

Legal Strategies to Come to Grips with Climate Change

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Abstract

Most global crises (climate change, unsustainable development, environmental degradation and financial downturns) have quite a lot in common. They have largely the same causes: short-term views, giving priority to personal interests, and greed. So far, the debate largely focuses on ex post remedies. This is a rather unsatisfactory approach. It means that people accept massive and unnecessary human suffering and try to compensate for the losses after the event. Realistically, states and enterprises will not have enough funds to compensate for the global losses that will accrue over time. Instead, a change of mindset is needed: how can global evil – to an extent unheard of before – be avoided?

This contribution puts emphasis on the major challenge of the present time: climate change. It aims to contribute to the debate by submitting concrete suggestions how to overcome the deadlocked position. Some of the key questions are: What has to be done by each national state and each enterprise? Should each of them curb its GHG emissions, and, if so, to what extent? Can these obligations be enforced, if need be? How can coalitions of allies be forged to stem the tide?

A. Introduction

This contribution is a summary of the book *Shaping the Law for Global Crises*.¹ This book was based on the idea that global crises, such as climate

1 Spier (2012). *Shaping the Law for Global Crises* was written by the author of this article as a fellow of Stellenbosch Institute for Advanced Study (Stias), Wallenberg Research Centre at Stellenbosch University, Marais Street, Stellenbosch 7600, South Africa. This article, too, was written at Stias (as a fellow), a true paradise for research. I am most indebted to Stias' director Prof. Hendrik Geyer for his warm support for an

change, unsustainable development, environmental degradation, financial downturns, and even – albeit to a lesser extent – poverty have a lot in common. They largely have the same causes, namely short-term views and greed of those who wield power, and the inability of so many to resist mixing up personal interests with those they should focus on. If this assessment is by and large correct (although obviously not complete), it follows that the solutions are very similar. People in responsible positions should be encouraged to refrain from focusing on the sway of the day, and should develop views that go beyond the next elections or the next annual (or quarterly) report. Wrong incentives should be removed. This contribution will only focus on climate change.

It is unrealistic to assume that a change of mindset, as just advocated, will materialise without the right incentives and, where needed, the right correction mechanisms – in brief, the stick and the carrot.

Part of the problem is that some (arguably quite a few) senior politicians and business people may understand and even be willing to change course, but do not know with sufficient precision what they have to do and why. Those who would argue along these lines would certainly have a point, namely that it is no excuse to stick to business as usual, as it is often clear that they should *at least* curb greenhouse gas (GHG) emissions to a larger extent than they actually do.

In the author's assessment, little progress can be expected until it can be determined with sufficient precision what the respective players have to do and why that is the case. But even then, irresistible pressure may be needed. Almost certainly, courts will have to step in, given that there is little, if any, hope that enforceable political solutions can be reached in the foreseeable future – and that it is high noon. With a few exceptions, few (superior) courts will be prepared to deliver the bitterly needed courageous judgements. Judges willing to abstain – arguably most judges – would have rather easy excuses as long as the law is insufficiently 'settled'. Also for that reason, it is vital to map the law as it (probably) stands in relation to the rights and obligations of the major players in these fields.

The author realises only too well that the submissions below are work in progress. The issues at stake are tremendously complex. Despite the fact that

international project focussing on Shaping the Law for Global Crises. The just mentioned book is the first fruit of this project. It has been approached from a broader perspective by experts from various legal disciplines and various countries in fall 2012. A few new developments and new insights have been added where appropriate.

it seems quite possible to draft a *kind of* blueprint, there remains a rather broad grey zone where it will be difficult, if not impossible, to determine the law as it stands. A myriad of questions cannot be answered in a very pertinent way, but quite a few can.

The gist of the book and of this contribution is obviously not to submit a final blueprint; that would be pretentious. The author's submissions will hopefully serve as a fruitful basis for further discussion.

B. Is there any Need for Legal Action Right Now?

According to the prevailing view among climate change scientists, climate change poses a very serious threat to humankind, unless the level of greenhouse gas emissions is reduced significantly at great pace, right now. Even then, it can no longer be taken for granted that society will be spared a change of climate with many deleterious consequences. But the nastiest consequences can still be avoided.

Not all leading scientists subscribe to the view that the climate will change unless GHG emissions are curbed substantially. Let alone that it is high noon. Some sceptics deny any relationship between GHG emissions and climate change. Other scientists speak of (major) uncertainties. They are prepared to accept that there *might* be a relationship between a high level of GHG emissions and climate change, but they point at major uncertainties.

Last, but certainly not least, opinions diverge as to the urgency. Quite a few experts seemingly take the view that climate change can be kept under (reasonable) control if GHG emission reductions are commenced in the years to come, whereas, in fact, they have to be curbed by 80% (or more) by 2050. Others suggest that reductions of 6% a year, if not a higher percentage, are imperative.²

One of the inherent difficulties in this field is that the relevant data about the level of global GHG emissions, on which the respective theories are based, change at a staggering pace. According to the chief economist of the International Energy Agency quoted by Reuters, the present trend is "in line with a temperature increase of 6 degrees Celsius [by 2050], which could have devastating consequences for the planet".³ Put differently, the Inter-

2 See in more detail Spier (2012:11 and 61ff.).

3 See <http://www.reuters.com/article/2012/05/04/co2-iae-idUSL5E8GO6B520120524>, last accessed 12 September 2012.

governmental Panel on Climate Change (IPCC) and similar institutions unavoidably lag behind the facts. In turn, their predictions and calculations, often based on (small) decreases of the global emissions, are often outdated and, worse, turn out to be far too optimistic.⁴

C. How to Cope with these Uncertainties?

Are the uncertainties, briefly mentioned in Section B, a justification to stick to business as usual? Seen from a moral and a legal angle, the answer obviously is in the negative. Given the significant adverse consequences of a rise of global temperature of more than 2°Celsius, the toll in human and economic terms⁵ will be way too high. Seen from a legal perspective, it is beyond reasonable doubt that society is obliged to change its accustomed ways radically. To that extent, the precautionary principle paves the way.

The precautionary principle was already embedded in Principle 15 of the Rio Declaration: “lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation” where there are “threats of serious environmental damage”.

A clearer definition is given by the EU Commission. The principle applies –⁶

in those specific circumstances where scientific evidence is insufficient, or inconclusive or uncertain and there are indications through preliminary objective scientific evaluation that there are reasonable grounds for concern that the potentially dangerous effects of environmental, human, animal or plant health may be inconsistent with the chosen level of protection.

4 Besides, one cannot escape from the impression that some calculations by international ‘bodies’ are based on hard fought compromises, i.e., paint a too optimistic picture at the time of publication.

5 See *inter alia* the report by the Stern-commission, Stern (2006). The report departs from grossly outdated assumptions. This means that we may take it for granted that the economic devastation will be considerably higher if we (largely) stick to business as usual.

6 COM (2000:9f.).

The principle also belongs to the domain of supranational law.⁷ It has been applied by courts around the globe.⁸

The author has little doubt that it belongs to the hard core of this realm of the law.⁹ The question whether or not a person is liable depends in many legal systems on the question whether or not he measured up to the standard of conduct of a reasonable person in the given circumstances. In that respect, regard must be given to the dangerousness of the activity, the foreseeability of the damage and the availability and costs of precautionary measures.¹⁰

In a number of tort law cases – particularly, but not only in the field of personal injury – courts are sometimes inclined to “regard fantastic possibilities as reasonable possibilities”¹¹ The idea that liability *would (have to) be* established in case of even a remote chance of materialisation of a *single* personal injury due to a specific act or omission, *but not* in relation to the extremely serious harm suffered as a consequence of climate change by

7 See, e.g., *United Kingdom v Commission* [1996] ECR I-3903; NFU [1996] ECR II-815; Zander (2009:49ff.). The Swedish position is particularly interesting. In environmental matters “actions to protect the environment should only not be taken where this is not ‘environmentally motivated’. The presumption is thus that measures should be taken. Only where great costs would only result in marginal environmental improvement should they not be taken” Zander (2009:202). See also Shaw (2008:860ff.) and Casese (2005:489ff.). See also OHCHR (2009:29); and ILA (2010:375). It is mentioned in OECD (2011:22, 31 and 44). According to Shelton (2011:440), the precautionary principle has begun to play a role in bringing more risks within the ambit of human rights.

8 See e.g. Supreme Court of Canada, *Ltee (Spraytech) v Hudson (Town)*, (2001) 2 S.C.R. 241, 2001 SCC 40 per l’Heureux-Dubé §§ 31ff.; Supreme Court of India (*Vellore Citizens Welfare Forum v Union of India and Others*), AIR 1996SC2715; Supreme Court of the Philippines (*Oposa et al. v Fulgencio Factoran et al.*); Supreme Court of Sri Lanka (*Bulankulama v Secretary, Ministry of Industrial Development*); Supreme Court Pakistan (*Shehla Zia v Wapda*, PLD 1994 Supreme Court 693); High Court of Kenya (*Waweru v Republic* (2007) AHRLR 149 KeHC 2006)); Federal Court of Appeal of La Plata (*Asociacion Coordinadora de Usuarios, Consumidores y Contribuyentes v ENRE-Edesur* of 8 July 2003); see for the laws of the US, UK and Sweden, Zander (2009:163ff.). See also respective contributions in Macrory (2004); Scott (2004); Lavrysen (2004); Wegener (2004); Pagh (2004); Grassi (2004); Smorenburg-van Middelkoop (2004); Aragao (2004); Moreno (2004); and Macrory & Havercroft (2004).

9 See for a further elaboration Spier (2011).

10 See, e.g., Article 4:102 Principles of European Tort Law (PETL). This principle is in line with the prevailing view in many European countries; see for more details Widmer (2005:75ff.) and van Dam (2007:189ff.). See for US law Dobbs (2000:337).

11 Van Dam (2007:200).

a great many people is untenable. Such a view cannot be justified. The mere fact that it *may* turn out that the sceptics are right cannot serve as a justification for a fundamentally different treatment of both cases.

Lesser probabilities than climate change have been the basis of far-reaching *political* decisions. The One Percent Doctrine of the Bush (II) administration may serve as an example. According to Suskind, it was articulated by then Vice-President Cheney who would have argued:¹²

If there is a 1% chance that Pakistani scientists are helping Al-Qaeda build or develop a nuclear weapon, we have to treat it as a certainty in terms of our response. It's not about our analysis It is about our response.

The author readily admits that dealing with uncertainties is risk-ridden. Wrong decisions may turn out to be very costly. But that goes both ways. Ignoring a major probability which, if it materialises, will cause very serious damage will elicit the contempt of future victims. When the risk materialises, the people who feel the adverse consequences will not understand how and why those risks were deliberately taken.¹³ Even right now, there is no convincing justification. The position that the fruits of our activities are our deserved gain and that the mess may be left to others cannot serve as a justification. Realistically, there is no other ground for a laissez-faire attitude.

By the same token, legal strategies must be based on “reasonable worst case-scenarios”, i.e. doom scenarios based on sufficiently sound predictions. It follows that the stakes are so tremendously high, that it is a legal imperative to stay on the safe side. Besides and more importantly, the recent data point at a (much) higher level of emissions than anticipated in most studies executed a couple of years ago, and there is little reason to believe that the tide can be stemmed, so we can no longer base our arguments on outdated estimates. If some leading experts, even if they are a clear minority, paint a dark picture of the future unless society at large embarks on far-reaching reductions of GHG emissions, we have to use their findings, if sufficiently plausible and based on proper research, i.e. research based on the best available techniques and insights, as a point of departure.¹⁴

12 Quoted by Fox-Keller (2011). Fox-Keller was also a Stias fellow those days.

13 This has happened quite often in the past, asbestos, diethylstilbestrol (DES) and tobacco may serve as examples.

14 This submission is admittedly a bit vague. Not being an expert in the field of climate change science, I cannot be much more precise. For the reasons mentioned in the text, we must stay on the safe side. I.e., research done by serious scientists, pointing

D. Foundations for Legal Action

I. Introduction

So far, this article has arrived at the conclusion that a) it is high noon and b) that a certain level of uncertainty does not bar legal action. That raises the question whether there would be legal bases for legal action. The answer is in the affirmative. Legal concepts, doctrine and case law may be borrowed from many fields. Below, the author confines the argument to a few potentially promising bases.

Even if there were legal bases for litigation it may be an uphill fight in quite a few countries. Firstly, not every court in the world is (truly) independent. Secondly, it requires judicial courage to fill the (legal) gap or to apply well-established concepts in untraditional settings. Thirdly, quite a few obstacles would have to be removed. They will be briefly discussed below in Section F.

II. International Law

Over the years, protection of the environment and the need to place emphasis on prevention has gained ground.¹⁵ A recent judgment of the International Court of Justice in the so-called *Pulp Mills* case¹⁶ may serve as a clear sign post. The Court put it as follows:

there are situations in which the parties' intent upon conclusion of the treaty was, or may be presumed to have been, to give the terms used – or some of them – a meaning or content capable of evolving, not one fixed once and for all, so as to make allowance for, among other things, *developments in international law*.

In that sense –¹⁷

the obligation to protect and preserve... has to be interpreted in accordance with a practice, which in recent years has gained so much acceptance among States

at higher risks or more devastation than most experts predict, cannot easily be ignored. The question of what that means in a specific case can only be answered on the merits of the relevant facts and circumstances.

15 See Sands (2003:241ff. and 246ff.).

16 *Pulp Mills on the River Uruguay (Argentina v Uruguay)*, Judgment of 20 April 2010.

17 See in more detail Rieter (2010:20ff.).

that it may now be considered *a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a trans-boundary context ... Moreover, due diligence and the duty of vigilance and prevention* which it implies, would not be considered to have been exercised, if a party planning works are liable to affect the régime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works. (emphasis added)

This leaves untouched (§ 205) that ‘general international law’ does not specify its scope and content. Each state has to determine in its domestic legislation or in the authorisation process for the project –

the specific content of the environmental impact assessment required in each case. Having regard to the nature and magnitude of the proposed development and its likely adverse impact on the environment as well as to the need to exercise due diligence in conducting such an assessment Moreover, once operations have started and, where necessary, throughout the life of the project, continuous monitoring of its effects on the environment shall be undertaken.

States particularly have obligations to ensure that activities within their jurisdiction and control respect the environment of other states or areas beyond national control. That obligation is part of “the corpus of international law relating to the environment”.¹⁸ Several international instruments even go a step beyond this obligation.¹⁹

Many courts have delivered judgments based on the *no harm rule*. This rule is also incorporated in various international documents,²⁰ such as Principle 21 of the Stockholm Declaration 1972:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdictions.

Given the transnational, if not global, impact of GHG emissions on climate change, there is little room for doubt, the author thinks, that international law comes into play in the case of excessive emissions.²¹ But it is at least

18 ICJ Advisory Opinion on the Threat or Use of Nuclear Weapons.

19 Rieter (2010:21). See about international environmental law the impressive treatise of Sands (2003) also for a wealth of references.

20 Schwarte & Byrne (2010).

21 See for more details Kilinski (2009:387ff.); O’Brien (2001:566ff.).

open to debate whether it points at very precise rights and obligations of the respective states.

III. Human Rights²²

Human rights encompass the right to a healthy environment, and civil, cultural, economic, political and social rights.²³ More generally, many courts cast environmental protective action in human rights terms.²⁴ Special rapporteur Fatma Zohra Ksentini has suggested that the UN Human Rights Committee –²⁵

could expand its general comment on the right to life in order to include environmental concerns or formulate a general comment defining the links between civil and political rights and the environment. Moreover, it should be able, through dealing with complaints, to establish case law that will accommodate environmental concerns.

If the fatal tipping point (an increase of global temperature by more than 2° Celsius) is passed – either because we are unable or unwilling to curb GHG emissions significantly in the near future – a series of catastrophes will set in. Cast in *legal* terms, they bring, *inter alia*, the right to life into the picture.²⁶ The same goes for “family life”, embodied in, *inter alia*, Article 8 European Convention on Human Rights.²⁷ These catastrophes will further impair the already not so enjoyable living conditions of the most vulnerable people around the globe and, by the same token, affect a series of social and economic rights.

22 See about the reach of human rights Gondek (2009) and McInerney-Lankford et al. (2011).

23 Shaw (2008:848ff.). The New Partnership for Africa’s Development (NEPAD) Declaration (2001) reveals that African leaders “have learned from their own experiences that … good governance, human rights and sound economic management are conditions for sustainable development.” They pledge “to work… to promote these principles in their countries …” (para. 71). See also the 2002 NEPAD Declaration on Democracy, Political, Economic and Corporate Governance para. 9; Article 24 African Charter on Human and Peoples’ Rights and Article 11 Protocol of San Salvador; Kravchenko (2008:533).

24 Kravchenko (2008:513ff., 523f., 528f. and 536).

25 Quoted by Kravchenko (2008:526).

26 See for more details, *inter alia*, Abate (2007:3ff., particularly at 40ff.).

27 The ECHR has pointed at Article 8 in several environmental cases; see Kravchenko (2008:529).

In her annual report of 15 January 2005, the UN high commissioner for Human Rights addresses the relationship between climate change and human rights.²⁸ She observes that –²⁹

the United Nations human rights treaties bodies all recognize the intrinsic link between the environment and the realization of a range of human rights, such as the right to life, to health, to food, to water, and to housing.

She subsequently pays attention to the impact of climate change on these and other rights (such as the right to life).³⁰ According to the high commissioner there is “broad agreement that climate change has generally negative effects on the realization of human rights”. She discusses the question whether this implies that “such effects can be qualified as human rights violations in a strict legal sense”³¹

Irrespective of whether or not climate change effects can be construed as human rights violations, human rights obligations provide important protection to the individuals whose rights are affected by climate change ...

States must take “deliberate, concrete and targeted measures” making the most efficient use of available resources “to move as expeditiously and effectively as possible towards the full realization of rights”, but irrespective of resources they *must* “guarantee non discrimination in access to economic, social and cultural rights”.³² In the concluding chapter the notions above are summarised as follows:

96. The physical impacts of global warming cannot easily be classified as human rights violations, not least because climate change-related harm often cannot clearly be attributed to acts or omissions of States. Yet, addressing that harm remains a critical human rights concern and obligation under international law. Hence, legal protection remains relevant as a safeguard against climate change-related risks and infringements on human rights resulting from policies and measures taken at the national level to address climate change.

In a resolution of 26 March 2008 the UN Human Rights Council emphasised that –³³

28 United Nations, General Assembly, A/HRC/10/61.

29 (ibid.:7 and 22).

30 (ibid.:8ff.).

31 (ibid.). It follows from no. 72 that States may not be *responsible* for the harm; see on causation Spier (2012:175ff.).

32 United Nations, General Assembly, A/HRC/10/61, 25.

33 Quoted by Kravchenko (2008:525). See also ILA (2010:394f.).

climate change poses an immediate and far-reaching threat to people and communities around the world ... [which] has implications for the full enjoyment of human rights.

The African Commission on Human Rights has issued a resolution on climate change. The resolution almost explicitly labels it as a human rights issue.³⁴

There is an emerging school of thought among academics that climate change entails a human rights aspect.³⁵ Various human rights can be called to aid.³⁶ For instance the right to life, health, food and culture.³⁷ The right to water (important as droughts become more frequent and glaciers melt) is in the process of becoming a customary norm.³⁸

1. Unorthodox Exercises

In many cases, also in the field of industrial activities, human rights courts have arrived at the conclusion that human rights have been violated. Early cases were about nuisance (excessive noise) caused by airports and aeroplanes. States have a certain margin of appreciation, but excessive noise is labelled as a violation of Article 8 of the European Convention on Human Rights.³⁹ Much more spectacular is a series of other cases, also decided by the European Court of Human Rights. The most inspiring probably is *Öneryildiz v Turkey*.

Since the early 1970s a household-refuse tip had been in operation near Istanbul. From 1972 onwards, the site was used as a rubbish tip by the local authorities. In those days the area was uninhabited. However, as the years passed, rudimentary dwellings were built without authorization in the surrounding area. They eventually developed into slums. At some stage the houses were more or less legalized. The tip no longer exists. It was covered with earth. In 1989, the authorities started to redevelop the rubbish tip. In 1991, it turned out that the tip did not conform to the technical requirements and presented a number of dangers

34 Resolution adopted 25 November 2009, ACHPR/Res153 (XLVI) 09.

35 See, e.g., Lord et al. (2011:38, 39 and 40) referring to Humphreys (2009). On p. 40 they point at a series of specific human rights that come into play; Ruppel & van Wyk (2011:10ff.).

36 See in more detail McInerney-Lanford et al. (2011:11ff.).

37 See also for further references, the passionate contribution of Kravchenko (2010).

38 Kravchenko (2010:48–49).

39 See, e.g., ECHR *Deés v Hungary; Borysiewicz v Poland; Leon and Agnieszka Kania v Poland; Oluic v Croatia*.

liable to give rise to major health risks for those living in the slum areas. Experts put forward the risk of an explosion. Their report was brought to the attention of the authorities. The local authorities refused to close the tip. In 1993, an explosion occurred. The refuse erupted from the mountain of waste and engulfed ten dwellings, including the house of Mr Öneyildiz. Thirty-nine people died.

According to the Court Article 2 of the European Convention on Human Rights puts a positive obligation on states to take appropriate steps to safeguard the lives of those within their jurisdiction. This applies to any activity, whether public or not, in which the right to life may be at stake, and *a fortiori* in the case of industrial activities, which by their very nature are dangerous (para. 71).

The state must put in place a legislative and administrative framework designed to provide effective deterrence against threats to life. This undisputedly applies particularly in the context of dangerous activities. The court emphasises the *potential risk to human life*, which means that urgent consideration must be given to the licensing, setting up, operation, security and supervision of the activities that could jeopardise the life of people, and places all those concerned under an obligation to take practical measures to ensure the effective protection of citizens whose lives might be endangered by the inherent risks (§§ 89 and 90).

The sting is in the tail. Where lives have been lost in circumstances potentially engaging the responsibility of the state, Article 2 of the Convention entails a *duty* to ensure an adequate response, also to the effect that breaches are repressed and punished (§ 91). This also applies in the context of dangerous activities when lives have been lost as a result of events occurring under the responsibility of the public authorities. The authorities must be prosecuted if their negligence goes beyond an error of judgement or carelessness (§ 93).

A similar message is conveyed in an ECHR judgment in the case *Budayeva et al. v Russia*.⁴⁰

Another case, decided by the same court, also deserves our attention. In 2002, a young child, hereafter named J, was kidnapped and subsequently killed by Gäfgen. Gäfgen asked for €1 million. After his arrest, he was told by a police officer that he was suspected of having kidnapped J. Gäfgen suggested that J was being held by another kidnapper. The next morning the officer, acting on the orders of the deputy chief of police, told Gäfgen that he would suffer considerable pain at the hands of a person specifically trained

40 See also *Kalender v Turkey*; *Dink v Turkey*; *Pasa a.o. v Turkey* and *Osman v UK*.

for such purposes if he did not disclose the child's whereabouts. Gäfgen disclosed the whereabouts within ten minutes. At that place the victim's corpse was discovered. According to the deputy chief of police, J would have been in great danger, if still alive. The threat of torture was ordered to save J's life.

The European Court of Human Rights⁴¹ held that Article 3 of the Convention (the prohibition of torture) enshrines one of the most fundamental values of democratic societies. It makes no provision for exceptions; no derogation is permissible, *even in the event of a public emergency threatening the life of the nation* (§ 73). Furthermore, ill-treatment must attain a minimum level of severity to qualify as 'torture'. A threat also falls within the scope of Article 3, provided that threat of torture is sufficiently real and immediate (§§ 65 and 66).⁴²

The *Gäfgen* case, of course, is a very sad and very unusual one. Climate change is not about (threat of) torture to a not-so-innocent person. So it does not fall under the umbrella of Article 3 of the European Convention. Most lawyers stop thinking at this stage. Seen from a strict doctrinal viewpoint, they may be right that the *Gäfgen* judgement cannot serve as an underpinning for unrelated cases. It is true that the law has developed haphazardly. Protection to (potential) victims has given rise to a myriad of rules, most of them well-considered on their *own merits*.⁴³ Thus, a strange patchwork has been created. Very few lawyers think about internal consistency; they just apply the rules as they stand. Yet, it would be unsatisfactory if human rights could only come into play in relation to *relatively minor* offences.⁴⁴

The Grand Chamber of the European Court on Human Rights harped on the realities that had to be taken into consideration in interpreting Article 5

41 *Gäfgen v Germany* (Grand Chamber, 30 June 2008).

42 See also *A. v Netherlands* and *Saadi v Italy* (Grand Chamber). See for a similar view the (majority of the) Israeli Supreme Court in *John Does v Ministry of Defence*. In the context of inhuman treatment, the ECHR has dealt with a series of cases about people who were expelled to a country where, in the allegations of those to be expelled, they would run the risk of ill-treatment. According to the ECHR, prohibition of ill-treatment under Article 3 is absolute. The Court was indifferent to the pleas by various countries that the individuals concerned posed a threat to national security; see *A. v Netherlands*; *R. v Netherlands* and *N. v Sweden*.

43 But most are about trivial issues, such as all kinds of consumer protection.

44 See for a similar view Nollkaemper (2007:2876). To avoid misunderstanding: I do not want to suggest at all that individual violations are not appalling. Some even are extremely serious. But that is not my point.

paragraph 3 of the European Convention (the right to liberty and security), i.e. the growing and legitimate concern both in Europe and internationally, in relation to environmental offences.⁴⁵ Admittedly, the case was not about climate change, but concern for the environment and the need to adapt the interpretation to cope with the concern could easily be extrapolated, the author thinks.

The General Assembly of the United Nations has adopted a Millennium Declaration.⁴⁶ Under the heading of Values and Principles, mention is made of solidarity, i.e. global challenges must be managed in a way that distributes the costs and burdens fairly in accordance with basic principles of equity and social justice.⁴⁷ The heads of state and government pledged, *inter alia*, that they will “make every effort... to embark on the required reduction in emissions of greenhouse gases”.⁴⁸

2. *The Role of Enterprises*

Traditionally, it is open to debate whether enterprises are bound to comply with human rights (law).⁴⁹ In this respect, the Ruggie Principles and the OECD Guidelines for Multinational Enterprises come into play.⁵⁰ They clearly and convincingly point at the need for enterprises to refrain from violations of human rights. This view is endorsed by, *inter alia*, the UN Human Rights Council and the UN Commission on Economic, Social and Cultural Rights.⁵¹

45 *Mangouras v Spain*.

46 A/RES/55/2 of 18 September 2000. See also the Millennium Development Goals 1 (eradication of poverty) and 7 (sustainable environment) and about these Goals UNDP (2007).

47 A/RES/55/2 of 18 September 2000, 2.

48 (*ibid*:6).

49 See extensively Kammenga & Zia-Zarifi (2000).

50 It should be borne in mind that the OECD-Guidelines are not legally enforceable.

51 E/C.12/2011/1; Statement on the obligations of States Parties regarding the corporate sector and economic, social and cultural rights. This means effectively: safeguard rights holders against infringements and ensure effective remedies. See in more detail Clapham (2006:268). Earlier, he put it this way: “The message is that international human rights obligations can fall on States, individuals, and non-state actors.... With more and more national jurisdictions applying international human rights law as the law of the land, we look set to see an increasing acknowledgement of the relevance

IV. National Tort Law

The legal systems of common and civil law countries have a lot in common. If we disregard specific provisions about strict liability or national provisions on environmental liability – which largely diverge in Europe – there is considerable agreement that one is not allowed to expose others to a more than remote chance of significant damage.⁵² A very recent and important book paints a fascinating picture of the law as it stands in many legal systems; and the book is by no means confined to tort law.⁵³

The reasonable person (*bonus pater familias*) is often considered to be the yardstick for proper conduct. What can reasonably be required from such a person?⁵⁴ The European Principles on Tort Law elaborate on this topic as follows: it depends –⁵⁵

in particular, on the nature and the value of the protected interest involved, the dangerousness of the activity, the expertise to be expected of a person carrying it on, the foreseeability of the damage, the relationship between those involved, as well as the costs of precautionary or alternative methods.

A similar approach is adopted in, for instance, the United States,⁵⁶ China,⁵⁷ New Zealand,⁵⁸ Australia⁵⁹ and South Africa.⁶⁰ The International Commission of Jurists seems to take a similar position.⁶¹

It is true that not all of the just quoted criteria point in the direction of liability. For instance, there is no relationship (proximity) between, say, a German enterprise and the people in Bangladesh; arguably not even between the German people and a German enterprise based on one single or perhaps a very few German locations.

Expenses that have to be incurred to reduce GHG emissions play a role. But the importance of this factor should not be overstretched. More likely

of human rights norms for judging the conduct of private actors” Clapham (2006:58). See about specific cases Clapham (2006:347ff. and 437ff.).

52 See Article 4:102 para. 1 PETL.

53 Lord et al (2011).

54 See in more detail van Dam (2007:189f.).

55 Article 4:102 para. 1 PETL.

56 Dobbs (2000:§ 145).

57 Koziol & Zhu (2010:340).

58 Hodge et al. (2006:212ff.).

59 Trindade & Cane (1999:341ff.).

60 Neethling et al.(2009:36ff.).

61 International Commission of Jurists (2008:19).

than not, the costs involved are affordable, at least so far. Given the magnitude and seriousness of the threats of climate change, the major chance that these threats will materialise and the evil done in case of materialisation if we do not change course, a certain financial backdrop will certainly not be a justification to refrain from taking the necessary steps to curb GHG emissions. All the less so, as the enterprises that are unwilling to incur costs to curb their GHG emissions will be much more adversely affected in case the threats materialise.

The other factors clearly point in the direction of an urgent need to cope with the threats of climate change, i.e. the obligation to curb emissions. I have little doubt that the factors pointing at the need to take action outweigh the others, given the seriousness of the threats and the colossal damage that will accrue if we do not change course radically.

*E. By how much should GHG Emissions be Reduced?*⁶²

The most difficult question is the level of reductions of GHG emissions legally required.⁶³ According to the prevailing view, the obligations of the respective countries diverge (the common but differentiated responsibility concept). Rightly so, the author thinks. After all, many, predominantly African, Asian and Latin American countries did not cause the problem. The emissions of these countries are still far fewer than those of the self-acclaimed developed countries, while a significant part of their populations continues to face appalling poverty.

It follows that the so-called developed countries should achieve much higher levels of reductions of their emissions compared with developing countries. That in itself is a not unimportant ‘finding’, but it is so vague that it comes close to being meaningless when it has to be applied in concrete cases. In the book, this crucial issue is discussed in quite some detail. In this contribution, the author must stick to the essence of his submissions.

62 Particularly, but by no means only, this part of *Shaping the Law for Global Crises* was discussed in some detail with Elbert de Jong, a young researcher at the University of Utrecht.

63 In this contribution I have skipped quite a few issues, such as the important question whether or not states are under an obligation to assume the obligations of other states not willing to meet theirs.

The first step is to figure out the level of global emissions reduction needed to avoid global temperature rising by more than 2° Celsius. As already discussed, the calculations should be based on worst case scenarios. Emissions that go beyond the level that might cause an increase of global temperature of more than 2° Celsius have to be cut altogether. The second step is to figure out what can reasonably be achieved. Theoretically speaking, the required reductions could perhaps largely be achieved if (mainly) developed countries would refrain from central heating in winter, air conditioning in summer, stop (truly unnecessary) travelling and buying unnecessary luxury goods. Seen from the angle of developing countries, this could be a very reasonable stance, given that a major part of their populations is worse off. Be it as it may, there is not the slightest chance that such an approach will be adopted by courts around the globe, nor that it will reach the stage of even soft law. Besides, this approach would backfire on developing countries, as it would greatly affect the world economy and by the same token would have major adverse consequences for all nations.⁶⁴ A better alternative would be to switch to a carbon neutral society. The latter is probably the unavoidable (and desirable) final goal anyway, but it cannot be achieved overnight. It requires equipment that has to be manufactured. Hereinafter the author will largely ignore the practicalities, though they cannot be overlooked altogether when drafting a legal blueprint.

Two alternative scenarios are submitted:

- a. Decisive are the aggregate emissions per country as from, say 1990,⁶⁵ brought about by the people who cannot be labelled as truly poor. For

64 It seems quite likely that this adverse impact on the short term would have less deleterious consequences than the overall adverse consequences of climate change if we stick to business as usual. But I am afraid that it is unrealistic to base any legal theory on this state of affairs as it would be almost universally despised. As a matter of fact, developing countries (too) are mostly governed by the 'haves' and it is unlikely that they will accept any solution that will have significant adverse effects on the short term, all the more so as their voters (if any) will throw them out of office.

65 1990 or any other specific year is, in a sense, arbitrary. 1990 is unfair to *developing* countries, as it largely ignores the historical contribution of *developed* nations. On the other hand, any year earlier on the time line is, in a sense, unfair to the equally *innocent* younger generation of *developed* countries. In some instances they got collectively the benefits from earlier emissions, but not necessarily so as they may have been wiped out by wars or other catastrophes. Yet, I readily admit that there are sound arguments for replacing 1990 by, say, 1970 or arguably even 1950. See about this topic in more detail Spier (2012:92ff.).

practical purposes, emissions by people in a specific country whose annual income is less than, say, US\$7,500 should be ignored.⁶⁶ The remaining emissions have to be reduced with the percentage needed to stay on the safe side, as briefly discussed in Section C.

b. States, particularly ‘developed’ states, are under an obligation to reduce GHG emissions *as much as possible*. That also entails the obligation to find ways to urge enterprises and private persons within their territory to do so. Courts could (and should) urge them to do so.

If need be, courts (or independent commissions designed for that purpose) could urge a state to explain –

- i. *ex ante* what it aims to undertake to meet its obligations and why it cannot or is not required to go beyond these steps;
- ii. *ex post* whether it has come up to the pledges made *ex ante* and why it was impossible to do more.

The author realises, of course, that states will have some, arguably even a wide, margin of appreciation. But courts should closely scrutinise the arguments put forward by the states. In quite a few instances, information about what *could* reasonably be done is readily available. By way of example, one could think of: changes of equipment, efficiency standards and operational changes, which may often go at low cost.⁶⁷ Courts could and should urge defendants to be very explicit about the question why more far-reaching reductions are not a realistic option.

Thus far, the obligations of states have been discussed. What about enterprises? For them, the submission supra b should be applied as well, but one should be more demanding, given that they cannot invoke the ‘political argument’, so they do not have ‘manoeuvring’ room. In the short-term they should reduce their emissions as much as *technically* feasible. On top thereof, they should refrain from activities that create unnecessary GHG emissions and that can easily be avoided, such as switching on lights and heating in offices not in use, or distributing all kinds of useless paperwork and making unnecessary prints, and undertaking unnecessary travels. On the some-

66 Ignoring this part of the population is not overly appealing in rich countries such as the US. It could be argued that US\$ 7,500 is too high, given that a major part of the world’s population lives well below this line. It is also conceivable that the required level of reductions cannot be achieved if we depart from this threshold. That needs further discussion.

67 See in more detail Bodansky & O’Connor (2011:6ff.).

what longer term, not-so-vital industries should go well beyond these reductions by moving towards carbon neutrality. This should not necessarily go for all enterprises based in developing countries.

F. Defences

Assuming that there would be a legal basis for climate change litigation, the question has to be faced whether defendants could invoke defences. A few defences are briefly discussed below.

First, there is the political argument that will undoubtedly be invoked by state defendants. It cannot be denied that climate change and the need, extent and speed required to curb GHG emissions *should* be dealt with by politicians. As a matter of fact, they fall short to meet their obligations to humankind. It is extremely unlikely that this will change in the near future. That in itself seems enough reason why courts must step in, although it obviously requires judicial courage.⁶⁸ There have been quite a few occasions where superior courts in many countries were willing to enter politically sensitive fields.⁶⁹ It may well be the only way to bring politicians to their senses.⁷⁰

A related argument goes that explicit international agreements are the upper limits of GHG reductions that can legally be required. The author does not deny that proponents of this view have a point. However, the view is prone to criticism. It would mean that insufficiently specific agreements in this field would derogate to general principles of international law and human rights; even to the right to life. Such a stance is not overly attractive.⁷¹ It would mean that a huge part of the law could not come into play in relation to the most serious threats mankind has ever faced. Moreover and perhaps even more importantly, it would imply that a few (major) countries, blocking more stringent reductions, would determine the law in this area for the rest of the world. To put it in the extreme: a relative or even absolute

68 Not every court will be inclined to show courage. Supreme Courts such as the Supreme Court of India may well take the lead in this debate.

69 See for examples Spier (2012:101ff.).

70 Quite a few will only be happy. In this scenario, they can explain to voters that they *must* act. So they get an ‘excuse’ to embark on steps they are keen to take.

71 See about this topic Faure & Peeters (2011:263ff.); Kaminskaite-Salters (2011:181ff.).

small number of (very) right wing people in a very few countries (amounting to approximately 50–55% of the voters⁷² in those countries) could determine the fate of mankind. It would also mean that the race to the bottom would pay. It would be unsatisfactory if that indeed were the state of the law: the author does not think it is. That is not only a moral judgment.⁷³ Recall again the case about the kidnapper in which the ECHR held that the right to life has preeminence in all international instruments on human rights. It speaks of the supreme value in the international hierarchy of human rights.⁷⁴ The same court subscribes to the view that torture is *never* allowed: not even if *vital interests* of a state are at stake.⁷⁵ It is of little use, however, to compare torture to the evils of climate change. Some of the evils of climate change – arguably even most – will be (far) less serious in *single* cases. Other impacts will be very serious. What counts is that the cases decided by the ECHR are about violations of the hardest core of human rights, albeit in relation to a relatively small group of victims.⁷⁶ Climate change is about evil inflicted on many more people whose lives or wellbeing at an already very minimum level is in jeopardy. So it can hardly be true that colossal misery all over the globe has to be *accepted* only because politicians are unable to reach agreement on useful, or rather bitterly needed, targets. It follows, the author thinks, that compliance with national law and/or permits is *a fortiori* not a viable defence either.⁷⁷

Defendants could also argue that the state of the law is – and was even more so in the past – fundamentally unclear about the question whether, let alone to which extent, they have (and had) to reduce their emissions. As a matter of fact, it cannot be denied that defendants would have a point. It is true that it is rather unclear *how far* the requirement to reduce GHG emissions stretches, and why that is the case. The defence would however be funda-

72 In some of the countries involved, only 50% or less of the voters actually vote. So 50–55% of the votes only represents approximately 25% of the population entitled to vote.

73 There have been – and are – more instances where views of a relatively small number of hardliners in one or more countries have been overturned by later developments of the law.

74 *Streletz, Kessler and Krenz v Germany*.

75 *Gaefgen v Germany*.

76 In the *Gaefgen* case no torture took place. Gäfgen was ‘only’ told that this would happen if he would not release the name of the child he had kidnapped because the police believed (and had reason to believe) that its life was in danger.

77 See in more detail Spier (2012:170 and 171).

mentally mistaken if it were to suggest that it is unclear *whether* emissions must be curbed.

The defence would be bogged down straightaway if put forward by an enterprise which GHG emissions are too high by all reasonable standards, i.e. if they are unreasonably and unnecessarily high in relation to the emissions of similar enterprises and could have been lowered at (relatively) small costs. In other scenarios the defence is more problematic.

As a matter of fact, courts deal with this type of situation quite often. It happens in many instances that the law has to be shaped. If casting doubt about its precise meaning would be a defence, there would be many lawless realms. It would imply that this type of case would almost always be decided to the detriment of the plaintiffs. If scenarios of obviously irresponsible behaviour are ignored, I can imagine that the defence would meet (some) sympathy if the litigation were about damages in relation to climate change. As to injunctions, it does not matter that the law *was* unclear. After all, they point at the future and by then the law is clear, if shaped in the decision which grants the injunctions.

Last but not least, the defence derived from technical advance is discussed. Many believe that technology will progress with the passage of time. They assume that better technology with a lower carbon footprint will be available in a couple of years. It is possible that this view is correct. Is that sufficient reason to take a wait-and-see position right now? There are compelling reasons for a more active stance at this stage:

1. The expected advance may not materialise. Besides, we cannot take for granted that the materials to manufacture the equipment, based on the new technology, will be available, let alone to the extent needed and in the very short term.
2. If the expectation turns out to be justified, it will take quite a while before the new technology becomes operational. So again, a couple of years, if not more, will elapse. We cannot afford that, given that it is high noon.
3. Given that the stakes are extremely high, we cannot afford to wait.

G. Causation

Causation probably is the most serious obstacle for legal action, particularly if plaintiffs were to seek compensation, which in the author's view is not the most attractive way forward (see Section H below).

As a matter of fact, the contribution of almost every country and even more so of every single enterprise to the global problem and of specific losses is relatively small, irrespective how one counts these contributions.⁷⁸ In many legal systems this poses a serious problem, at least in relation to claims for damages. There are precedents of cases, doctrine and quasi-legal instruments that are fairly generous to plaintiffs, even if the contribution of a specific defendant is small, albeit that defendants are only likely to be liable in relation to their proportional share.⁷⁹ So far, the law seems rather unsettled in this field.⁸⁰

A somewhat related argument is that the damage would have occurred anyway, even if the defendant were to have met his obligations. As such, the argument will (often) be valid. But if it could be invoked by every defendant, any advance would be blocked. So the author can only support the stance of the Supreme Court of the United States that has rejected the argument.⁸¹

Assuming that the causation defence would be rejected, one has to face the scope of liability.⁸² The law (of causation) in many countries provides adequate means to keep liability within bearable limits. Proximity (i.e. a more or less close relationship in time and space between victim and tortfeasor) is one of the preeminent vehicles in this field. The same goes for ad hoc mitigation (the court could cap liability in a specific case if liability would be an oppressive burden).⁸³

H. Remedies

If we let things happen, catastrophe will set in. The aggregate losses will be beyond imagination. Worse, they will sharply increase with the passage of time. If the conditions for liability are met, a causal link can be construed

78 See about that topic Spier (2012:92ff.) There are a few exceptions, such as the US, China, India and the Russian Federation.

79 See, e.g., Spier (2005:58 and 59) and *Sienkiewicz v Grief*, (UK) Ltd., [2011] UKSC 10.

80 See in more detail Winiger et al. (2007:531ff.).

81 *Massachusetts et al. v EPA et al.*, 415 F.3d.50.

82 In some legal systems this issue is not dealt with under the heading of causation. If I am not mistaken, this is of no avail in relation to the outcome of a specific case.

83 See e.g. *Principles of European Tort Law*, Articles 3:201 and 10:401; see also International Law Commission, Articles on Responsibility for Internationally Wrongful Acts, 40.

and defences will be rejected, so compensation springs to mind as the most obvious remedy. In such a scenario, the need to pay compensation is often considered self-explanatory in most legal systems. Should climate change be an exception to this rule? An answer in the affirmative will be despised by many, victims, academics and practitioners alike. If reasonably possible, such an answer would appeal to one's primary sense of justice. Yet, the predominant view has it that the losses will be so colossal that no tortfeasor will be able to pay even its proportional share of all these losses, present and future. Is this *non possumus* a justification for an uncommon solution? I am afraid that the answer should be in the affirmative.⁸⁴

Firstly, compensation will often have to be paid by equally innocent people, such as tax payers, shareholders (more often than not of pension funds), employees and so on. That in itself is perhaps not enough reason to ban compensation. After all, in the short term it could be argued that these classes of people have enjoyed the fruit from the excessive GHG emissions. In the longer term, when catastrophe has already set in, the gains of the past will have disappeared; only the liability will remain.

Secondly, liability for damages would imply that the first victims would receive all the money available for compensation. Little money, if anything, would be left for future victims, despite the fact that their losses will be much higher than those of the first victims. Lastly, too much will disappear in the pockets of often already overpaid attorneys.

Should the same reasoning be applied for adaptation and mitigation costs? The author's answer would be: not necessarily so. After all, those costs may well be manageable and bearable. If and to the extent that this would be the case, there is not much reason to refrain from applying the law as it stands. The recoverability of reasonable expenses to ward off the consequences of a risk created by others probably is common core.⁸⁵ The more difficult question is how much of the expenses should be borne by the developing countries. I fear that there is hardly a sound legal basis or formula to determine this part.

It follows from the argument above that compensation, all in all, is the wrong track to take, in the author's view, despite the fact that *ex post* reme-

84 That would only be different if there would be fair, consistent and solid ways to keep the liability burden for present and future losses within bearable limits. One of my colleagues in the project, mentioned in footnote 1, will try to develop a coherent and fair framework to this extent.

85 See, e.g., Article 2:104 PETL.

dies belong to the lawyer's paradigm and are still common ground in legal education in many places. Moreover, a focus on *ex post* remedies would mean that we first let things happen, and act only when the evil has already materialised. I cannot think of any good reason why a great many people would have to be exposed to major risks, whereas they could, at best, seek compensation when the damage is done.

Prevention has long been ignored by lawyers, but happily there is an emerging trend to point at the important role it could play.⁸⁶ But, once again, it will not happen without appropriate pressure. Injunctive relief could pave the way to prevention. As a general rule, potential victims can ask courts to issue injunctions toward those whose wrongful acts or omissions will bring about these losses.⁸⁷ Courts tend to have quite some discretion; that is a long established practice and makes possible decisions "flexible, intuitive, and tailored to the particular case".⁸⁸ Relevant factors have to be weight, particularly the magnitude of the harm; the prospect of grave or even irreversible losses; and the chances of manifestation of such losses.⁸⁹ Compliance with his duty should not be too burdensome for the defendant.⁹⁰ If we balance the just mentioned factors, one can barely arrive at a different conclusion than that injunctions stand a fair chance, given that the stakes are tremendously high. Seen from a legal angle, it is not easy to explain why injunctions should *not* be granted, assuming that the emissions can be labelled as wrongful.

I. Liability of Others

So far, this contribution has focused on liability of states and enterprises. In an ideal world – and according to most experts in the field of law and economics – the threat of liability would have a sufficient deterrent effect. This is one of the (many) examples where this theory turns out to be mere theory. True, ever more states and enterprises are reducing their emissions, but the

86 Krämer, (2004:38). See also ECJ *Regina v Ministry of Agriculture* [1998] ECR 1-2211 paras. 63 and 64; ICJ *Argentine v Uruguay* (Pulp Mills) § 205; Koziol & Zhu (2010:342).

87 See, among many others, Faure & Nollkaemper (2007:176); Kaminskaite-Salters (2010:95f.).

88 Dobbs (2003:66); van Boom (2010:14f.).

89 (ibid.:15, 20 and 29ff.).

90 (ibid.:30).

level of these reductions falls short compared to what is needed. So apparently other incentives are needed to get the job done.

The first and obvious targets are senior politicians and directors and officers of enterprises. They will obviously not be able to compensate even a very small part of the loss, but the prospect of personal liability may bring them to their senses. Personal liability of directors and officers arguably is not far-fetched. According to research executed by Harvard professor John Ruggie, in a significant number of countries directors and officers are implicitly required to consider non-shareholder interests as part of their duty to act in the company's best interests. In that context Ruggie mentions safety laws and environmental protection. Besides, enterprises should respect human rights law, as we have seen above. If they do not they may be subject to a civil claim by the company.⁹¹ One can, equally, imagine claims by victims other than shareholders, although such claims are fraught with difficulties.

If liability for damages would stand a favourable chance, enterprises should properly report and make provisions for these potential losses. Auditors should scrutinise them to do so. If the latter do not, they run a liability risk themselves.

J. A Search for Allies

If catastrophe strikes, it will result in human tragedy. Besides, the economy will be greatly affected. In the aftermath, an economic depression will be unavoidable. Stock markets will collapse. Loans will not be able to be repaid any longer. Even if insurers were to survive all these evils, they would face bankruptcy because they will have insured too many triggered events.

Many people and organisations are ever more concerned about the threats lying ahead. That goes, *inter alia*, for prestigious international institutions such as the United Nations and a series of UN fora, development banks, the World Bank, the World Health Organisation, and the African Commission on Human Rights. A growing number of banks and (re)insurers are concerned too. So are leading NGOs.

91 UN, General Assembly, A/HRC/17/31/Add.2, 18 ff.

So far, most banks, insurers, investors (such as retirement funds) do not seem to care. Supervisory institutions seemingly⁹² care even less. That is quite remarkable in view of their fiduciary duties. There happily is a change for the better: a not unimportant group of investors – that collectively represent assets of over US\$15 trillion – has chosen to speak out.⁹³ More generally, there is an emerging trend among major investors to focus on sustainability.⁹⁴ The Principles for Responsible Investment (PRI), an initiative of investors in partnership with the UN Environmental Programme Finance Initiative and the UN Global Compact,⁹⁵ stresses that investors in their fiduciary role “believe that environmental, social and corporate governance... issues can affect the performance of investment portfolios”. The *PRI Annual Report 2011* explicitly mentions climate change.⁹⁶ The executive director of the PRI Initiative, James Gifford, points at the link with human rights and the Ruggie Principles.⁹⁷

In a *World Economic Forum Report*⁹⁸ the question is posed whether “our ... investment incentives [are] strong enough to drive the development of ... energy efficiency measures adaptation and new technology development”. In the *Geneva Reports Risk and Insurance Research, The Insurance Industry and Climate Change – Contribution to the Global Debate*, one of the key messages is that major institutional investors and the insurance industry should encourage mitigation and investment in low-carbon energy

92 I do not know, of course, what happens behind closed doors.

93 Global Investor Statement on Climate Change: Reducing Risks Seizing Opportunities & Closing the Climate Investment Gap, November 2010. I do not address the difficult question who can be labeled as *investor* and who can use voting rights. In most instances, the answer is quite clear. But that is far lesser the case in relation to investment in all kinds of funds or indexes. See Melis et al. (forthcoming).

94 See Löfving & Bacani (2011:28ff.); they point at an “Initiative financière du Programme des Nations Unies pour l’Environnement”. On p. 31 they explicitly mention climate change.

95 According to Löfving & Bacani (2011:28) the principles are endorsed by investors with 25 trillion USD. The annual Report of PRI (2011:1) mentions USD 30 trillion of assets. According to the PRI-website, available at <http://www.unpri.org/signatories/signatories/>, last accessed 21 April 2013, 270 asset owners, 732 investment managers and 133 professional service partners have signed the Principles; among them the pension funds of Australia, South Africa, Thailand, Norway, Denmark, the public sector of the Netherlands (ABP), BP, major banks and (re)insurers such as Danske Bank, Generali Group, Swiss Re and leading investors such as Black Rock.

96 PRI (2011:1 and 7).

97 (ibid.:7).

98 WEF (2009:20).

projects.⁹⁹ In a recent study, carried out by investors, most respondents viewed climate change issues as a material investment risk/opportunity.¹⁰⁰

The US National Association of Insurance Commissioners released a white paper. It “concluded that disclosure of climate change risks was important because of the potential impact of climate change on insurer solvency as well as on insurance availability and affordability across all major categories of insurance”¹⁰¹

Banks, insurers, major investors and retirement funds are very important economic players. Politicians cannot be indifferent to their concerns and would not (easily) ignore their concerted call for action – even less so, if they were seconded by supervisory institutions such as central banks. They ought to speak out.

It is not overly clear why most of the institutions mentioned above seemingly have shown so little courage, or, worse, have outright ignored their fiduciary duties. If need be, they should be brought to their senses by injunctions and, in rather extreme cases, arguably by criminal responses and other kinds of litigation. It would be preferable by far, and it would also be more effective, if these institutions would join forces with others who try hard to stem the tide. Together, they could make the difference. They could do the world, their own interests and the interests of those who put their confidence in them a great favour. In brief: they could be allies to achieve a better and sustainable world.

Trade unions also are potential allies. They do not react differently from the rest of society and they, too, rarely seem to have long-term views. But they possibly could be brought to believe that it is very much in the interests of the employees they represent to tackle climate change. If Stern’s calculations are about right, the looming unemployment and other miseries will grossly exceed those of the financial crisis, which is seen by many as about the worst eventuality that could strike the world.

More promising, but at the same time more difficult to forge, are alliances between countries with largely the same interests. The author is inclined to believe that this holds true for many Asian and African countries, arguably

99 The Geneva Association (2009).

100 IIGCC (2010:40).

101 Ishihara (2010). Others are more optimistic. See, e.g., Lord et al. (2011:28, 30 and 52).

together with a few Latin American countries.¹⁰² The author may however be mistaken, and other alliances may stand better chances. The point being made is that the bargaining power of a group of countries would be much stronger than the power of single countries. So, it might be worthwhile exploring which countries could develop common strategies.¹⁰³

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102 Scholtz (2010:7f.) casts doubts about this point, although he observes that the African Union aims at arriving at a common position, Scholtz (2010:10 and 12). According to Gupta (1997:98 and 94ff.) there are “financial, political, information, ideological and other reasons” why developing countries are unable to form a substantial common negotiating strategy”. In the context of COP17 (Durban) African States and a number of States in Latin America (the ALBA-group of countries) have coordinated their strategies; see Bolivarian alliance calls for extending and strengthening the Kyoto Protocol and climate change adaptation aid to poor countries, and opposes the commodification of forests under REDD, www.climate-justice-now.org, last accessed 21 April 2013; COP17 and the Future of the African Common Position, www.stakeholderforum.org/sf/outreach/index.php/cop17-day1-home/467-cop17-day1-item1, last accessed 21 April 2013.

103 For regional initiatives see Lord et al. (2011:60).

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