On the whole, courts have until now dismissed lawsuits against private entities. It should be borne in mind that the same was initially true for asbestos-related claims of the 1950s which were driven by a groundswell of public support. By the 1960s, these asbestos-related claims were already becoming successful. At issue is not any correlation between asbestos and climate change, but rather the speed at which an issue can become a widespread topic for collective actions. While a legal basis has been established in the case of a climate change-related lawsuit against a public entity, there has not been a similar standing established against a private entity, at least not by the end of 2008. We expect, however, that climate change-related liability will develop more quickly than asbestos-related claims and believe the

---

9 https://www.bis.org/review/r151009a.pdf p. 4; see also, more pronounced, a reference to Carney by the Deutsche Bundesbank (German Central Bank), https://www.bundesbank.de/Redaktion/EN/Topics/2016/2016_09_23_carney_climate_change.html. See also Bank of England, The impact of climate change on the UK insurance industry, September 2015, p. 3, 7 and 8.


11 Kevin Haroff, Climate-change litigation in the United States, in Munich Re, Liability for climate change? Experts’ view on a potential emerging risk p. 8; depending on the outcome of such cases, billions might well be an extremely conservative estimate, I think. See also Lindene Patton, Why Insurers Should Focus on Climate Risk Issues, in Geneva Association, Risk Management SC5, June 2011, p. 7 ff.
frequency and sustainability of climate change-related litigation could become a significant issue within the next couple of years.\textsuperscript{12}

Others have expressed similar views.\textsuperscript{13} Although not about liability for damages, a recent statement by former Republican Governor of California Arnold Schwarzenegger is telling:

If you walk into a room and you know you are going to kill someone, it's first degree murder; I think the same thing with the oil companies.\textsuperscript{14}

Some cases geared at compensation have already been submitted, a few in the United States\textsuperscript{15} and one in Germany. The German claim was dismissed in first instance; the court of appeal will hear the case on its merits\textsuperscript{16}. Two cases were recently dismissed in the US\textsuperscript{17}.

A series of declarations, codes of governance, guidelines and other authoritative documents emphasise the need to compensate environmental losses and losses caused by human rights violations. Because climate change is at least a human rights issue, and whereas many corporations have pledged to refrain from violations of these rights, it would not be overly revolutionary to translate such violations into liability. This is

\begin{footnotes}
\item[12] Swiss Re, The globalisation of collective redress: Consequences for the insurance industry p. 3.
\item[17] City of Oakland and others v BP and others, United States District Court for the Northern District of California, June 25, 2018, decided by Judge William Alsup and the City of New York v BP and others, United States District Court Southern District of New York, July 19, 2018, decided by Judge John F. Keenan. Judge Keenan explicitly acknowledges the US intent to withdraw the Paris Accords (p. 22). It does not seem beyond imagination that future courts will be reluctant to harp on the political argument if the other branches of the government abstain. See for a different approach Juliana and others v United States of America, the US District Court for the District of Oregon, Eugene Division, 10 November 2016, decided by Judge Ann Aiken. Attempts by the United States to get the case dismissed have failed, so far: https://static1.squarespace.com/static/571d109b0442670152f5eb0/t/5b520bba70a6ad8a16c96312/1532103610664/2018.07.20+JULIANA+NINTH+CIRCUIT+OPINION.pdf.
\end{footnotes}
not to say that liability would be a brilliant idea, but that is a different story. If one is prepared to accept liability, it will be difficult to justify why compensation should be confined to environmental losses, as many of the legal sources cited below seem to suggest.

In the short term, it would be quite a miracle if all countries could reach agreement on an international instrument with legally binding and enforceable obligations of the respective countries to keep global warming (well) below 2 degrees (say, Germany has to curb its emissions by x% annually and Canada by y%). Such an agreement would (probably) leave it to countries to determine the reduction (and other) obligations of corporations active within their territories. If countries would comply with the obligations emanating from these instruments, that would be the best, although not a perfect, shield against liability for current GHG emissions, assuming that enterprises would comply with the obligations emanating from the relevant domestic legislation. At some stage, one or more countries could rescind from such an agreement. The withdrawal by the US from the Paris Agreement and the agreement with Iran and its threat to enterprises that engaged in business with Iran based on the latter agreement are telling examples. That is an inconvenient reality.

In the absence of an international instrument, states may enact legislation with pertinent obligations of enterprises active within their territories. Compliance with these obligations will certainly help avoid liability, but it is no full guarantee. Their courts, or the courts in other countries, may take the view that the obligations are insufficient, for instance because the obligations are based on—say—keeping global warming below 2 degrees, while these courts believe that “well below 2 degrees” means that it should be kept below 1.7 degrees.

A member of the opposition of Ontario (Canada) introduced a draft bill\textsuperscript{18} to establish strict liability of corporations “engaged in the production of fossil fuels” for a wide scope of losses occurring in Ontario\textsuperscript{19}. If adopted, such legislation would be outright disastrous, particularly if other countries followed this ill-considered example and extended it to all enterprises. It would be disastrous because the draft bill apparently creates far-reaching liability for all emissions. That is at odds with the seemingly prevailing view that GHG emissions must be reduced at a great pace, which means that not all emissions are unlawful/can serve as a basis for liability. I emphasise “seemingly”, because the—strikingly widely acclaimed and endorsed—polluter pays slogan may also advance the idea that all emissions give rise to liability; see elaboration below.

---


In the absence of pertinent legislation sufficient to keep global warming (well) below 2 degrees, it is to be expected that ever-more victims will sue alleged tortfeasors (enterprises that, in the plaintiffs’ view, violate their legal obligations) for the victims’ alleged losses that are partly caused by the defendant’s GHG emissions. It will often take years before Supreme Courts in the respective countries deliver their judgements. These courts will have to determine both the content of the obligations in point and the liability issue. If they establish liability, they have to determine its scope. These courts will—probably—try hard to apply the law as it “stood” at the time of the alleged violations. They will face, however, the inconvenient truth that the law was unclear/unsettled. For practical purposes, these judgements will have retro-active effect. At that stage, the past cannot be undone.

Precisely because courts cannot base their judgements about reduction obligations on pertinent legislation, they have to invent the wheel. Prima facie, once a court has decided that the enterprise’s GHG emissions are higher than allowed by law, it seems to follow that liability for damages is only a small step\textsuperscript{20}. Most courts will probably understand that (fully fledged) liability has far-reaching consequences. Many judges may be inclined to err on the safe side unless there is a sound basis for liability or if they believe that (blatant) injustice would be done by leaving victims empty-handed. Courts keen to issue liability judgements may feel encouraged to do so if they conclude that there is a strong and widely accepted current promoting liability. As a rule, courts in developed countries will probably be more cautious than the quite often more ground-breaking superior courts in developing countries, which may not come as a surprise in light of the very different needs of the latter group of countries.

It would not be overly difficult, nor far-fetched, to contend that society, the corporate sector, senior members of the judiciary and senior politicians apparently favour liability. The widely acclaimed “polluter pays principle” might serve as a basis for liability, despite the rather unclear meaning of this concept. In a recent judgement of the Privy Council, Lord Carnwath put it thus:

2. The Polluter Pays Principle (...) is now firmly established as a basic principle of international and domestic environmental laws. It is designed to achieve the “internalization of environmental costs”, by ensuring that the costs of pollution control and remediation are borne by those who cause the pollution, and thus reflected in the costs of their goods and services, rather than borne by the community at large (see eg OECD Council 1972 Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies; Rio Declaration 1992 Principle 16). Most recently, the Principle has been simply expressed in the Draft Global Pact for the Environment, presented by President Macron to the United Nations Assembly

\textsuperscript{20} That is not necessarily the case as it is not self-explanatory that a tiny contribution to global emissions can be labelled as unlawful, even if the emissions are very high. Answering this question in the negative may mean that the law cannot play a role to reduce GHG emissions, an unattractive view.
on 19 September 2017: “Article 8 Polluter-Pays Parties shall ensure that prevention, mitigation and remediation costs for pollution, and other environmental disruptions and degradation are, to the greatest possible extent, borne by their originator”\(^\text{21}\).

A resolution based on the Global Pact, geared at establishing a working group “to consider the report and discuss possible options to address possible gaps in international environmental law and environment-related instruments”, was adopted by the UN General Assembly by 143 votes in favour and six against (among them, the US and Russia)\(^\text{22}\).

In July 2014, the UN Human Rights Council decided to establish a working group on transnational corporations and other businesses with respect to human rights geared at elaborating on an international binding instrument\(^\text{23}\). Twenty countries (including China, Russia and South Africa) voted in favour; 14 voted against (European countries, the US and Japan) and 13 abstained. In September 2017, the working group published “elements for the draft”\(^\text{24}\). The “elements” contain elaborate thoughts on liability, including criminal liability and liability of “natural persons who are or were in charge of the decision-making process”\(^\text{25}\). On 2 July 2018, the UN Human Rights Council welcomed “the work of the United Nations High Commissioner for Human Rights on improving accountability and access to remedy for victims of business-related human rights abuse, and notes with appreciation his report on improving accountability…”\(^\text{26}\).

At first blush, the OECD Guidelines for Multinational Enterprises 2011 are merely a series of guidelines worthy of consideration. According to chapter IV under 1, enterprises must respect human rights, “which means that they should avoid infringing on the human rights of others and should address adverse human rights impacts with

\(^{21}\) Fisherman and Friends of the Sea v The Minister of Planning, Housing and the Environment (of Trinidad and Tobago) of 27 November 2017.

\(^{22}\) \text{www.un.org/press/en/218/ga12015.doc.htm}. Many states from around the globe “reaffirm” “all the principles of the Rio Declaration” (UN General Assembly A/72/L.51.

\(^{23}\) UN General Assembly, A/HRC/RES/26/9.


\(^{25}\) P. 8.

\(^{26}\) A/HRC/38/L.18 p. 3; see also p. 4. See for the “Zero draft” of 16 July 2018, \text{https://www.ohchr.org/Documents/HRBodies/HRCouncil/WGTransCorp/Session3/DraftLBI.pdf}. If adopted, this not overly clear draft may have far-reaching consequences. It follows from the covering Note to the UN High Commissioner for Human Rights of 19 July 2018, \text{https://www.ohchr.org/Documents/HRBodies/HRCouncil/WGTransCorp/Session3/NoteVerbaleLBI.PDF} that the draft is “victim oriented”, which is clearly the case.
which they are involved”. The commentary speaks of “remediation of actual impacts, and accounting for how adverse human rights impacts are addressed”27.

The most important part of this chapter is the obligation of enterprises to respect human rights, which aligns with the emerging view that corporations have to comply with human rights. That matters because climate change clearly has an important human rights dimension that comes with obligations28. The focus on “remediation” is important, in spite of the fact that the guidelines are soft law. Because the guidelines express “the shared values of the governments of countries from which a large share of international direct investment originates and which are home to many of the largest multinational enterprises”29, they carry weight.

Principle 1 of the Global Compact also emphasises that “businesses should support and respect the protection of internationally proclaimed human rights”. Under “What does it mean”, the commentary explains that “a business should (…) address adverse human rights impacts with which they are involved”. Further down, it mentions legal liability in case of infringement and labels Principle 1 as “the baseline responsibility to respect human rights”. It refers to the Guiding Principles on Business and Human Rights, on which the human rights chapter of the OECD Guidelines is based30 for “further conceptual and operational clarity for the two human rights principles championed by the Global Compact”31. The Ruggie Principles are all the more important because they are endorsed by the UN Human Rights Council32.

In 2014, the European Environmental judges issued a declaration on “Environmental responsibility”. It states under “Fundamentals” that “[l]egal liability is based on moral responsibility”. Signatories “feel reasonable responsibility for our environment and for safeguarding the constituent elements of nature”. The “task of legal systems is to provide legal protection for people suffering from environmental pollution and/or exposed to environmental load”. The Declaration continues:

[II] 6. Signatories to the Declaration also emphasize the significance of the enforcement of environmental responsibility….

In 2015, the International Centre of Comparative Environmental Law published a Draft of the International Covenant on the Human Right to the Environment33. It states that the “costs of prevention, pollution reduction, and the fight against pollution, as

27 Under 41, p. 33; see also II. General Policies under A 11 and 12, and VI. Environment. The importance of the Guiding Principles is emphasised by the UN Human Rights Council on July 2, 2018 o.c.
29 Foreword p. 3.
30 Foreword to the OECD Guidelines p. 3.
32 Resolution 17/4 of 16 June 2011.
well as the costs of repairing environmental damage, must be borne by the polluter” \(^{34}\), while everyone “who is responsible for damage to the environment is obligated to restore to its original state” \(^{35}\).

A series of codes of conduct and authoritative reports point to access to effective remedies, albeit that it not always clear what exactly the drafters had in mind. John Knox’s Framework principle 10 reads: “States should provide for effective remedies for violations of human rights and domestic law relating to the environment”, which explicitly includes “remedies against private actors” \(^{36}\).

There is not much reason to assume that judges opting for liability will confine themselves to environmental losses, which does not necessarily mean that they will lend their ears to pleas for liability for every and all losses.

For the avoidance of doubt, this paper does not suggest that these sources unequivocally support liability, let alone potentially crushing liability, as will be discussed under 7. Nor does it speak in favour of far-reaching liability. The gist was to highlight that the liability risk is no longer negligible, to say the least. Upscaling reductions of GHG emissions or complying with the EP will lower the liability risk.

Courts unwilling to establish liability have easy ways out. The most obvious and – seen from a legal angle, the strongest – are:

- determining the obligations of enterprises is a political issue and not a matter to be decided by courts;
- the contribution of most defendants’ GHG emissions to the alleged losses is too small; \(^{37}\)
- there is no legally relevant causation and/or the link between the emissions in point and the alleged damage is too speculative \(^{38}\).

According to an emerging view, fuelled by research by Richard Heede and others, a significant part of the global GHG emissions can be attributed to less than 50 fossil fuel companies \(^{39}\). That view is based on both historical emissions and emissions caused by the products these enterprises have put on the market. The legal basis for that the attribution of scope 3 emissions to the fossil fuel industry is not very strong \(^{40}\).

\(^{34}\) Art. 4; see also art. 1 para 1 and 2, art. 2 para 4 and art. 3.

\(^{35}\) Art. 6.


\(^{37}\) That argument carries less weight if one adopts Heede’s approach, mentioned in footnote 39 below.

\(^{38}\) See for elaboration and further defences Ina Ebert, Climate Liability and Liability Insurance, in Helmut Koziol and Ulrich Magnus (eds), Essays in Honour of Jaap Spier p. 79 ff.


\(^{40}\) See for elaboration the commentary to the EP p 32 ff.
For potential liability of directors and officers, we refer to recent publications.1

7. The potential scope of liability

The potential scope of potential liability is to a significant extent in the laps of the Gods. The first question that has to be answered is whether there is a legally relevant causal link between a specific loss and the emissions of a defendant-enterprise. Take a hurricane that destroys houses, factories and the infrastructure (roads, electricity supply) in the Philippines. In the upshot of this catastrophe, people will lose their jobs, local sellers will be impaired, destroyed factories may go bankrupt, and so on. Over the next 20 years, new hurricanes will scourge the same place. It is not self-explanatory to deny or to accept legally relevant causation. Nor is it obvious that all these losses can be attributed pro rata parte to specific enterprises in, say, the Netherlands or Australia. Applying traditional legal concepts, claims for many of these losses may not stand a favourable chance. The unfortunate consequence of such a position is that victims would have to keep the losses for their own account, which is not very appealing either. Time will tell whether courts will keep the floodgates shut. It would not come as a complete surprise if courts in developing countries will be more generous to victims than courts in developed countries.

Another legal vehicle to keep liability within “bearable limits” is the duty of care. Judges keen to keep the floodgates shut (not a legal argument stricto sensu, but it often captures the mind of judges) may take the view that this duty is only owed to a small group of “people”.

Deciding this thorny issue is predominantly a matter of judicial policy, which makes the outcome rather unpredictable, in particular in the somewhat longer term as the adverse consequences of climate change will become increasingly disastrous.

Even if all, or most, claims would be doomed to founder, there is a fair chance that the adverse financial consequences will be significant: daunting amounts of defending court cases and the impact of litigation on the price of shares. In 2015, US security class actions caused investor losses of US$ 183 billion.2 They were only about security class actions (mostly unrelated to climate change), but the staggering amounts are telling about what could happen if litigation about losses caused by climate change conquers the world.

8. Conclusions

It follows that corporations would be best advised:

a) to reduce their GHG emissions as much as reasonably possible;

---


2 The Carbon Boomerang, o.c. p. 63.
b) to consider reductions beyond their current obligations, which will lower the potential liability for historical emissions;
c) to lobby for adequate and binding international instruments with detailed and pertinent obligations of states and enterprises to keep global warming (well) below 2 degrees; and
d) to promote non-liability for past and present emissions if they comply with the obligations mentioned under c.

9. Responsibilities of investors

Investors with a long-term view, such as pension funds and (re)insurers, would do themselves, their investees, pensioners and the world at large a great favour by promoting reductions mentioned under 8 a) and b) and to lobby for instruments mentioned under 8 c) and d). Their fiduciary duties – or the non-common law equivalent thereof – come with the responsibility to take the issues mentioned under 2–7 above into account in their investment decisions and strategies. As Sarah Breeden put it:

“[i]t’s a tough ask that gets more pressing by the day. The prize could not be more important. We must keep up the good work”43.

43 O.c. p. 7 in the context of enterprises.