Chapter 3

Enhancing Legal Regimes to Achieve Climate Change Justice

Existing legal mechanisms addressing mitigation, adaptation and remediation of climate change are failing to cope with the scale of the global issue and its wide-ranging impact on individuals, leaving climate change justice issues unaddressed. This Chapter identifies opportunities from the five areas discussed in Chapter 2 – international law relating to the environment, human rights, adaptation, trade, investment and dispute resolution – to propose creative and challenging legal, policy and institutional mechanisms to support efforts to address climate change, and to provide individuals with tools to access climate change justice. The recommendations, summarised in the Action Matrix on pages 25–31, are identified across short-, medium- and long-term timeframes for states, international organisations, domestic legislative, executive and judicial bodies, corporations, groups and individuals.

This Chapter makes recommendations in the following areas:

- **Part 1 – legal measures**: identifying climate change justice measures for: (i) individuals and communities; (ii) states; and (iii) corporate entities;
- **Part 2 – capacity building and transparency measures**: including knowledge and skills transfer; and
- **Part 3 – institutional measures**: identifying climate change justice measures in the areas of: (i) WTO reforms; (ii) bilateral and regional trade agreements; (iii) the UNFCCC negotiations; and (iv) multilateral adaptation measures.

3.1 Legal measures

International and domestic laws must be used to strengthen, not stifle, climate change justice. It is too easy, as shown in Chapter 2, to list the reasons why current legal systems cannot cope with emerging climate issues or why existing laws were not designed to solve global climate change. This Chapter sets out climate change justice measures that can be taken in relation to individuals and communities (section 3.1.1, p 117); to states (section 3.1.2, p 137); and to corporations (section 3.1.3, p 147). In this section, the Task Force explores the most promising opportunities for legal reforms, including using international and regional human rights bodies and instruments to clarify rights, creating a Model Statute on Legal Remedies for Climate Change, greater use of the existing PCA Optional Rules specific to environmental disputes, and the longer-term development of an International Tribunal for the Environment. Drawing on the challenges identified in Chapter 2, we consider the need for greater legal responsibilities that not only states, but also multinational corporations and organisations, must adopt to reduce GHG emissions and promote climate change justice.

3.1.1 Climate change justice measures for individuals and communities

In this section, the Report:

- explains *which rights* are available for individuals and communities to address climate change justice issues;
- makes three overarching recommendations for the *clarification of human rights obligations relating to climate change* in international and regional human rights law, specifically: (i) 'greening' existing human rights obligations; (ii) outlining a minimum core of rights and duties inherent in those 'greened' rights; and (iii) recognising a freestanding right to a safe, clean, healthy and sustainable environment; and
- proposes further work to progress domestic and international action, specifically through consideration of a Model Statute on Legal Remedies for Climate Change.

The recommendations made are summarised in the Action Matrix on pages 25–31.

(i) What rights are available for individuals and communities?

Climate change law encompasses a number of legal regimes on the international, regional and domestic levels. As such, individuals and communities *potentially* have access to multiple avenues to assert their rights for harms caused by climate change. For example, an affected party seeking to bring a claim against the state for failure to comply with its international obligations enshrined in international treaties and conventions might look to see if the state violated its GHG emission caps under the Kyoto Protocol, caused climate-related damages to fisheries and the marine environment in violation of the United Nations Fish Stocks Agreement and UNCLOS, or infringed human rights in breach of the ICCPR or the ICESCR.

Similarly, affected parties may examine whether the state caused climate change harm that violated regional obligations found in regional human rights instruments like the ECHR, the American Convention on Human Rights, and the African Charter on Human and Peoples' Rights (also known as the Banjul Charter).

An affected party hoping to bring a climate change claim against the state for failure to meet its own domestic obligations to protect the environment or properly regulate emitters may find relief in constitutional rights that protect a healthy environment, the ecosystem or the environment as part of the public trust, or environmental regulatory law. Tort claims, such as public nuisance actions, or destruction of property claims might also be brought in domestic courts, providing an opportunity for those affected by climate events to seek redress or injunctive relief from the state.

As explained in Chapter 2, there are numerous obstacles to climate change litigation in each of these avenues. Climate change litigants face challenges in establishing that the substantive law provides them an actionable right to bring a claim and make out causation, and procedural hurdles in the form of standing requirements. In addition, there is a diversity of viewpoints among policy-makers and courts as to the proper role of climate change litigation. To date, the central questions remain largely unanswered:

should individuals and communities be allowed to bring climate change claims against states, state-controlled emitters or private emitters? If so, how should claimants establish liability? And what triggers liability? For a state, should it be the occurrence of exceeding its Kyoto undertakings (and what of those who have not given undertakings)? For a state-controlled entity (eg, a state-run coal-fired power station), should it be the act of exceeding its permitted emissions under national regulations?

This Report will not attempt to provide definitive answers to all these questions, but instead will endeavour to make recommendations that will advance the discussion and enhance the substantive and procedure rights of climate change litigants. The Task Force remains mindful that even a robust litigation regime is in many ways an imprecise mechanism for distributing resources, establishing appropriate limits on conduct, and creating the conditions for sustainable economic and human development in balance with environmental conservation.

To that end, the Task Force posits that liability regimes must be developed in ways that ultimately support regulatory solutions. The ultimate goal must be to realign legal systems to accommodate the current problems in climate change litigation so that claims can be brought not solely for climate change justice and redress, but also to create a broader system of disincentives. For example, enforcing state liability should incentivise timely support for implementation of more effective and less costly regulatory solutions and mitigation regimes. For this same reason, this section focuses primarily on actions against the state, as opposed to also considering climate change litigation against private emitters. The reason for this is simple: if states can be incentivised to regulate actors within their borders, then this is the best solution to climate change justice.

The next two sections will discuss: (i) how individuals and communities can use international and regional human rights bodies and instruments to clarify and vindicate rights; and (ii) the work that is needed to enhance the scope for climate change litigation in domestic and international fora.

(ii) Clarification of human rights obligations relating to climate change

Unlike environmental rights instruments, many human rights instruments allow individuals to seek redress for state-caused harms. As such, they are an important avenue for climate change justice. However, most human rights instruments were promulgated before the advent of the modern environmental movement, and thus do not recognise that a safe, clean, healthy and sustainable environment (hereinafter, 'a healthy environment') is a prerequisite to the enjoyment of human rights.[464] Moreover, only a few human rights instruments explicitly refer to environmental threats as an obstacle to human rights.[465] As a result, many of those harmed by environmental degradation must seek redress from human rights bodies indirectly, by arguing that environmental harms impede their enjoyment of enumerated human rights, such as the rights to life, health, privacy and culture.[466] As a consequence, claimants may be able to use this indirect approach to claim *climate change* injuries as *human rights* injuries.

Given the lack of clearly identifiable rights for individuals and communities to draw on, the Task Force makes recommendations for: 'greening' existing human rights obligations; outlining a minimum core of rights and duties inherent in those 'greened' rights; and recognising a free-standing right to a safe, clean, healthy and sustainable environment.

'Greening' existing human rights obligations

Scholars and practitioners are working to 'green' existing human rights by arguing that human rights bodies should recognise that climate change impedes the full enjoyment of at least some, if not all, human rights. In such a case, the process of 'greening' refers to implementing existing human rights obligations in the context of environmental and climate change harms. As a result, human rights bodies have begun to acknowledge and develop the interrelationship between environmental harm and human rights violations, albeit in an ad hoc manner, through both jurisprudence and general comments of human rights bodies.[467] However, very few of these bodies have addressed specifically the environmental impact of climate change and its effects on human rights.[468]

Acknowledging these gaps, John H Knox, the UN Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, has prepared a series of 'mapping reports' which consider how human rights bodies – including those charged with interpreting the ICESCR, the ICCPR, the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW), the International Covenant on the Elimination of all Forms of Racial Discrimination (ICERD), and the UN Convention on the Rights of the Child (UNCRC), as well as several regional human rights treaties – have applied human rights law to environmental issues.[469] These mapping reports confirm that many fora are wrestling with the question of 'greening' human rights, and that virtually all human rights bodies have recognised that human rights are threatened by environmental degradation.[470] The Independent Expert urges human rights bodies to further develop and clarify the environmental rights contained in the instruments they interpret.

The Task Force strongly endorses the Independent Expert's reports and recommends, in the short-term, that human rights treaty bodies further clarify and 'green' the scope of human rights obligations relating to the enjoyment of a healthy environment. The Task Force also urges these human rights bodies to consider not only the human rights impacts of environmental degradation, but also climate change-specific impacts on human rights.

The ICCPR and ICESCR are the natural starting point for efforts to 'green' existing human rights. These treaties do not contain an explicit right to a healthy environment but the OHCHR has noted that all UN human rights bodies at least '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'.[471]

Of these two treaties, the ICESCR is more directly relevant to climate change and also more easily 'greened'. Recognising this relevance, the treaty oversight body, the Committee

on Economic, Social and Cultural Rights, has stated that 'the right to health embraces a wide range of socio-economic factors that promote conditions in which people can lead a healthy life, and extends to the underlying determinants of health, such as[…] a healthy environment.'[472] The committee has also confirmed that States Parties have obligations to safeguard the ICESCR's enumerated rights against degradation through environmental harms.[473] The rights to water, health, food and an adequate standard of living are all easily characterised as having an environmental dimension. The rights protected by the ICCPR are less obviously dependent upon a healthy environment. However, governments will face difficulty in protecting rights – especially the right to life and the right of a people to natural wealth and resources/means of subsistence – if their resources are taxed by climate-related catastrophes. All of the civil and political rights the ICCPR enshrines would become much more difficult to honour and protect against a background of cataclysmic climatic shifts. As the Human Rights Committee continues to examine environmental linkages to the rights under its purview, such rights are ripe for consideration as being deeply affected by our changing climate.

Efforts to 'green' existing human rights obligations have also been made through courts. For example, the ECtHR has held that severe environmental degradation may violate the right to life, found in Article 2 of the ECHR,[474] the right to respect of one's private life and family life, found in Article 8,[475] and the right to property, found in Article 1 of the First Protocol.[476] It also regards the ECHR as a 'living instrument which[…] must be interpreted in the light of present-day conditions.'[477] The European Committee of Social Rights, which monitors compliance to the Council of Europe's European Social Charter, has held that the right to the protection of heath 'include[s] the right to a healthy environment.'[478] In addition, the often-cited Inuit Petition of 2005, while inconclusive, was notable in its invocation of a host of economic, cultural and social rights in positing its claims and in explicitly targeting climate change harms.[479] While many obstacles still exist to widespread and international judicial recognition of the climate impact on existing human rights, courts will doubtlessly be faced with a number of environment and climate change-related claims in the years to come.

These parallel 'greening' processes, through treaty frameworks and in courts, are complementary. For civil society participants like the IBA, the mission should be to advocate for more explicit recognition of climate change's capacity to jeopardise each and every one of these rights and to identify remedies.

Developing a minimum core of rights and duties

The work of 'greening' existing human rights is a promising route to vindicating climate change claims. However, it has resulted in a fragmented set of rights, necessarily focused on particular problems and particular treaties. As the Independent Expert has observed, 'while there is no shortage of statements on human rights obligations relating to the environment, the statements do not come together on their own to constitute a coherent set of norms'.[480] As a result, it would be highly beneficial to delineate a

common core of substantive rights and duties contained in those fragmented rights. The Independent Expert has concluded that:

> 'The human rights obligations relating to the environment also include substantive obligations to adopt legal and institutional frameworks that protect against environmental harm that interferes with the enjoyment of human rights, including harm caused by private actors. The obligation to protect human rights from environmental harm does not require States to prohibit all activities that may cause any environmental degradation; States have discretion to strike a balance between environmental protection and other legitimate societal interests. But the balance cannot be unreasonable, or result in unjustified, foreseeable infringements of human rights. In assessing whether a balance is reasonable, national and international health standards may be particularly relevant. In addition, there is a strong presumption against retrogressive measures.'[481]

In order to clarify and solidify those norms, the Task Force recommends that, with the requisite state backing, the Human Rights Council adopt a resolution requesting that the UN OHCHR draft a report outlining a 'minimum core' of rights and duties implicated by the right to a healthy environment, particularly as it pertains to climate change. This analytical report should outline how this minimum core would apply to existing human rights that are easily 'greened', such as the rights to health, food, water and life, and should pay special attention to climate change harms as a crucial subset of environmental harms. This report should be drafted in consultation with states, relevant international organisations, and intergovernmental bodies such as the IPCC and the secretariat of the UNFCCC, and the UN Independent Expert on human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment.

The Human Rights Council is particularly well-suited to undertake this task as it has been working for years on the issue of human rights and the environment, with a notable focus on climate change.[482] For example, the Human Rights Council has adopted several resolutions on human rights and climate change and has noted that 'climate change-related impacts have a range of implications, both direct and indirect, for the effective enjoyment of human rights'.[483] It has affirmed that 'human rights obligations and commitments have the potential to inform and strengthen international and national policymaking in the area of climate change'.[484] The Human Rights Council has decided to convene a full-day discussion during its 28th session in March 2015 on 'specific themes relating to human rights and climate change' and to identify 'measures and best practices to promote and protect human rights that can be adopted by States and other stakeholders in their adaptation and mitigation efforts'.[485] This discussion could perhaps be a launching pad for further elucidating the minimum core of rights and duties implicated by the right to a healthy environment.

In developing such a minimum core, the Human Rights Council should consider the points highlighted overleaf.

First, as explored further in section 3.2.2, 'Transparency', on page 158, certain key procedural rights should inform the right to a healthy environment, such as the right to receive and disseminate information about climate change, its causes and its effects, the right to receive and disseminate information about environmental harms generally, and the right to participate in decision-making about environmental standards and the balance to strike between development and environmental protection.[486] Non-discriminatory application of environmental policies is an important subset of such procedural rights. The Aarhus Convention, adopted in 2001 and with 46 States Parties, can serve as an important guidepost in this area.[487] In addition, the Human Rights Council can look to Principle 10 of the Rio Declaration on Environment and Development and Article 13 of the ILA's Draft Articles on Prevention of Transboundary Harm from Hazardous Activities. Principle 10 of the Rio Declaration states that '[e]nvironmental issues are best handled with the participation of all concerned citizens, at the relevant level' and that each citizen of a state should have appropriate access to that state's information concerning the environment.[488] Article 13 of the Draft Articles on Prevention of Transboundary Harm outlines that states shall provide the public likely to be affected by transboundary harm with relevant information and ascertain their views.[489] In addition, the Human Rights Council should look to the UN Declaration on Human Rights Defenders[490] and consider including explicit protections for environmental human rights defenders, such as activists, journalists and affected citizens who advocate for state response to environmental and climate change harms, allowing them to disseminate information and encourage activism without fear of retribution.

More broadly, states' procedural duties should include: (i) the duty to adopt policies and frameworks to protect against environmental and climate change harms; and (ii) the duty to regulate private actors who may cause environmental harm and whose GHG emissions contribute to climate change.[491] In 2011, the UN Human Rights Council endorsed the UN Guiding Principles on Business and Human Rights, which are instructive when looking to clarify a state's duty to regulate.[492] As discussed in more detail in section 3.1.3 on page 147 those Guiding Principles state that states must take 'appropriate steps to prevent, investigate, punish and redress' human rights abuse by businesses 'through effective policies, legislation, regulations and adjudication'.[493]

Secondly, the 'minimum core' of substantive rights can be informed by the Independent Expert's mapping reports, the substantive environmental rights and duties currently recognised in national constitutions,[494] and the African Commission on Human and Peoples' Rights' interpretation of the right to a healthy environment found in Article 24 of the African Charter. The African Commission recognised in the *Ogoniland* case that Article 24 'imposes clear obligations upon a government' and requires governments 'to take reasonable and other measures to prevent pollution and ecological degradation, to promote conservation, and to secure an ecologically sustainable development and use of natural resources'.[495] Some national constitutions currently include the right to healthy housing[496] and the corresponding state duty to take environmental factors into account when conducting urban planning.[497]

Others include the right to be free of unhealthy levels of pollution and the concomitant state obligation to ameliorate pollution and to regulate hazardous materials.[498]

The Task Force encourages scholars and practitioners to take note of institutions such as the Court of Justice of the European Union (CJEU), which may become an important player in the intersection of human rights and climate change. Article 11 of the Treaty on Functioning of the European Union requires the EU to integrate environmental protection and to promote sustainable development when defining all of its policies and activities, and Articles 191–93 require the EU's environmental policy to aim for 'a high level of protection'. In addition, with the entry into force of the Lisbon Treaty in 2009, the Charter of Fundamental Rights of the European Union (the 'Charter') became legally binding on EU Member States.[499] Article 37 of the Charter states that '[a] high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the [EU] and ensured in accordance with the principle of sustainable development.'

The ECtHR and the CJEU refer to each other's case law and, even before the Charter had binding status, both had referred to the Charter in their case law.[500] Notwithstanding the fact that the EU has not (yet) acceded to the ECHR, the CJEU has already brought its case law in line with the case law of the ECtHR.[501] An important provision is Article 52 of the Charter, which provides that '[i]n so far as this Charter contains rights which correspond to rights guaranteed by the Convention for the Protection of Human Rights and Fundamental Freedoms, the meaning and scope of those rights shall be the same as those laid down by the said Convention. This provision shall not prevent [EU] law providing more extensive protection.'

In its case law, the CJEU has made it very clear (even before the entry into force of the Lisbon Treaty, giving binding effect to the Charter) that fundamental rights are part of the general principles of EU law and that the CJEU and the General Court should guarantee that they are protected within the EU's legal order.[502] The entry into force of the Charter increases the possibility of the CJEU handling cases regarding human rights violations. Moreover, the CJEU already has an important role in environmental protection, as it polices the EU's numerous environmental regulations and the EU Emissions Trading Scheme. Considering the content of the Treaty on the Functioning of the EU and the Charter regarding the environment, the bond between the CJEU and the ECHR, and the CJEU's oversight over environmental law, it is quite possible that the CJEU will play an increasingly large role in the achievement of climate change justice.

Thirdly, development of such a minimum core of rights and duties should take account of the obligations owed to *future generations*. While visible pollution and efforts at controlling industrially driven environmental degradation are predicated on improving quality of life *now*, the effects of climate change are often less immediately visible. These effects will increase over time, with the most pernicious consequences likely to occur in timeframes that surpass our lifetimes. As a result, climate change is often portrayed as a concern of future generations, often leading to apathy and lack of current political will.

However, as the UN Secretary-General pointed out in his Report on Intergenerational Solidarity and the Needs of Future Generations, presented to the 68th session of the General Assembly of the United Nations (UNGA) in 2013, 'the dedication to future generations is visible worldwide and across cultures. It is a universal value shared amongst humanity'.[503] This is also recognised in the ILA 2014 *Draft Articles on Climate Change,* Article 3.1 of which states that: 'States shall protect the climate system as a common natural resource for the benefit of present and future generations.'[41] Yet, despite the universality of this value, a sense of normative responsibility towards future generations is not widely accepted among law and policy-makers.

There is of course great difficulty determining responsibility and obligation to those who do not yet exist. But if equity demands that we safeguard the needs of the vulnerable, then due to the fact that they have no voice and no representation, future generations are arguably the *most* vulnerable group to be affected by climate change.[505] The work of clarifying intergenerational rights and responsibilities is made normatively easier by the fact that the UNFCCC already makes clear that climate change is fundamentally an intergenerational problem.[506] In addition, scholars and practitioners are using the 'public trust' doctrine to argue in domestic courts that the government has a responsibility to hold environmental resources in trust for the common use of all people, including those yet unborn.[507] There are also over 25 international agreements, declarations and conventions that refer to future generations.[508] Moreover, some countries have already made headway in this direction. Finland, for example, has a Parliamentary Committee for the Future with the power to comment on all budgetary and legislative review issues.[509] Hungary, too, has established a Parliamentary Commissioner for Future Generations, which is imbued with significant legislative, investigative and, where applicable, even prosecutorial and punitive powers.[510] Such examples of institutionalised recognition for responsibility towards future generations should be a model for others.

Some have proposed criminalising certain acts as crimes against future generations, and conferring jurisdiction on both domestic courts and the International Criminal Court to prosecute these crimes.[511] However, the hurdles facing the creation of climate-related crimes against future generations are significant and unlikely to be overcome in the short term.[512]

Recognising a freestanding right to a safe, clean, healthy and sustainable environment

Although it would require overcoming many obstacles, the Task Force also recommends that, as a supplementary long-term goal, states consider recognising free-standing human right to a healthy environment. The adoption of such a free-standing right would provide a more comprehensive solution to protecting environmental rights and vindicating climate change harms than the already-discussed combination of 'greening' existing rights and outlining a minimum core of rights and duties inherent in those greened rights. Human rights bodies can look to the minimum core of rights and duties discussed herein when considering the contours of a free-standing right to a healthy

environment. They can also look to the regional human rights instruments that already include a free-standing right, the more than 90 nations that have included some form of environmental rights in their national constitutions,[513] and the many states of the US that have done the same.[514]

Adopting optional protocols to incorporate a free-standing right into human rights treaties

Drawing on the conclusions of the Independent Expert, and recognising that it would be difficult to renegotiate existing human rights treaties, in addition to encouraging the recognition of such a right in national Constitutions, the Task Force also encourages human rights bodies to adopt protocols to existing treaties in order to expressly recognise the right to a healthy environment, and to encourage signatory States to ratify these protocols.

This work has already begun. For example, the *African Charter on Human and Peoples' Rights* established the right 'to a general satisfactory environment favourable to [human] development',[515] and a subsequent Protocol also established women's 'right to live in a healthy and sustainable environment'.[516] In addition, the *San Salvador Protocol to the American Convention on Human Rights* enshrined the right 'to live in a healthy environment,' and requires States Parties to 'promote the protection, preservation, and improvement of the environment'.[517] More recently, and although ultimately rejected by the Committee of Ministers, the Council of Europe's Parliamentary Assembly recommended in 2009 that the Committee of Ministers 'draw up an additional protocol to the European Convention on Human Rights, recognizing the right to a healthy and viable environment'.[518]

Adopting optional protocols to enhance access to justice

Though the current international environmental regime lacks judicial fora accessible by individuals to keep states and non-state actors accountable for environmental harm, individuals can now bring claims to UN human rights bodies in respect of violations of their rights contained in the nine so-called 'core' human rights treaties.[519] However, these complaint procedures are only available against a state that is a party to the treaty in question and that has accepted the Committee's competence to examine individual complaints, either through ratification or accession to an optional protocol (in the case of ICCPR, CEDAW, CRPD, ICESCR and CRC) or by making a declaration to that effect under a specific article of the Convention (in the case of CERD, CAT, CED and CMW).

There are also procedures for complaints that fall outside of the human rights treaty body system, such as the Human Rights Council Complaints Procedure. The Complaints Procedure was established in 2007 to address consistent patterns of gross and reliably attested violations of all human rights and all fundamental freedoms occurring in any part of the world and under any circumstances.[520] It addresses communications

submitted by individuals, groups or communities that claim to be victims of human rights violations or that have direct, reliable knowledge of such violations. A complaint can be submitted to the Council against any country, irrespective of whether the country has ratified any particular treaty or made reservations under a particular instrument.

The Task Force urges states to emulate the progress in the Human Rights Council Complaints Procedure and ratify or accede to the First Optional Protocol to the ICCPR and the Optional Protocol to the ICESCR, so as to allow individuals to bring claims for violations of key ICCPR and ICESCR human rights hampered by environmental degradation and climate change. Ratification of these protocols would ensure that individuals have international fora in which to vindicate their environmental rights.

Strengthening regional human rights bodies

Several regional human rights instruments already contain a free-standing right to a healthy environment. In the medium-term, the Task Force urges states to work together to further strengthen regional human rights bodies and their mechanisms for enforcing the right to a healthy environment, and encourages states to work together to create new regional bodies where they do not exist or are lacking. Much exciting work is being done at the regional treaty level. As discussed, the ECtHR has held that severe environmental degradation may violate the rights to life, respect of private and family life, and property found in the ECHR and its First Protocol.[521] In the *Ogoniland* case the African Commission on Human and Peoples' Rights interpreted the African Charter's free-standing right to a healthy environment to require governments to take measures to secure sustainable development and prevent ecological degradation.[522] And the 2005 Inuit Petition to the IACHR, though not ultimately granted, was a watershed case in the area of climate change harms.[523] In addition, two of the newest regional human rights treaties contain a free-standing right to a healthy environment. The ASEAN Declaration on Human Rights, promulgated in 2012, though controversial in its treatment of individual rights in general,[524] includes 'the right to a safe, clean and sustainable environment'.[525] The ASEAN Intergovernmental Commission on Human Rights has yet to implement a complaint mechanism, though its terms of reference may open the door to such a mechanism in the future.[526] The 2004 Arab Charter on Human Rights has also drawn international criticism,[527] but includes the right to a healthy environment as part of the right to an adequate standard of living.[528] In 2009, the Arab Human Rights Committee was established under the Charter, and is set up to receive reports from States Parties on measures that those States have taken to give effect to the rights recognised by the Charter.[529] These developments are encouraging, and the Task Force urges scholars, civil society organisations and communities to further strengthen regional human rights bodies and their mechanisms for enforcing the right to a healthy environment.

(iii) Model Statute on Legal Remedies for Climate Change

Enhancing litigation rights and remedies for individuals and communities

As described in Chapter 2, although litigation strategies have been proposed, and in some cases attempted, thus far none have had particular success because international and domestic laws do not provide effective and consistent standards due to the types of diffuse, non-specific, unpredictable and non-causative harms caused by climate change.[530] Unless some standardisation is achieved, such litigation will either burden certain states or actors disproportionately or fail to achieve any meaningful solution for those most vulnerable.

This section highlights the work that is needed to enhance climate change litigation as an effective process for individuals and communities to exercise rights and seek remedies, primarily against states, to ensure climate justice. The Task Force is conscious that litigation that secures *declaratory* or *interim* relief against states, whereby individuals can hold *governments* to account for their domestic regulation of GHGs, is preferable to ad hoc litigation against individual emitters that does not address broader climate concerns.

As part of this review, the Task Force has considered the importance of incremental development and the use of model statutes and laws to serve as a basis for the establishment of a unified legal framework. In this regard, the Task Force has considered the widespread adoption of the first Model Law on International Commercial Arbitration (UNCITRAL Model Law), which was adopted in 1985 by the General Assembly of the UN on the basis of UNCITRAL. The UNCITRAL Model Law was developed as a vehicle for harmonisation in response to concerns that the diversity of national laws on international arbitration was a serious impediment to the efficiency of the international arbitration process.[531] Today, many countries worldwide have enacted legislation based directly on the UNCITRAL Model Law, which has provided an excellent statutory framework for arbitral proceedings and thus a hospitable legal climate for such proceedings in those states that have adopted it.

Drawing on the success of the UNCITRAL Model Law in international arbitration, the Task Force recommends in the short-term that an IBA Working Group on Climate Change Justice be designated to draft a Model Statute on Legal Remedies for Climate Change, outlining legal rights and remedies in respect of climate change, including injunctive relief to mitigate or prevent current or future threats, declaratory relief, and judicial review. The Model Statute would be relevant not just for purposes of developing domestic statutes, but in promoting the development of consistent international legal standards relevant to procedural rights related to climate justice litigation, which face many of the same conceptual difficulties and issues. Over the longer term, the Task Force encourages states to adopt domestic procedural and substantive law that incorporates legal principles as set out in the Model Statute. The development of norms at the international level should also progress in accordance with the principles developed in the Model Statute.

Substantive and procedural issues to be addressed in Model Statute

The Task Force proposes that the Working Group build upon the ILA's 2014 *Draft Articles on Legal Principles Relating to Climate Change* and include in its terms of reference the following commonly observed substantive and procedural issues:

- *actionable rights* affected by climate change;
- clarification of the role and definition of *legal standing*;
- issues regarding *causation*, including appropriate standards for proving a legally cognisable causal link between GHG emissions and relief sought;
- whether knowledge, including foreseeability of harm, is relevant to liability or judicial relief;
- development of methods for awarding remedies and relief as warranted by the circumstances, including uniform standards by which to apportion damages, and the provision of declaratory, interim and injunctive relief;
- issues regarding standards of *liability*;
- the interrelationship of competing claims from nations, communities and individuals;
- limitation periods for claims;
- the availability of pre-trial and interim applications for disclosure and discovery;
- guidelines on costs awards in climate change cases; and
- guidelines for the jurisdictional reach of domestic and international courts to adjudicate climate change-related claims.

The interconnected and overlapping nature of these issues supports the Working Group taking a unified approach to considering these issues. The common issues encountered in each of the aforementioned areas are set out below.

Actionable rights

A comprehensive model statute would provide for the identification of actionable rights available to individuals. Owing to the fact that these will differ between states, each state would need to adjust its model statute to explain which rights and causes of action were available to individuals in the climate change context, for example, whether individuals can solely bring claims against the state for failure to implement climate change legislation. The Task Force's recommendations on how to progress development of actionable rights is set out in the previous section on page 119 ('greening' existing human rights obligations and recognising a free-standing right to a safe, clean, healthy and sustainable environment).

Standing

For climate change litigation to be effective, a model statute would need to provide a clear definition of legal standing to inform an adjudicative body of who must be allowed to seek legal remedies.[532] US federal courts, for example, require a claimant to make a threshold showing that it has suffered a concrete and particularised injury in fact that is actual or imminent; fairly traceable to the defendant's alleged conduct; and likely to be redressed by the court.[533] Yet many national constitutions and environmental protection regimes allow groups or individuals to seek judicial relief where such rights are allegedly being breached without requiring proof of any direct or particular harm or damage to such individuals or groups (ie, where there are domestic procedural rights to ensure the public is informed and can participate in regulatory decisions on environmental matters).[534] In such instances, standing in the traditional sense of 'injury in fact' is not deemed to be an appropriate requirement. Accordingly, to ensure relief to all those harmed by human-induced climate change, adjudicative bodies should interpret the notion of standing broadly. The goal should be to recognise a broad range of harms that would qualify a party to seek redress, yet at the same time incorporate procedural safeguards to prevent frivolous claims from going forward.

The model statute should also provide guidance that outlines the types of harms that are capable of being considered injury in fact and that are fairly traceable to the global impacts of climate change.

Among other things, adjudicative bodies should be instructed to recognise potential claimants across geographic boundaries, provided that the claimant could show a sufficient link to a territorial action or actor. Such an expanded notion of standing would immediately give rise to the problem of accommodating multilateral participation in legal proceedings. Given the widespread impact of climate change, the model statute could model private rights of action and attendant procedural rules around existing judicial procedures that allow for class actions (eg, in the US and the American Convention on Human Rights) or public interest litigation (eg, in India and in the African Charter on Human and Peoples' Rights) to allow for addressing the large-scale effects of climate change.

A key consideration will be whether a class or public interest certification process will require affirmative opt-in by similarly situated claimants or rather include all affected parties who may then choose to opt-out. Requiring affirmative opt-in could lead to low participation, particularly among under-informed communities, and could ultimately lead to a proliferation of overlapping claims. By contrast, an opt-out system would potentially lead to greater participation in a smaller number of claims, which should result in more efficient and consistent resolution of disputes. However, any opt-out system must include robust protections to ensure that all claimants' interests are fairly represented by class counsel and that any damages are justly distributed.

Another standing approach that the Working Group should consider is a gateway or leave provision whereby a potential claimant applies for, and the adjudicative body may grant, leave to bring proceedings. This approach is utilised in judicial review proceedings in the UK and, for certain types of proceedings, in Australia.

One issue that will require careful consideration is whether the model statute should address the possibility of granting standing to litigate potential human rights violations that unborn generations will have to endure. For example, in *Oposa v Factoran*, a case regarding massive deforestation plans, the Supreme Court of the Philippines found that the petitioner minors could sue on behalf of themselves as well as generations yet unborn.[535] Yet this concept itself raises a number of difficult issues, including establishing appropriate trusteeship and distribution of any damages recovered, legitimacy concerns for representing the interests of persons unknown, and the doctrine of *res judicata* precluding future claims from being brought by the unborn parties themselves. Moreover, the harms of global climate change are already being experienced in the present day, which should remain the primary focus of climate change justice.[536]

Lastly, a model statute could also address how to better enforce environmental procedural rights before international human rights tribunals. For example, while the ECHR has cited the Aarhus Convention favourably, the ECHR rules on standing make it difficult for an individual to initiate a claim before the ECHR on the basis of the Aarhus Convention.[537]

Causation

A model statute should address causation issues, such as, in a damages claim, the standards that should be adopted for proving a legally cognisable causal link between particular tangible harms and sources of GHG emissions; and in respect of preventative (injunctive) claims, whether the same standards or different standards should apply; and to what extent causation is relevant in seeking judicial review or declaratory relief for failures to fulfil obligations.

Is the right to a healthy environment violated if a person's environment is unsafe, unclean or unhealthy for any reason, or is it violated only when environmental degradation is due to anthropogenic climate change and other human-induced pollution? The answer to this question may depend on the contours of the right and on the difficult issue of causation. As Stephen Humphreys points out, '[t]he assertion that climate change causes human rights harms is self-evident on the first view, but much more problematic on the second' because, although people are clearly harmed, the harm is not easily attributable to any particular actor.[538] In addition, some robust human rights instruments, such as the ECHR, do not include the concept of peoples' rights. In order to have standing before the ECtHR therefore, a group would most likely have to prove that each individual in that group was the victim of an individual rights violation. This would make it difficult for indigenous peoples to petition the court saying that their way of life was being threatened by climate change harms.[539]

In order to pursue a substantive climate change claim against a state, on some level (depending on the theory of liability) it is necessary to establish a causal link between the wrongful conduct alleged and the harm complained of[540] (unless the individual is asserting breach of statutory duty or administrative review that does not require harm). As discussed in Chapter 2, climate change litigation faces significant obstacles on the element of causation because there are currently serious factual difficulties in establishing a chain of causation in the context of collective contributions to climate change.[541]

An example of a recent climate change claim brought before the US Supreme Court that achieved a significant success in dealing with the issue of causation is the case *Massachusetts v EPA*.[542] In that case, the Supreme Court held that evidence of sea-level rise, together with credible predictions of future harms resulting from climate change, were sufficient to show that the injuries in question were 'concrete'. Given this, the Court ruled that EPA's refusal to regulate CO_2 as a pollutant was a likely cause both of present injuries and of future damages. In the Court's view, although regulation would not reverse climate change, this was not sufficient reason to avoid it. To reach this conclusion, the Court did not grapple extensively with climate change science but only accepted evidence of scientific consensus, and on that based the credibility of a claim of future harms and the possibility that deliberate action might slow it down.[543]

Some scholars have argued that the precautionary principle should be used as a 'procedural tool to lower the standard of proof in situations where the complexity of scientific facts leads to a degree of uncertainty'.[544] A similar approach was attempted in the *Inuit* case before the IACHR, wherein native Arctic peoples alleged that global warming caused by GHGs from the US threatened, inter alia, the availability of traditional food sources.[545] However, as discussed in Chapter 2, the precautionary principle is not yet regarded an 'operative' principle of international law or as being of a fundamentally obligation-creating nature in the climate change context.[546] And many jurists are inclined to view with some degree of scepticism any proposal that lowers an adjudicative standard of proof to meet a pre-determined litigation result, as this can raise serious concerns for fairness and due process for defendants.[547]

A more viable approach in the climate change context may be for a model statute to provide clear authority that in climate change litigation against states, partial causation will be considered sufficient to establish liability.[548] The model statute should make clear that causation would be established if the defendant's wrongful conduct was a 'substantial factor' in bringing about the harm relating to climate change.[549] As most, if not all, of the factual basis for climate change litigation depends upon global climate models and statistical extrapolation, a model statute should stipulate that these types of evidence – subject to rigorous testing and neutral verification – constitute sufficient proof of causation.[550]

Owing to the fact that not all effects of climate change are attributable to human activity, adjudicative bodies need guidance on how to deal with the scientific evidence on causation in a sophisticated manner. While the IPCC *Fifth Assessment Report*

expresses high confidence that 'human influence has been the dominant cause of the observed warming since the mid-20th century', quantifying the anthropogenic contribution to any particular climate change harm is, at present, imprecise.[551] The uncertain quantification of specific causation centres on research to determine equilibrium climate sensitivity – research that is still emerging.[552] For example, the IPCC *Fifth Assessment Report* acknowledges uncertainty in attributing extreme weather events to anthropogenic causes.[553] Regarding sea-level rise, the IPCC *Fifth Assessment Report* cites evidence that sea-level rise in 1920–1950 (at lower CO_2 concentrations) is likely of a similar magnitude as in 1993–2012 (at higher CO_2 concentrations).[554] Regarding coastal harm, 'there is low confidence in region-specific projections of storminess and associated storm surges'.[555] Further, apportioning these uncertain anthropogenic causations more granularly among any particular set of carbon-emitters creates additional challenges of establishing causation.[556] The point is not that there is doubt over climate change itself – the IPCC has concluded with very high certainty that human-induced changes are causing climate change – but whether the current accepted *legal* standard for causation can or should need to be met in particular instances by particular individuals in the climate change context.

It is logical to expect that such challenges in establishing legal causation in climate change litigation should dissipate organically as the contemporaneous effects of global warming become more apparent and the evidence of human causality becomes more demonstrable. Yet because the populations affected by such harms will require access to adaptive resources as quickly as possible, waiting for the climate to produce irrefutable evidence is not an acceptable option for climate change justice.

Several approaches are available. Relying on the findings of the IPCC, the model statute could instruct that no claimant will be required to prove affirmatively that the harm resulting from climate change was anthropogenic. Under such a rule, it would be sufficient to show that, for example, the defendant emitted GHGs and/or destroyed or removed GHG sinks, which, taking into account mitigation efforts, resulted in a net increase in GHGs in the atmosphere. Such a prima facie showing could create a rebuttable presumption of causation, with the burden then shifting to the state to show an intervening confounding cause. At the same time, adjudicative bodies could require a higher standard of proof for claims of harm where the causal link between natural phenomena and human induced climate change is more difficult to prove (ie, the increased frequency of hurricanes due to climate change).

Knowledge

A model statute should consider whether knowledge, including foreseeability of harm, is relevant to the accrual of a cause of action and/or required for liability for climate change harms. In certain jurisdictions, an actor's state of knowledge is relevant to when a cause of action can be said to have accrued. The role of knowledge or foreseeability of the impact and potential effects of GHG emissions (ie, by reference to when they were omitted) is a significant issue to be clarified.

One possible proposal is to include a provision that conduct occurring after the UNFCCC entered into force on 21 March 1994 shall be presumed to be undertaken with knowledge that carbon emissions contribute to climate change. Thus, a claimant alleging offending conduct after this date could establish a prima facie case for knowledge, which would then be subject to rebuttal by the defendant. Alternatively, the model statute could provide that a claimant need not prove knowledge, and/or that lack of knowledge will not serve as an affirmative defence for a state violator. Some causes of action could be made ones of strict liability, rather than requiring knowledge. In evaluating the various options, drafters of the model statute should at all times seek to balance due process concerns of the defendant with claimants' potential remedies.

Relief

A model statute should provide the flexibility for an adjudicator to award such relief as is warranted by the circumstances of the dispute: (i) damages for past or present harms; (ii) injunctive relief to mitigate or prevent current or future threats; and/or (iii) declaratory relief.

It is consistent with the Task Force's objective of advancing climate change justice in the context of human rights that a model statute not be limited to 'damages', which is an after the fact or ex post facto type of remedy. Rather, in order to mitigate sources of climate change, a model statute also must contemplate an injunctive type remedy. To this end, a model statute should be seeking to enable injunctive relief in support of the rights and principles identified by the 2013 John H Knox Report (the 'Knox Report'), which found, inter alia, that: (i) states have obligations to adopt legal and institutional frameworks that protect against, and respond to, environmental harm that may or does interfere with the enjoyment of human rights;[557] (ii) to that end, states are required to adopt measures against environmental health hazards, including by formulating and implementing policies 'aimed at reducing and eliminating pollution of air, water and soil';[558] and (iii) in addition to a general requirement of non-discrimination in the application of environmental laws, states may have additional obligations to members of groups particularly vulnerable to environmental harm. Such obligations have been developed in some detail with respect to women, children and indigenous peoples, but work remains to be done to clarify the obligations pertaining to other groups.'[559]

Accordingly, in some cases, a *declaration of rights* might also be appropriate, for example, that certain factual scenarios permitted or acquiesced in by a state are a violation of domestic laws and rights. In other cases, the most effective action will be an *interim order* to require a state to properly implement its environmental legislation, while in others the best option might be subsequent *judicial review* of executive action (eg, the state's failure to implement environmental legislation). In some jurisdictions, a condition for the grant of interim relief, such as an interim or interlocutory injunction, is that the claimant must offer an undertaking to pay any damages suffered by the party enjoined if the claimant were to be ultimately unsuccessful. The requirement to pay an

undertaking for damages can operate as a significant hurdle to public interest litigation and other climate change litigation. This issue and the appropriate balance between the interest of the claimant and the potential harm to the defendant will need to be addressed by the Working Group.

If cases seeking *compensation* for specific harm from particular emitters or from the state were to be brought, from a compensatory standpoint, a model statute should adopt uniform calculations by which to apportion damages. The multitude of actors involved with global climate change – both as emitters and as affected persons and communities – create enormous complexities and opportunities for apportioning and distributing remedial damages in an equitable manner. Unless some standardisation is achieved, litigation will either burden certain states or actors disproportionately or fail to achieve any meaningful solution for those most vulnerable.

For example, in terms of apportioning damages, it has been suggested that, because of the cumulative causation of climate change, each defendant should only be held responsible for its share of the overall wrong.[560] Estimates exist of different countries' relative contributions to the absolute volume of GHG emitted globally.[561] Of the various compensation regimes that have been explored by scholars, the 'emitters pay' regime has been identified ultimately as the most attractive (which would focus on the ultimate emitter, or user, of carbon, rather than, for example, the fossil fuel company that extracted the carbon).[562] Holding states liable for emissions within their jurisdiction serves the practical purpose of deterring wrongful behaviour, as well as the ethical goal of correcting for the externalised environmental costs inflicted by the emitter on those harmed.[563]

Liability

The model statute should consider optional bases for establishing liability for damages, ranging from negligence to no-fault or strict liability, before arriving at a recommended basis. For example, under a negligence-based regime, liability could hinge on the defendant's conduct exceeding or falling below some agreed-upon environmental standard. For a state, the standard could be its obligations under public international norms and laws, including the 'no-harm rule', instruments such as the Kyoto Protocol, or for non-signatory nations, actions that are inconsistent with maintaining the 2°C goal embraced by the international community.

Even with a strict or absolute liability regime, the model statute could provide for a de minimus liability threshold for emissions, below which a defendant could not be held liable (though states could be responsible for small emissions in aggregate over time). Such a rule could drastically reduce the number of claimants, and focus limited judicial resources on the most important claims. A recent study by Carbon Majors attributes 63 per cent of the carbon dioxide and methane emitted between 1751 and 2010 to just 90 entities.[564] This research, which looks at emissions from producers rather than states, could assist states to attribute harm.

Although joint liability is an important aspect of the causation element, it appears that joint and several liability is highly problematic if applied in the context of damages in climate change litigation. As some scholars have recognised, to avoid an absurd result – for example, holding a single state liable for all climate change harms worldwide – liability for damages should be limited by the doctrine of proportionality, that is, to the extent that it is reasonable and equitable in light of that defendant's wrongful conduct.[565] Of course, any state defendant found liable under this regime would be free to seek indemnification from other liable states. Overall, this approach of joint and several liability limited by the doctrine of proportionality would likely look to the same body of evidence that attributes GHG emissions to the defendant state. The model statute should provide clear guidance on this point and expressly limit a state's liability to its own improper conduct or failure to act.

Interrelationship of claims

A model statute should also address the interrelationship between competing claims by individuals and communities arising from the same harm. If a judgment precludes future claims by similarly harmed individuals and communities, the statute should include measures to ensure that these interests receive compensation for the harm that they have suffered. The model statute should seek to balance the need to ensure that potential claimants are made whole with preventing individual defendants from paying excessive or duplicative damages.

With this in mind, a class-based system of distributing monetary compensation or other remedial aid might be preferable to a multitude of individual damages awards. Fragmented awards of damages could skew available adaptive and compensatory resources towards those complainants who race to the courthouse and/or who have the resources to retain the most capable legal counsel. A system of class-based awards would ensure that similarly affected persons receive a fair portion of any resources awarded.

Limitation periods

A model statute should also consider the appropriate approach to statutory limitation periods for climate change actions. The model statute should provide a distinct limitations period that would override any shorter domestic limitations period that might otherwise apply (eg, for torts or general negligence). In addition, the model statute should address the equitable defence of laches, as it is used in many jurisdictions to bar delayed suits for equitable relief (such as injunctions) or deny final equitable relief.

Disclosure and discovery

Many domestic jurisdictions impose a threshold requiring a claimant to show some basis for the alleged claims beyond mere speculation, and prohibit or strictly limit party disclosure and discovery to aid the claimant's satisfying that pleading threshold. The model statute should address the availability of pre-action and interim applications for disclosure and discovery. The goal should be to provide for a more open process of exchanging information in a timely manner.

Costs awards

A model statute would ideally contain guidelines for managing costs awards in climate change litigation. For example, although frivolous claims are to be discouraged, a balance must also be struck to ensure that potential applicants for judicial relief, particularly in claims against a state for failure to implement environmental laws, are not intimidated from even commencing a claim by the spectre of a punishing costs awards should their claim be rejected (even for technical reasons). In the same way, the role of 'costs in advance' could be examined, as developed by courts in certain common law jurisdictions, whereby a court can order advanced costs orders against government defendants. In addition, the model statute should also address applications by defendants that claimants lodge security for costs in advance of the trial. Again, requirements to lodge security for costs can potentially operate as a hurdle to public interest litigation. The model statute may consider whether security should be provided in a climate change litigation context and, if so, whether a cap on the total security requested would be appropriate.

Jurisdictional reach

A model statute should also provide some guidance as to the jurisdictional scope of domestic courts to adjudicate climate-related claims. Possible grounds for extending limited jurisdiction could include: (i) whether the claimant suffered harm within or outside of the court's jurisdiction; (ii) whether the defendant is present or does business within the court's jurisdiction; and (iii) whether the defendant's conduct occurred within the court's jurisdiction and/or produced climate change-related harm within the jurisdiction. These issues are discussed further in section 3.1.3 on page 147. A model statute should be guided by the relevant recommendations set forth in the Knox Report, specifically:

> 'Many grave threats to the enjoyment of human rights are due to transboundary environmental harm, including problems of global scope such as ozone depletion and climate change. This raises the question of whether States have obligations to protect human rights against the extraterritorial environmental effects of actions taken within their territory. There is no obvious reason why a State should not bear responsibility for actions that otherwise would violate its human rights obligations merely because the harm was felt beyond its borders.'[566]

Finally, the Task Force recommends that the Working Group consider ways in which tools utilised in the PCA's 2001 Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment (discussed below) could guide development of the model statute.

3.1.2 Climate change justice measures for states: international dispute resolution

(i) What rights are available for states?

In the previous section, 3.1.1, the Report identified potential rights that might be available to be invoked by *individuals and communities* to address climate change justice issues. We now consider what legal and procedural rights *states* have against other states, state-controlled emitters and privately controlled emitters.

The enforcement of environmental obligations arising under customary international law[567] and treaties relies on the concept of state responsibility, which signifies that a state must be accountable for its acts and omissions which violate international law.[568] A state's internationally wrongful act may engage its responsibility towards one state, several states or even the international community as a whole.[569] The idea that there are certain rights of such importance that 'all States can be held to have a legal interest in their protection'[570] – described by the ICJ in *Barcelona Traction* as obligations *erga omnes*[571] – is particularly important to climate change justice in the absence of any concept under international law of public interest *actio popularis*, since any state may invoke a breach of an obligation *erga omnes*, regardless of whether it has suffered injury.[572] Since the intended beneficiaries of climate change obligations must be the international community as a whole, and the obligations are dedicated to the protection of the global commons, they should be viewed as having *erga omnes* character.[573]

A state may challenge another state's breach of an international law obligation by a number of means including: (i) diplomatic channels, which include espousal of diplomatic claims, voluntary mediation and conciliation;[574] (ii) unilateral sanctions or countermeasures (although it is unlikely that they could be lawfully applied in the context of climate change obligations);[575] or (iii) binding international dispute settlement before judicial bodies such as the ICJ[576] or international arbitral tribunals.[577] The ICJ may adjudicate claims concerning violations of international climate obligations provided that its jurisdictional requirements, which are based on the state's prior consent, are met. States may consent to the ICJ's jurisdiction either by making an ex ante declaration accepting the compulsory jurisdiction of the Court under Article 36(2) of the Statute of the Court; by a dispute resolution provision in an international environmental agreement (see, for example, UNFCCC Article 14(2));[578] or by way of an ad hoc special agreement with the adverse party to submit their dispute to the Court.

Alternatively, states may also initiate inter-state applications before the regional human rights tribunals for violations of environmental human rights. Significantly, the ECHR has asserted its (implied) power to grant interim measures in inter-state disputes.[579] In addition, one could envisage inter-state claims arising under BITs where a host state applied climate or emissions regulation in a discriminatory manner against foreign investors or where the host state has arbitrarily withdrawn commitments made to renewable energy investors. While inter-state investment arbitrations are, to date, quite

rare,[580] the great majority of BITS contain inter-state dispute settlement provisions.[581]

However, the state responsibility model and the adjudication of inter-state climate change disputes encounter many of the same challenges encountered in individual litigation, set out in Chapter 2. Issues such as the appropriate standard of liability, causation, the threshold of injury or damage, liability for environmental damage by a private party, and the calculation and attribution of remedies in environmental disputes are contentious issues that remain to be determined.[582]

For this reason, the bilateral state responsibility model is not sufficient, in itself, to tackle the common concern of climate change and there is a recognised need to reconceptualise enforcement through the lens of prevention, cooperation and collective compliance.[583]

There are a number of supervisory bodies in the human rights field that have been tasked with overseeing compliance with human rights treaties and that have the power to accept petitions from other States Parties alleging (environmental-related) human rights breaches. While less prevalent in environmental agreements, a number of MEAs have established non-compliance procedures,[584] such as the Implementation Committee of the Montreal Protocol to the Ozone Convention,[585] which can be invoked by any State Party.[586] Similarly, the Kyoto Protocol non-compliance procedure established a compliance committee, which may be seized either by states or by an 'expert review team' established under Article 8 of the Protocol.

As will be discussed section 3.2.2, 'Transparency', on p 158, the Aarhus Convention and the Espoo Convention on transboundary harm[587] both include provisions on inter-state dispute settlement and a non-judicial compliance committee. Further, NAAEC, which is the environmental side agreement of NAFTA, which requires States Parties to effectively enforce its environmental legislation, established the CEC as a distinct international organisation responsible for implementing NAAEC. States, in addition to certain private parties, may initiate complaints before the CEC.

(ii) Applicable fora to determine international claims against states

As discussed, a major focus of this Report is the importance of holding states accountable for their environmental and climate change obligations under international law. In this regard, one major goal of climate change justice is to ensure that suitable dispute settlement fora are available and equipped with the procedural and practical tools to effectively hear and decide climate change litigation.

As described in Chapter 2, several existing fora provide facilities for environmental claims against states. The ICJ adjudicates international disputes with significant environmental dimensions, without resorting to the now-abolished special chamber for environmental cases. The dispute settlement mechanism under UNCLOS has been also utilised for environmental disputes. Regional courts, such as the ECtHR and the Inter-American Court of Human Rights, have entertained petitions concerning the human rights implications of climate change. However, these courts face various challenges, such as states accepting only limited jurisdiction or no jurisdiction at all, the absence

of regional enforcement mechanisms other than diplomatic or political pressure and, ultimately, reliance on the states themselves for compliance with recommendations and execution of binding judgments.[588] The Task Force recommends that where possible states accept the jurisdiction of the ICJ and ITLOS, and work to ensure that these tribunals have access to the expertise and resources necessary to credibly adjudicate climate-related cases, and comply with their recommendations and judgments.

Although no single forum has emerged as uniquely appropriate or particularly willing to entertain climate change litigation against states, the lack of a specialised international environmental court does not seem to be handicapping the settlement of environmental disputes against or between states.[589] Yet there are clearly a number of steps available to states to ensure a more robust framework for the governance of the international environment, and in particular the resolution of climate justice-related issues.[590]

(iii) The Permanent Court of Arbitration

The Task Force recognises that judicial bodies, such as the ICJ and ITLOS, provide an important fora in principle for the resolution of inter-state disputes on climate-related matters, particularly as they are best placed to develop international law. At the same time, many states have opted for arbitration in regard to environmental matters both between states and in cases involving investors, such as disputes over power generation and natural resource extraction. Taking account of this trend, the PCA has been suggested as a preferred – but not dedicated – forum for international environmental disputes against states.[591] Indeed, both critics and proponents of a future ICE have advocated for an increased use of the PCA to fill in the gaps in environmental dispute resolution.[592]

Where arbitration has been chosen over judicial dispute resolution, the PCA has several advantages in its favour: (i) it is the oldest institution dedicated to settling inter-state disputes with presently 115 member states and thus enjoys a high degree of international recognition and acceptance; (ii) it has experience administering purely environmental disputes as well as arbitrations under Optional Rules specific to environmental disputes, and the PCA has expertise in disputes involving remedies for environmental damage, environmental preservation or sustainability, or rights to natural resources;[593] (iii) by using an existing institution, the need to secure both political will and the large amount of funding to create an ICE is avoided; (iv) the PCA is open to a broad range of actors such as states, private parties and intergovernmental organisations;[594] and (v) the use of one specific institution and set of arbitration rules could further the coherent, consistent and directed development of international environmental law.[595]

A product of the first Hague Peace Conference, the PCA was established by the Convention for the Pacific Settlement of International Disputes, concluded in 1899 (later revised in 1907), and was the first global mechanism for the settlement of disputes between states.[596] In the 1930s, faced with a request to administer a dispute between a state and a private party, the PCA Administrative Council interpreted its founding Conventions as encompassing disputes between states and non-state actors.

The PCA's founding Conventions set out procedures for arbitrating disputes between states. Since then, the PCA has promulgated various sets of rules for certain types of disputes. Of particular relevance for climate change disputes are the PCA Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment based on the UNCITRAL Arbitration Rules 1976, which establish a specialised list of arbitrators and a list of scientific and technical experts. Promulgated in 2001, it has been described as the only modern set of arbitral rules by any international dispute resolution body, drafted specifically with environmental disputes in mind.[597] In 2012, the PCA promulgated the PCA Arbitration Rules 2012, a modernised set of rules based on the revised UNCITRAL Arbitration Rules 2010, for use in disputes involving at least one state, state-controlled entity or intergovernmental organisation.

The PCA functions through a unique, three-part structure, consisting of an Administrative Council that oversees its policies and budgets, a roster of independent potential arbitrators nominated by the member states, known as Members of the Court, and its secretariat, known as the International Bureau, which provides registry services and administrative and logistical support to tribunals.[598] Arbitrations proceed by consensus, with parties choosing to recognise the existence of a dispute, and choosing to submit it to the PCA. Parties may appoint arbitrators from the PCA's extensive roster of arbitrators: each member state may nominate up to four persons, although they are not obliged to do so.[599]

Immediately apparent from this structure is the PCA's capacity to meet at least two key requirements for an optimal international climate change arbitration forum: uniformity and procedural flexibility. The PCA imposes no mandatory jurisdiction and its membership is voluntary. Its roster of member arbitrators nominated from every member state offer both wide expertise and expansive choice to parties who are otherwise loath to subject themselves to the jurisdiction of an already constituted, treaty-based court with a narrow legal framework. These traits make the PCA highly desirable as a preferred forum for environmental disputes against states. As, like other arbitral institutions, the PCA has been criticised for lacking transparency, the Task Force recommends that the PCA and other arbitral institutions adopt stronger rules on transparency, such as the recently finalised UNCITRAL Rules on Transparency in Investor-State Arbitration (discussed under 'Transparency and precedent in international arbitration' on pages 112–113).[600]

PCA reach and expertise in environmental litigation

As mentioned, the PCA has already developed rules specific to environmental litigation: its 2001 Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment. These are the first and only procedural arbitral rules drafted specifically with environmental disputes in mind, and they introduce several convenient innovations. States, inter-governmental institutions, NGOs, corporations and investors may bring claims to the PCA, provided the parties have agreed to do so. In addition, so long as there is agreement between the parties, multi-party disputes can be accommodated, which is particularly important in environmental matters.

The Rules also provide for the establishment of a specialised list of arbitrators considered to have expertise in environmental issues as well as the establishment of a list of scientific and technical experts who may be appointed as expert witnesses pursuant to the rules.[601] By incorporating environmental expertise into an existing forum, this mechanism directly addresses the criticism that arbitrators do not have the requisite experience and knowledge base to adjudicate environmental issues. Furthermore, the separation of environmental experts from the arbitral panel vitiates concerns over potentially inflexible focus on the environmental aspects of a claim. Finally, the expectation of parties' input in appointing arbitrators and experts increases the parties' confidence in the outcome.

A variety of other advantages exist, such as the Rules' emphasis on expeditious resolution of claims and condensed procedural timelines – something highly desirable given the potential time-sensitivity and irreversibility of environmental harms. Moreover, although it is often costly to appoint counsel to represent the parties, as well as hire expert advisers, together with arbitrators fees for hearings, the PCA can be more competitive vis-à-vis other arbitral institutions given the fact that the operating costs of its administrative organ are partially covered by annual contributions from its member states.

The PCA also provides registry, administrative and secretarial services at the parties' request according to its schedule of fees, which adopts hourly rates, or under any other fee arrangement that may be agreed. When the PCA administers an arbitration, it makes available its hearing and meeting rooms in the Peace Palace in The Hague and other locations around the world (including Argentina, Costa Rica, Mauritius, Singapore and South Africa) available to parties and tribunals free-of-charge. The PCA does not charge any fee for the registration of a case or any yearly administrative fee.

Of particular note is the fact that the PCA maintains a financial assistance fund aimed at assisting developing countries meet part of the costs involved in dispute settlement proceedings offered by the PCA. A 'qualifying state' may seek financial assistance to defray its costs in proceedings.[602]

In order to expand the accessibility of its services around the world, the PCA has adopted a policy of concluding Host Country Agreements (HCAs) with its member states.[603] HCAs seek to establish a legal framework within which PCA-administered proceedings can be conducted in PCA member states under conditions similar to those guaranteed by the PCA's Headquarters Agreement with the Netherlands. The HCA seeks to secure the assistance of the host country in the provision of facilities and services required for PCA-administered proceedings. It regulates the privileges and immunities that are afforded by the host country to PCA staff and participants in PCA proceedings in order to protect the international character of the proceedings. The PCA has also concluded a wide network of cooperation agreements with all major international arbitration institutions.[604]

Further, the Secretary-General of the PCA has experience acting as designator of appointing authorities under the UNCITRAL Arbitration Rules. He may be called

upon by parties to act as appointing authority for the appointment of arbitrators, the determination of challenges, and the review of fee and deposit amounts under the PCA Rules of Procedure, the UNCITRAL Arbitration Rules or other rules of procedure.

Awards rendered in arbitrations concluded under the auspices of the PCA are enforceable under international law in accordance with the broadly accepted 1958 Convention on the Recognition and Enforcement of Foreign Arbitral Awards (also known as the New York Convention).[605] Recommendations as to enhancing transparency in international arbitration, particularly in respect of the publishing of arbitral awards, can be found on pages 112–113.

Finally, as adjudication itself has been criticised as being an inadequate means of resolving international disputes in the climate change context,[606] the PCA offers other dispute settlement methods such as review panel proceedings, fact-finding commissions, and mediation and conciliation capabilities.[607] Procedures for the latter are stated in the PCA 2002 Optional Rules for Conciliation of Disputes Relating to Natural Resources and/or the Environment (2002).

Certainly, the key limitation with the PCA mechanism for the resolution of climate change-related disputes is that all parties must agree to be subject to proceedings under the PCA's auspices, whether these are suits brought by other states or by individuals. On the other hand, once gently induced to voluntarily participate in the settlement of international environmental disputes through the PCA, states could become more amenable to adopting more binding forms of dispute resolution. The PCA could therefore serve as a bridging institution, leading states towards incrementally greater adoption and participation through voluntary exposure both institutionally and procedurally.

Drawing on the PCA in existing treaty frameworks

In recommending greater reliance on the PCA where arbitral rather than judicial resolution is preferred for environmental disputes, the Task Force recognises the concerns set out above, and encourages states and other organisations to consent – including through domestic legislation and international commitments – to arbitration before the PCA. In doing so, states should ensure that proceedings are open and transparent. The Task Force further encourages states to apply the PCA Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment and to take advantage of the PCA roster of environmental experts, in all arbitral disputes touching on climate justice, including those involving power generation and distribution and natural resource extraction, and in disputes involving investors.

To strengthen the incentives towards voluntary reliance on the PCA where arbitration is chosen, the Task Force further recommends that states and international organisations include the PCA as one of the relevant fora for dispute resolution in existing dispute resolution provisions in other international instruments. Several dozen of these environmental treaties allow for submission of disputes for international adjudication, but few contain actual procedures for arbitration, and even

fewer have secretariats well-resourced enough to conduct arbitration proceedings.[608] Beneficially, the PCA already engages in regular discussions facilitated by the various UN convention secretariats, so as to encourage the incorporation of references to the PCA's environmental rules in the dispute resolution mechanisms of existing MEAs.[609] This process should be further encouraged.

Most relevant for climate change-related disputes, the Task Force recommends that states make use of the UNFCCC dispute resolution provision (Article 14.2). Specifically, Article 14.2(a) of the UNFCCC provides for 'submission of the dispute to the International Court of Justice'; as an alternative, Article 14(b) provides for 'Arbitration in accordance with procedures to be adopted by the Conference of the Parties as soon as practicable, in an annex on arbitration.'[610] However, countries have yet to submit disputes to the ICJ, per Article 14.2(a), nor to adopt any such procedure or make provisions for arbitration, per Article 14.2(b). To resolve this state of inaction, the members of the UNFCCC should act according to the stipulation of the Convention, and meet to adopt arbitration procedures. Specifically, the Task Force recommends that the COP adopt the PCA as its preferred arbitral body, per Article 14.2(b), with the PCA adopting adequate rules of transparency in all such proceedings and, furthermore, adopt its Optional Rules on environmental disputes as the UNFCCC preferred dispute resolution procedure. This will make the UNFCCC dispute resolution mechanism more meaningful and give direction for parties seeking arbitration to make use of the PCA.

Similarly, UNCLOS provides dispute settlement procedures which can lead to a binding decision on States Parties.[611] The forum to resolve the dispute depends on the choice of the parties, either a forum for disputes between states – the ICJ or the International Tribunal for the Law of the Sea (ITLOS) – or an arbitral tribunal. Pursuant to Article 287(3) of UNCLOS, arbitration under Annex VII of UNCLOS is the default means of dispute settlement if a state has not expressed any preference with respect to the means of dispute resolution available under Article 287(1) of UNCLOS (and has not expressed any reservation or optional exceptions pursuant to Article 298 of UNCLOS). Likewise, pursuant to Article 287(5) of UNCLOS, if the parties have not accepted the same procedure for the settlement of the dispute, arbitration under Annex VII is the default means of dispute settlement (again subject to the same exceptions or reservations pursuant to Article 298).

Since UNCLOS entered into force in 1994, 12 cases have been resolved through arbitration under Annex VII, and the PCA is acting, or has acted, as registry in almost all (11) of those cases.[612] The Task Force therefore recommends that efforts continue to be made towards making the PCA the preferred arbitral forum for UNCLOS disputes in cases where States Parties have not opted for the jurisdiction of the ICJ or ITLOS. By strengthening the PCA mandate in both the UNFCCC and the UNCLOS regimes, the international community will lend both more legitimacy and force to the PCA system, and make it all the more attractive for states to rely upon.

Adoption of the PCA model arbitration clauses

Finally, in its efforts to promote arbitration of environmental disputes, the PCA offers model arbitration clauses designed specifically for use in contracts in order to bind parties to resorting to the PCA for environmental disputes.[613] The arbitration clause is simple, and states:

> 'Any dispute, controversy, or claim arising out of or relating to the interpretation, application or performance of this agreement, including its existence, validity, or termination, shall be settled by final and binding arbitration in accordance with the Permanent Court of Arbitration Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment, as in effect on the date of this agreement. The International Bureau of the Permanent Court of Arbitration shall serve as Registry for the proceedings.'[614]

More generally, the PCA Arbitration Rules 2012 contain model arbitration clauses for contracts, treaties and other agreements. The arbitration clause for contracts reads:

> 'Any dispute, controversy or claim arising out of or relating to this contract, or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the PCA Arbitration Rules 2012.'[615]

The arbitration clause for treaties and other agreements reads:

> 'Any dispute, controversy or claim arising out of or in relation to this [agreement] [treaty], or the existence, interpretation, application, breach, termination, or invalidity thereof, shall be settled by arbitration in accordance with the PCA Arbitration Rules 2012.'[616]

As a matter of form, and to facilitate ease of resorting to PCA arbitration by private parties, the Task Force also recommends that states adopt these clauses, as appropriate, in environmentally significant contracts and MEAs.

(iv) Other international arbitral fora

Although the Task Force recommends the PCA as a preferred forum for environmental and climate change-related disputes, the Task Force recognises the availability of multiple other arbitral fora which, depending on the nature of the case, may also be considered, including the LCIA, the ICC, and the Arbitration Institute of the Stockholm Chamber of Commerce, among others. The Task Force encourages all arbitral institutions to take appropriate steps to develop rules and/or expertise specific to the resolution of environmental disputes, including procedures to assist consideration of community perspectives.

(v) Transparency and precedent in international arbitration

Despite the many benefits of encouraging the use of arbitral fora to resolve environmental claims against states, a significant disadvantage of using arbitration as opposed to domestic courts is that arbitration decisions are often confidential to the parties and thus not available in any published form.[617]

Even though there is no official system of binding precedent in arbitration, an unofficial system of precedent is increasingly common, particularly in investor-state arbitration instigated under BITs, where arbitral tribunals will be influenced by authoritative or well-regarded awards issued on similar issues.[618] In addition, in response to the criticism that these arbitral processes were too opaque, states and investors have, over the last decade, moved to make these arbitrations more accessible and transparent.

For example, in 2006, ICSID modified its rules so that ICSID was required to promptly publish excerpts of every award, and tribunals could consider requests from third parties to file amicus curiae briefs.[619] More recently, in April 2014, the UNCITRAL Rules on Transparency in Treaty-based Investor-State Arbitration went into effect. These rules apply to all treaties concluded after 1 April 2014, unless the contracting parties opt out. Under these rules, all hearings are open to the public, all awards will be published and tribunals may accept (as well as invite) third-party submissions.[620] A number of countries, including Argentina, Australia, Canada, Mexico, Norway, South Africa and the US, reportedly support the universal application of these rules.[621]

In particular, ensuring that awards from environmental or climate change arbitrations are published will allow future tribunals to have the benefit of earlier decisions, which will be particularly useful for developing principles of international environmental law and to show how complex scientific issues may be dealt with.[622]

In the short term, the Task Force endorses this move towards greater transparency in investor-state arbitrations and recommends that states participate in this trend. The Task Force recommends that arbitral awards and decisions affecting climate change issues should be made available publicly, on a timely basis, to ensure transparency and confidence in the arbitral system.

(vi) International Tribunal for the Environment

An additional, if longer-term, goal to enhance climate change justice would be the creation of an ICE, as described in Chapter 2. Despite various efforts, a specialised international legal forum dedicated to adjudicating environmental disputes does not yet exist. Yet it is likely that developing a focused scientific and technical expertise within an ICE could more efficiently and effectively address the pronounced challenges of climate change litigation. Indeed, although international courts and specialised tribunals increasingly address environmental matters, they face limitations: 'standing to bring a claim is generally restricted to States, jurisdictions may overlap and contribute to fragmentation, and pronouncements are often of modest significance'.[623]

Therefore, in the long term, the Task Force supports proposals for the gradual development of an ad hoc arbitral body (ICE Tribunal), which would build towards a permanent formal judicial institution (ICE).[624] A new ICE Tribunal could provide 'an informal, ad hoc body with specialized environmental science and law subject matter expertise'.[625] It could be modelled on the best practices of arbitration institutions such as the London Court of International Arbitration and the International Chamber of Commerce. Unlike other arbitration bodies, however, the ICE Tribunal would operate exclusively in the environmental issue area, ensuring its reliability and competence.

Moreover, the ICE Tribunal would 'provide the conceptual template for how a Court could work in terms of decision-making, procedure and, above all, the application of a corpus of well-reasoned international environmental law'.[626] In particular, an ICE Tribunal could ascertain and clarify environmental legal obligations of governments and businesses, facilitate harmonisation of and complement existing legislative and judicial systems and provide access to justice to a broad range of actors through open standing rules.[627]

Scholars and commentators have advanced a range of proposals to achieve these goals in an ICE Tribunal. At a minimum, both state and non-state actors, that is, organisations, individuals and corporations, should have standing before the tribunal, so as to grant broad airing of the potential complexity of issues and multiplicity of parties involved.[628] This might be difficult, but as climate change-related disputes arise with greater frequency, states would be well advised to rely on more efficient non-state actors to identify and litigate cases that states themselves do not have the quickness or resources to bring. States could express their consent to allow non-state actors to bring claims either through treaties or some kind of ad hoc arrangement.

Secondly, in furtherance of better access, the tribunal's procedures should allow the parties to choose the location for constituting a tribunal. Thirdly, states should ultimately be bound by the decisions of the tribunal. This goal might seem to be fraught with difficulties, but states have achieved widespread acquiescence to the authority of transnational tribunals when the costs of non-compliance outweighed that of mutually agreed compliance. The dispute settlement mechanisms of the WTO and the international investment arbitration framework are cases in point. Moreover, the ECtHR has demonstrated that compulsory international jurisdiction over states is possible even in the realm of public interest and human rights litigation.[629]

Finally, in terms of remedies, the ICE Tribunal should have broad powers to make findings of incompatibility between domestic legislation and MEAs, to order provisional measures, and to make final judgments that encompass both monetary awards and performance of tailored orders of environmental rehabilitation or restoration.[630] As such, ICE would be empowered to fulfill a judicial review role, to make international environmental law, to police legislation for compliance with MEAs, and to adjudicate disputes.

Negotiating the creation of an ICE Tribunal and incorporating these measures into it may take a long time yet. Getting states to submit to compulsory jurisdiction, for example, might require the manifestation of even more acute climate change effects. However, if an ICE Tribunal came to fruition, the Task Force would recommend the standardisation of MEAs to incorporate the ICE Tribunal into their dispute resolution process to avoid fragmentation on environmental issues and to facilitate the use of an ICE Tribunal by private parties.

3.1.3 Climate change justice and corporate responsibility

Having considered the role of climate change justice for individuals, communities and states, we now turn to corporate responsibility. As discussed in Chapter 2, with respect to corporate responsibility, the current regulatory regime imposed by international environmental, human rights or trade law is, at best, inconsistent and at worst, ineffective. The impetus is on states and international organisations to come to coherent and consistent standards. As stated by John Ruggie, the (then) Special Representative of the Secretary-General on Human Rights and Transnational Corporations and Other Business Enterprises, 'the State duty to protect against non-State abuses is part of the very foundation of the international human rights regime. The duty requires States to play a key role in regulating and adjudicating abuse by business enterprises, or risk breaching their international obligations.'[631]

The Task Force strongly endorses the recent (December 2013) Report of John Knox, the Independent Expert to the UN Human Rights Council on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, which recognises that the UN Guiding Principles on Business and Human Rights make it clear that states have an obligation to provide for remedies for human rights abuses caused by corporations, and that corporations themselves have a responsibility to respect human rights. In particular, the Report concludes that: 'the human rights obligations relating to the environment also include substantive obligations to adopt legal and institutional frameworks that protect against environmental harm that interferes with the enjoyment of human rights, *including harm caused by private actors*' (emphasis added).[632]

These statements are reflected in the position taken by the European Court, which has held that states are obligated to take positive steps to protect against environmental harm to the right to private and family life, whether the pollution was caused by governmental or private action.[633] In addition, the recently published ILA *Draft Articles on Climate Change* articulate the obligation to 'take all appropriate measures to anticipate, prevent or minimize the causes of climate change, especially through effective measures to reduce GHG emissions'.[634]

The Task Force supports the increasing international recognition of corporate responsibility for environmental and human rights harms. But that responsibility must be accompanied by development of coherent and clear regulatory standards that make

compliance possible. The impetus is on states and international organisations to come to coherent and consistent standards to regulate corporates and multinationals within their jurisdiction as part of their efforts to mitigate and adapt to climate change. In this regard, the Task Force recommends a multi-faceted approach to corporate responsibility that will increase the ability of corporations to self-regulate, including in response to increased regulation by states.

As a first step, corporations should adopt and promote the UN Guiding Principles on Business and Human Rights as they pertain to human rights and climate change.

Secondly, states need to clarify regulatory mechanisms relating to climate change, including for overseas violations and require increased transparency from corporations by requiring more detailed reporting of GHG emissions. This can be assisted by adoption of the recently published ISO technical specification on carbon footprint measurement.

Thirdly, multinational organisations should work to support these initiatives by increasing their external monitoring of corporations and endorsing corporations taking the most proactive measures.

Finally, sector specific initiatives promoting human rights and in particular environmental rights, as seen in the banking and finance sector, should be encouraged. All of these recommendations are discussed in detail below.

(i) Implementation of the UN Framework on Corporate Responsibility to Respect Human Rights in the context of climate change

Since the critical endorsement of the UN Guiding Principles on Business and Human Rights in 2011,[635] corporate implementation of the Guiding Principles has been uneven, in part due to uncertainty on what policies or structures are required for compliance. In addition, there is no direct explanation in the Principles as to the interplay between climate change and human rights.

To address this uncertainty, the Task Force recommends that the OHCHR develop a model internal corporate policy, expanding upon its prior guidance from 2011.[636] That guidance provides the outline for such a policy, emphasising the importance of conducting risk analysis before undertaking any major project, tracking performance and remediating any harms, while simultaneously integrating human rights concerns throughout the company.[637]

To advance corporate responsibility specifically in the context of climate change, a model policy should commit the corporation to take a number of concrete steps.First, the corporation should adopt an explicit policy that stipulates measures designed to prevent or mitigate adverse climate change impacts linked to its operations.[638] Such measures must include due diligence of corporate projects, including the environmental practices of the company's affiliates, and as far as reasonably practicable, its major contractors and suppliers,[639] as well as compliance with reporting obligations (discussed in the following).

Secondly, the corporation should implement a due-diligence process to identify, prevent, mitigate and account for its actual climate change impacts.[640] While awareness

is the first step, the corporation must translate its awareness into active efforts to minimise or reverse the impacts of its actions on climate change and human rights.[641] The corporation should consider measures it can implement to assist in achieving the objective of limiting global warming to no more than a 2°C increase. The corporation's goal should be to implement the most advanced available technology to minimise its carbon footprint. In situations where negative impact on the environment is unavoidable given current technology or if the cost of such technology is prohibitive, the corporation bears responsibility for corresponding mitigation and remediation.

Thirdly, the corporation should implement remediation processes that allow for open communication with stakeholders most affected by the corporation's operations.[642] Strictly internal assessments of potential environmental or human rights impacts can fall short of a complete picture of the actual impact on nearby and distant communities.[643] This complete picture is of particular importance in the context of climate change impacts, which are not strictly localised to any one area. The Task Force recommends that the IBA offers to collaborate with the Office of the High Commissioner or work in partnership with other stakeholders to develop a model internal corporate policy.

(ii) Reporting by corporations

Incorporation of ISO technical specification

In May 2013, the ISO published ISO/TS Technical Specification 14067, relating to the carbon footprint of products.[644] This Technical Specification 'specifies principles, requirements and guidelines for the quantification and communication of the carbon footprint of a product', with the aim to enhance clarity and consistency of data for all stakeholders.[645] This is an important step forward towards adopting uniform measurement of GHG emissions and will help promote best practices in environmental and energy management. The Task Force therefore recommends that corporations incorporate ISO standards in business GHG management programmes to ensure standardised quantification of GHG emissions and to promote good practice in environmental and energy management.

Promoting access to information through mandatory corporate reporting requirements

A growing number of companies voluntarily report on the impact of their business activities on climate change, in addition to their exposure to the adverse effects of climate change, in response to increased demand from governments, investors and civil society.

This emerging trend can be significantly extended by mandating corporate disclosure of GHG emissions. To date, a limited number of countries, including Australia,[646] Canada,[647] France, the UK and the US[648] have introduced binding GHG disclosure requirements. Mandatory disclosure will be further increased by the recently-adopted

EU directive on non-financial narrative reports.[649] This EU directive requires large public-listed companies to disclose GHG emissions, among other information relating to human rights and diversity policies.

By way of example, in 2008, the UK adopted the world's first act requiring specific GHG targets – the UK Climate Change Act 2008. The Act was considered a landmark bill because it provided for GHG emissions reductions targets that were intended to be legally binding, but it was also noteworthy because it included mandatory carbon reporting. The UK recently amended the Companies Act 2006 to introduce mandatory corporate reporting requirements on human rights and GHG emissions as part of its action plan to implement the UN Guiding Principles on Business and Human Rights. From October 2013, all quoted companies[650] must prepare annual 'strategic reports', a narrative report containing non-financial information intended to enable company members to assess whether the company directors have performed their statutory duties, including reporting on GHG emissions.[651]

The strategic report must include GHG emissions resulting from the combustion of fuel; the operation of any facility and from the purchase of heat, electricity, steam or cooling. The report must also contain information concerning methodology and the data from the previous year, for the purposes of comparison. While the company may decline to provide this information where it is not practicable to obtain the relevant information, it must explain what information is not included and why.

Using this as a model, the Task Force therefore encourages states and international organisations, in consultation with corporations, to develop and subsequently adopt clear and implementable objective standards for corporate reporting in respect of human rights issues pertaining to the environment. Reporting requirements could then be introduced through legislation governing annual company accounts, securities regulations, or corporate governance codes. As an initial step, states could lead the way by first requiring that all state-owned companies make GHG emissions disclosures. For example, in 2007, the Swedish Government required all state-owned companies to start sustainability reporting, including reporting on the company's risks and opportunities due to climate change.[652] NGOs could also undertake comparisons of the data released to ensure accountability.

In the short-term, the Task Force encourages states to require corporations to specifically disclose GHG emissions using the ISO or other promulgated standards already available. It is suggested that, in order to protect the competitiveness of small to medium enterprises, GHG disclosure should be limited to large corporations, in light of the high cost of reporting requirements and potential difficulty in determining emissions. If that approach is taken, states should consider how the pool of corporations required to disclose can be gradually extended.

Furthermore, in order to ensure that disclosure requirements are as effective as possible, disclosure requirements must extend to 'direct and indirect, current and future, corporate and product emissions'.[653] Supply chains present a particular

challenge in this respect but must be addressed in order to prevent companies simply 'outsourcing' their carbon emission or carbon-intense aspects of their production to other suppliers or jurisdictions. To this end, the Task Force recommends that corporates should require full disclosure of evident climate change impacts arising from the actions of (i) all major subsidiaries and affiliates; and, as far as reasonably practicable, from (ii) the corporation's supply chain (for example, by incorporating disclosure obligations into contractual provisions).

A further challenge presented by mandatory GHG reporting is how to effectively verify or monitor these reports. The recently adopted EU directive, for example, has been criticised by civil society organisations for omitting a clear monitoring mechanism or for failing to stipulate sanctions for non-compliance.[654] With regard to sanctions, the UK has adopted the approach that directors may be subject to liability for misstatements in the company's annual accounts; however, this provision is subject to 'safe harbour' limits, which confine liability to intentional or reckless statements.[655] Monitoring could be entrusted to a specially created branch of the regulatory body which otherwise oversees company accounts, dedicated to reviewing sustainability and environmental reporting requirements.

Another potential solution that could improve the consistency and accuracy of corporate disclosures is the issuance of interpretative guidance. For example, in 2010, the SEC issued guidance for how the disclosure requirements in the Securities Exchange Act could apply to companies' climate change risks and opportunities.[656]

Ultimately, if this is implemented, the Task Force recommends that states should require independent verification of corporations' GHG emissions reporting, similar to auditing of financial statements, as well as independent verification of corporations' broader human rights reporting pertaining to the environment in as rigorously objective manner as is practicable given the standards and guidance developed.

Institutional monitoring of corporate actors

International institutions have an important role to play in monitoring the activities of multinational corporations. While a globalised, interconnected world economy has allowed corporations to expand their reach beyond national boundaries, legal regimes remain largely fixed at national borders – as does regulators' ability to oversee corporate activity. International institutions can help fill this governance gap by monitoring multinational corporations to identify those that significantly contribute to GHG emissions and determine compliance with applicable national laws and international treaties on human rights and GHG emissions limits. As the ILA *Draft Articles on Climate Change* provide, 'States shall jointly monitor, through an appropriate international or regional organization, whether emission reduction standards are fulfilled and whether other preventative and adaptation measures are taken to address climate change.'[657]

Many prominent international institutions are fulfilling this important monitoring role. The FAO has reported on GHG emissions from the perspective

of agricultural business.[658] Its mandate is sufficiently broad to cover all businesses that have significant GHG emissions.[659] The IPCC also has a National Greenhouse Gas Inventories Programme that attempts to quantify GHG emissions on a nation-by-nation basis.[660] Recently Oxfam published its report identifying ten food and beverage companies contributing significant GHG emissions through their supply chains.[661] The World Bank also already monitors GHG emissions.[662] This work should be expanded to more clearly define the norms in this space.[663]

However, international institutions with a wider array of tools to oversee and monitor corporate activity are needed to ensure comprehensive monitoring. The Task Force therefore encourages international institutions to increasingly monitor multinational corporations in respect of their compliance with GHG emissions limits. Such a development would allow those who work in the area of international human rights law to evaluate the human rights impact of those emissions on a case-by-case basis.

(iii) Regulation of corporations, at home and abroad

States have a primary role in protecting human rights, and robust regulation of corporations within each state's jurisdiction is an important factor.[664]

First, each state should take steps to develop sufficient 'judicial capacity to hear complaints and enforce remedies against all corporations *operating or based in their territory*'.[665] This ensures that local capacity is developed to deal with events which happen in the local jurisdiction (ie, South African courts dealing with subsidiaries based in South Africa in relation to environmental and human rights breaches occurring in South Africa). But that responsibility must be accompanied by development of coherent and clear regulatory standards that make compliance possible.

Secondly, to ensure effective state-based regulation of corporations in their activities abroad, the Task Force recommends that states clarify regulatory mechanisms related to climate change, including for overseas violations by corporations or international subsidiaries. Private or semi-private corporate actors are directly responsible for the largest portion of GHG emissions[666] and states cannot neglect their role in protecting human rights by failing to hold corporate actors to account.[667] However, obligations on corporates must be clear so that corporates are able to put in place strategies to comply with regulation. It is important that states strike the proper balance between under- and over-regulation as they undertake measures designed to bring international climate change under the ambit of national law. Regulations characterised by gaps and loopholes will create enforcement difficulties and hamper the effectiveness of remedies.[668] Just as problematic, however, is overregulation that can harm business interests essential to the domestic economy and broader economic growth.

In particular, states should increasingly seek to regulate corporations' impact on the climate through legislation requiring full disclosure of GHG emissions both at home and abroad. By basing jurisdiction on the presence of a parent or subsidiary

within the state's territory, such legislation can effectively render extraterritorial actions and harms subject to domestic regulation.

One example that already allows states to regulate corporations' activities abroad (in respect of anti-bribery) is the US Foreign Corrupt Practices Act.[669] Importantly, once overseas actions are within the reach of domestic legislation, a company cannot circumvent the domestic regulation via offshore siting of high-emissions operations. An analogous approach that utilises domestic law to address actions abroad could therefore be used where a lack of local capacity meant that corporations' GHG emissions were not being regulated at all. Another US example is the disclosure requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act with respect to corporations' global supply chains for sourcing of certain 'conflict minerals'.[670] Such measures would therefore provide access to domestic remedies for violations of climate change obligations, even if the violative conduct occurred in another country.[671]

There are a number of significant benefits to allowing home-state regulation of corporations, perhaps most importantly that most corporations are ultimately based in first-world countries with well-developed and independent judiciaries.[672] Two such laws worth noting have been proposed; one in the US (Corporate Code of Conduct, HR 4596) and one in Australia (Corporate Code of Conduct Bill 2000).[673] Under the proposed US Corporate Code of Conduct Act, US companies that employed more than 20 employees in a foreign country were required to establish a code of conduct based on US and internationally recognised standards in the areas of environmental protection, labour rights and human rights.[674] In the Australian bill, companies employing more than 100 people in a foreign country were required to 'take all reasonable measures to prevent any material adverse effect on the environment'.[675] While neither was adopted, they together demonstrate potential paths forward.

Although these provisions could be seen as essential to any long-arm environmental protection statute, they have several key omissions: (i) they did not affirmatively state the human rights standards applicable to corporations, instead incorporating treaties by reference; (ii) they were not clear as to the ability to sue a parent for the entirely extraterritorial actions of a subsidiary; and (iii) they did not allow for attachment of domestic assets in the event of foreign court judgments.[676] Each of these features should ultimately be a part of statutory regulation of overseas corporate conduct.

(iv) Sector-specific initiatives: finance and banking

Under the auspices of the UNEP Finance Initiative, there has been much progress in the banking and financial sector to define human rights obligations. The UNEP Finance Initiative has contributed to the publication of the PRI and has developed the Principles for Sustainable Insurance.[677] In addition, the Thun Group of Banks has been particularly active in progressing discussion of the UN Guiding Principles on Business and Human Rights.[678]

Furthermore, over 79 financial institutions have officially adopted the Equator Principles, a risk management framework for determining, assessing and managing environmental and social risk in projects, and which primarily seeks to provide a minimum standard for due diligence to support responsible risk decision-making. To this end, the Equator Principles implement environmental protection standards, and require the client to develop or maintain an environmental and social management system. Additionally, the Principles require that the client prepare an environmental and social management plan to address issues that were raised during the assessment process and incorporate actions required to comply with the applicable standards. If the applicable standards are not met to the satisfaction of the EPFI, the client together with it will agree on an Equator Principle Action Plan.[679]

In Europe, export credit agencies (ECAs) have been taking positive steps to recognise the threat of climate change. ECAs are private or quasi-governmental institutions that act as intermediaries between national governments and exporters to issue export financing. ECAs make it possible for corporations to do business abroad, mostly in places where the financial and political landscape is unpredictable. The financing can take the form of credits, credit insurance or guarantees. As financial institutions, ECAs can make their support to an exporter dependent on certain conditions being met.

In 2011, the EU adopted a Regulation on the application of certain guidelines in the field of officially supported export credits.[680] The EU is party to the Arrangement on Officially Supported Export Credits (the 'Arrangement') of the OECD. The Arrangement regulates the financial terms and conditions that an ECA may offer in order to foster a level playing field for officially supported export credits. Regulation 1233/2011/EC provides that the guidelines contained in the Arrangement shall apply in the EU. In particular, Recital 4 of this Regulation provides that:

> '[T]he Member States should comply with the Union's general provisions on external action, such as consolidating democracy, respect for human rights and policy coherence for development, *and the fight against climate change*, when establishing, developing and implementing their national export credit systems and when carrying out their supervision of officially supported export credit activities.'[681]

> As outlined, initiatives by both public and private actors show that there is ample room to effectively address climate change within the banking and financial sector. The Task Force encourages similar initiatives which promote addressing climate change issues through the banking and financial sector.

3.2 Capacity building and transparency

Drawing on the international regimes discussed in Chapter 2, it is clear that a number of opportunities exist for capacity building, skills and knowledge transfer to developing countries, whether through the IBA itself or through existing institutions such as the UN UPR process, as well as opportunities for increased transparency in environmental litigation and decision-making. Several key recommendations in this area are identified below.

3.2.1 Knowledge and skills transfer

Promoting developing countries' access to the full range of legal tools, remedies and resources to address climate change is a critical part of achieving climate change justice. The Task Force considers that this can be advanced through IBA-facilitated programming and training, the establishment of an IBA network of climate change counsel and within the UN UPR process.

(i) IBA and IBAHRI climate change initiatives and network of climate change counsel

The IBA is the global voice of the legal profession, with 55,000 lawyers and over 200 bar associations and law societies around the globe. Leveraging this resource, in the short-term, the Task Force recommends that the IBA consider innovative ways of raising attorney, judge and lawmakers' awareness of climate change and its adverse implications on human rights. For example, the IBA could spearhead training initiatives for lawyers and judges dealing with climate change and environmental and human rights issues.

In particular, the Task Force recommends that the IBA establish an international IBA network of climate change counsel. The creation of a more capable body of climate change lawyers in both the developed and developing worlds could increase access to justice and could serve as a resource for policy-makers, scientists and practitioners on climate change and human rights issues. Such a network would allow developed and developing nations to leverage the legal expertise of IBA members and to exchange ideas regarding environmental litigation and international law more efficiently. By acting as a central repository for climate change knowledge, the IBA network could assist local actors to avoid reinventing the wheel and empower them to achieve more lasting progress in their communities. The first initiatives in this arena could include a website, mailing list or other means through which parties on the ground could easily access relevant expertise for their particular needs.

In the medium-term, the Task Force recommends that the IBA integrate climate justice training and courses into its existing platform of legal education. Drawing upon the IBA commitment to providing educational programmes for those with an interest in the legal profession on a global scale, the IBA could include climate justice and human rights as part of the curricula of its Public and Professional Interest Division's Training Course Programme (on International Legal Business Practice),[682] its Online CLE programmes,[683] and its LLM in International Legal Practice.[684]

A significant positive development would be for the IBA to add climate justice to the pertinent human rights issues that form the basis of the targeted capacity building and advocacy projects of its Human Rights Institute.[685] Following the trend of the IBAHRI in other human rights contexts, it could include climate change justice issues in its training initiatives and annual reports and/or publish training manuals, papers, video interviews or reports. In particular, the Task Force recommends that in the medium-term the IBAHRI, together with other components of the IBA, including its Environment, Health and Safety Law Committee, integrate training on climate justice and human rights issues into the support and technical assistance provided to judiciaries, newly established and/or under-resourced bar associations and law societies worldwide. As has been done in the past, this could include workshops for judges, placement of a climate change and human rights specialist to work with the local bar association or law society to provide training for staff and members, and to build or strengthen links with international regional organisations.[686]

(ii) Increase technical assistance in UPR Reports

As another short-term measure, the Task Force recommends that UN Members lacking expertise or resources to address certain climate change issues should request technical assistance in their UPR country reports. Doing so would further cement the treatment of climate change as a human rights issue, while at the same time allowing individual countries to identify, and receive assistance for, the complex environmental problems that they face. After all, individual states are often in the best position to determine what climate threats should be given priority and what areas possess the greatest need for foreign expertise.

The UN Human Rights Council has overseen the UPR process since its creation in 2006. The UPR requires all 193 UN Member States to periodically report what actions they have taken to meet their human rights obligations under international treaties or prior voluntary pledges. It is a unique, state-driven process that aims to establish universal accountability among all UN Members by allowing countries to share their best practices, explain their challenges and request technical assistance.[687]

The enhancement of a state's technical capacity is one of the UPR explicitly stated objectives, and countries have utilised this process to ask for help in meeting their human rights obligations.[688]

By and large, the UPR process does not yet focus on the climate change effects on human rights directly, but countries most affected by climate change have raised the issue in their UPR reports. The Republic of the Marshall Islands, for instance, wrote in its national report to the Working Group on the UPR:

> 'As an island nation with land only 2 meters above the sea-level, the adverse effects of climate change, particularly sea-level rise, are a human rights concern for the RMI. Not only are lives at risk, but livelihoods as well vis-à-vis food security, economic security, educational security and health security, amongst others. The jeopardy of livelihoods ultimately leads to poverty, loss of land, loss of custom and culture and loss of identity which more often than not targets the most vulnerable groups, i.e., women and children.' [689]

Encouraging other countries to likewise integrate climate concerns into their human rights submissions will increase transparency and accountability, and allow for a more targeted deployment of technical expertise on a national scale.

(iii) Use UPR Reports to highlight climate change justice issues

In the medium-term, the Task Force recommends that UPR stakeholder reports should be used to highlight domestic climate change justice concerns during the reviews of each UN Member State. This work would complement and reinforce states' requests for technical assistance in their own UPR national reports; the more stakeholder advocates draw attention to climate change injustice through their UPR submissions, the more that countries will use the process to reach out for professional support.

Although the UPR review is largely state-driven, NGOs, national human rights institutions, human rights defenders, academic institutions, research institutes, regional organisations and other 'stakeholders' can also participate in the process.[690] The UPR process specifically allows for such civil society organisations to submit their own reports to the UPR Working Group, which, along with the government-authored report, jointly serve as the factual basis for the review.

The Friedrich-Ebert-Stiftung Foundation and the Center for International Environment Law have suggested that the Human Rights Council make climate change challenges to human rights a standing part of the agenda in the UPR.[691] The UPR guidelines for written submissions already ask relevant stakeholders to keep in mind that the review is based on the '[v]oluntary pledges and commitments made by States', which presumably include climate-focused treaties.[692] Having civil society

actors call nations to account for their failings to confront climate change will help identify problems to be addressed, and provide impetus for states to take action.

It must be noted, however, that a truly inclusive UPR reporting process is still far from reality for a number of developing nations, where significant barriers for an effective participation in the UPR regime still exist. For this reason, any recommendations for the inclusion of climate change concerns in human rights submissions must be accompanied by an urge for UN Member States to create a truly inclusive reporting system that goes beyond just holding public hearings.

3.2.2 Transparency

The principle of transparency in climate change governance and decision-making encompasses a range of procedural environmental rights, specifically the right to access information concerning the environmental and climate impacts of projects; the right of the public to participate in environmental decision-making; and the right to a remedy where environmental obligations are ignored or transgressed. John H Knox recognised in his 2013 Report to the UN Human Rights Council that:

> 'Human rights law includes obligations relating to the environment. Those obligations include procedural obligations of States to assess environmental impacts on human rights and to make environmental information public, to facilitate participation in environmental decision-making, and to provide access to remedies. The obligation to facilitate public participation includes obligations to safeguard the rights of freedom of expression and association against threats, harassment and violence.'[693]

The Inter-American Court of Human Rights emphasised the importance of transparency to environmental decision-making by public authorities in the following terms:

> '[T]he State's actions should be governed by the principles of disclosure and transparency in public administration that enable all persons subject to its jurisdiction to exercise the democratic control of those actions, and so that they can question, investigate and consider whether public functions are being performed adequately.' [694]

Transparency seeks to 'involve, in the decision-making processes, individuals whose lives, health, property, and environment might be affected by providing them with a chance to present their views and be heard by those responsible for making the ultimate decisions'.[695] In this manner, transparency enhances the legitimacy of environmental decision-making and government action by ensuring that the perspectives of a wide spectrum of stakeholders are taken into account. Further, procedural rights enhance climate justice by empowering the public and enhancing its role in the regulatory process. Participatory rights help to ensure more accountable, transparent and responsive governance and should encourage governments to ensure that climate change issues are considered at all stages of the procedure. Transparency is also closely related to EIAs, discussed further below.

The right to access environmental information and to public consultation has been enshrined in a number of international instruments, including, inter alia, Principle 10 of the Rio Declaration on Environment and Development,[696] Article 6 of the UNFCCC, Articles 2(6) and 3(8) of the Espoo Convention[697] and Article 13 of the ILC Draft Articles on Prevention of Transboundary Harm from Hazardous Activities.[698]

Furthermore, international human rights tribunals have recognised that the right to access environmental information and the right to take part in environmental decision-making are procedural components of other free-standing human rights. For example, these procedural rights have been found to be integral to the right to freedom of expression, which encompasses the right to seek, receive and impart information,[699] the right to life[700] and to private life,[701] the property rights of indigenous communities,[702] the right to a healthy environment, and the right to development,[703] among others.

At the vanguard of developments with regard to the international principle of transparency in environmental decision-making is the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters,[704] better known as the Aarhus Convention.

(i) The Aarhus Convention

The Aarhus Convention was adopted under the auspices of the UNECE and entered into force in 2001. It has 46 States Parties, including the EU.[705] The Aarhus Convention contains three 'pillars' that build on the procedural rights set out in Principle 10 of the 1992 Rio Declaration. The first pillar is the right to access environmental information,[706] pursuant to which all public authorities are obliged to provide information upon request and, in certain circumstances, to actively disseminate certain types of information. Secondly, the Convention sets out the right of the public to participate in environmental decision-making in respect of activities relating to the energy sector, metal and mineral production and waste management, among others,[707] in addition to projects, policies and regulations relating to the environment.[708] Thirdly, it protects the right to access environmental justice, by ensuring that individuals have the right to seek independent or judicial review of environmental decisions.

The relationship between transparency and climate change justice is reflected in Article 1 of the Convention, which sets out the objective of the Convention to 'contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being'.

Article 3.7 of the Aarhus Convention imposes a novel obligation on states to 'promote the application of the principles of this Convention in international environmental decision-making processes and within the framework of international organizations in matters relating to the environment'.[709] This, in effect, imposes a positive duty on states to 'export' the principles of the Convention when entering into negotiations with other states and when concluding international agreements. One commentator has described this obligation to promote the Convention's principles as a 'duty of evangelism'.[710]

Another innovative feature of the Aarhus Convention is its compliance mechanism which, fittingly, incorporates the principles of public participation, transparency and environmental citizenship. The Convention supplements a traditional inter-state dispute settlement procedure[711] with a non-judicial compliance mechanism, the Aarhus Convention Compliance Committee (ACCC).[712] The ACCC, which became operational in 2002,[713] is a non-judicial, independent committee of experts with a mandate to report on compliance, monitor implementation and make recommendations to the Meeting of the Parties. The Meeting of the Parties may in turn endorse the ACCC recommendations.

Significantly, the compliance mechanism is open to members of the public or NGOs who may – in addition to states – petition the ACCC when they believe that a party is not in compliance with the Convention. Citizens and NGOs have seized this opportunity with great enthusiasm; the ACCC has received over 100 communications from 2003 to the present.[714] Through its decisions, the ACCC has recommended legislative programmes and reform, capacity-building and development of implementation mechanisms.[715] For example, in a remarkable recent decision,[716] the ACCC held that the existing jurisprudence of the CJEU on individual standing[717] was 'too strict to meet the criteria of the Convention'.[718] If the CJEU persists in applying this case law,[719] the ACCC recommended that the EU amend the EU treaties' restrictive rules on individual standing before the CJEU in order to ensure compliance with the Convention and specifically the right of access to justice.[720]

(ii) Encouraging the adoption of international and regional instruments guaranteeing environmental procedural rights

The parties of the Aarhus Convention are all European states (although it is possible for non-European states to accede).[721] The Aarhus Convention is a powerful climate change justice instrument because it takes a human-centred, local community-empowered approach to addressing environmental problems. Despite its current regional scope, the Aarhus Convention has been recognised as having the 'potential to serve as a global framework for strengthening citizens' environmental rights'.[722] In the medium-term, the Task Force recommends the extension of the principles enshrined in the Aarhus Convention – which reflect Principle 10 of the Rio Declaration – to other regions and countries. The Task Force urges non-European states to take advantage of the right to accede the Aarhus Convention. States can also create new, parallel regional conventions.

On this note, it is encouraging to observe that the Economic Commission for Latin America and the Caribbean signalled their intent to adopt a similar regional instrument. In June 2012, ten countries adopted the Declaration on the application of Principle 10 of the Rio Declaration on Environment and Development in which they committed to drafting and implementing a Plan of Action on adopting the right to access information, public participation and access to environmental justice by 2014.[723]

Meanwhile, the UNEP has encouraged individual states to implement environmental procedural rights through domestic legislation. To this end, it has adopted Guidelines for the Development of National Legislation on Access to Information, Public Participation

and Access to Justice in Environmental Matters in 2010.[724] In the short term, the Task Force endorses these Guidelines and urges states to implement them in their domestic legislation.

(iii) Enforcing the duty to promote the principles of transparency in international negotiation

In the short-term, the Task Force also endorses the Aarhus Convention's citizen-focused compliance mechanism as a useful model in other regional agreements promulgating environmental procedural rights and in other MEAs more generally. The ACCC represents a move away from a coercive model of enforcement towards a persuasive or management model, whereby states are encouraged to comply with environmental standards as a result of public scrutiny and pressure, which leads them to the conclusion that it is in their interest to comply.

In addition to the right of the public to make complaints, the independence of the ACCC is a particularly salient feature that has contributed to its success and must be retained in future compliance regimes enable citizens to petition it. The ACCC is not composed of state delegates but is comprised of eight individual experts who serve in their personal capacity. Moreover, NGOs may also nominate experts for election to the Committee. The independence of experts not only precludes state interference in independent decision-making but also ensures the continuity of the composition of the Committee by ensuring that its members remain the same.

In contrast to the ACCC, the compliance mechanism under NAAEC also allows citizens to make complaints but it does not guarantee the same independence as the CEC, which oversees compliance, is an international organisation composed of state representatives. This structural weakness can allow the state to interfere with the work of the Commission, for example, by delaying or limiting the scope of CEC reports.

(iv) Environmental impact assessments

EIA is a risk management process that identifies and evaluates the environmental consequences of a proposed project before the project is authorised. EIA is not only integral to the principle of transparency, but also to the environmental principles of prevention and precaution, by enabling states to anticipate and address the environmental risks (and in particular, transboundary risks) of planned projects in advance. Strategic environmental assessment (SEA) complements EIA by considering sustainable development in policy, plan and programme development.

A number of MEAs and other international treaties incorporate EIA-type provisions, such as Article 206 UNCLOS;[725] Article 14(1) of the Convention on Biological Diversity; and Article 4(2)(f) of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. In fact, the ICJ recently held that it is now considered a requirement under general international law to undertake an EIA where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource.[726]

At a regional level, the Espoo Convention and the ASEAN Agreement on the Conservation of Nature and Natural Resources, among others, incorporate EIA requirements. The Espoo Convention, in particular, and its Protocol on SEA (not yet in force), sets out detailed procedural standards for EIA.[727] The EU also requires Member States to conduct EIAs for any projects adopted by national and local authorities,[728] and in 2013 released Guidelines on Integrating Climate Change and Biodiversity into Environmental Impact Assessment and also on Integrating Climate Change into Strategic Environmental Assessment. The Task Force also notes that the ILA *Draft Articles on Climate Change* usefully include at Draft Article 7B.5 the provision that '[w]here there is a reasonably foreseeable threat that a proposed activity may cause serious damage to the environment of other States or areas beyond national jurisdiction, including serious or irreversible damage through climate change to vulnerable States, an environmental impact assessment on the potential impacts of such activity is required'.[729]

The Task Force recommends that states incorporate obligations to conduct EIA and/or SEA into national (and, where appropriate, provincial, state and regional) legislation for significant projects with potential climate change or transboundary impact. States are encouraged to go beyond their obligation under customary international law to conduct EIAs for projects with transboundary effects, and to extend the duty to conduct EIAs, with specific reference to potential impacts on climate change, to all public projects. To be most effective, this legislation should require, first, that all EIAs include a detailed discussion of the GHG emissions that will be caused directly or indirectly by the project, and of the opportunities available to reduce the project's GHG footprint, both by increasing its energy efficiency and its use of low-carbon energy sources. Where practicable, these opportunities should be taken and, if they are not taken, a detailed explanation should be provided. Secondly, all EIAs should include a discussion of the effects that projected future climate conditions will have on them throughout the life of the proposed facility. For example, if a project is to be built along a coastline and is expected to last for 75 years, the EIA should discuss the facility's ability to survive the sea level and storm surge conditions that are anticipated in 75 years. And thirdly, all EIAs should be posted online so that everyone has the benefit of the analysis and projections.

(v) Transparency in international arbitrations

Specific recommendations to increase transparency in international arbitrations can be found on page 145.

3.3 Institutional measures

In addition to the legal strategies already discussed, the multilateral arena has a number of opportunities within the UNFCCC negotiations, the WTO and broader trade negotiations to assist in promoting climate justice. This remaining section outlines the recommendations for states when engaging in bilateral, regional and multilateral trade negotiations, as well as more institutional WTO reforms. It also sets out specific recommendations for states and other actors engaging in the UNFCCC process. Finally, the emerging area of oceans governance, as well as climate change-related migration, food security and technological transfer, present new chances to formally progress *adaptation* to climate change, as distinct from the traditional focus on mitigation.

3.3.1 WTO reforms

As identified in Chapter 2, the underlying objective of the WTO is trade liberalisation, not environmental protection, and consequently there has been tension between climate change policies and the WTO disciplines. However, there is a real opportunity for the WTO, an organisation with a broad membership and effective dispute resolution system, to evolve to accommodate states' 'pro-climate' policies within the bounds of WTO law and, in addition, to actively promote climate change and environmental objectives.

The WTO-UNEP Report on Trade and Climate Change argues that 'mitigation measures should be designed and implemented in a manner that ensures that trade and climate policies are "mutually supportive"'.[730] This is endorsed by the ILA *Draft Articles on Climate Change*, which suggest that in ongoing or future negotiations under the WTO and the climate change regime, states should be guided by the principle of 'mutual supportiveness' to prevent any inconsistencies or potential conflicts between future international agreements.[731] The Task Force endorses this approach, but also explores different approaches that can be taken to actively promote climate change and environmental objectives within the WTO system by: (i) enhancing the WTO Committee on Trade and Environment; (ii) reconciling existing WTO law with domestic and international climate change rules; and (iii) over the longer term, proposing amendments to the WTO agreements themselves.

(i) Enhancing the CTE

The CTE was established by a decision of the Meeting of Ministers in 1994 and conferred with a broad mandate to promote sustainable development by identifying the relationship between trade and environment and 'to make appropriate recommendations on whether modifications of the multilateral trading system are required'.[732] However, the CTE has thus far failed to issue any guidance on how WTO rules could be amended to accommodate climate change measures. By revamping its mandate to ensure it plays a more active role,

the CTE could contribute to the reconciliation of WTO rules and climate change measures.

First, the Task Force recommends that the CTE establish a notification procedure for climate change measures. States wishing to adopt climate change measures but that have concerns about the compatibility of the measures with WTO disciplines could refer the measures to the CTE prior to their promulgation to seek advice on their WTO-compatibility.[733] In this manner, potential trade issues arising from the measures can be addressed upstream and political solutions in a non-judicial context can be sought while receiving guidance from dedicated experts in this field.

Secondly, the Task Force recommends that the CTE strengthen its relationship and collaboration with the secretariats of other MEAs through the establishment of a series of memoranda of understanding. At present, several MEAs have observer status in the CTE,[734] and MEA secretariats have participated in CTE work. Improving these arrangements would enhance cooperation between the WTO and other MEAs, allowing coordination of reporting and monitoring, and facilitating continued dialogue. For example, the CTE could play a coordinating role in respect of the elaboration of uniform environmental technical standards by facilitating and coordinating discussions with a view to reaching international consensus. This is an important issue since Article 2.4 of TBT establishes a presumption that technical standards comply with the TBT Agreement if they are based on an existing international standard (there are no such standards concerning climate change measures, although the ISO has recently adopted ISO/TS Technical Specification 14067, relating to the carbon footprint of products, discussed further in section 3.1.3 on page 147). Uniform international standards would remove the risk of protectionist domestic standards, provide certainty for regulators and advance the position of producers in developing countries which presently must have regard to a myriad of domestic standards when exporting. While this standardisation would take place outside the WTO system, the CTE could assume a central coordinating role.

(ii) Greening the WTO disciplines: reconciling existing WTO provisions with climate change measures

As discussed in Chapter 3, climate change measures that cause adverse effects on trade in goods may fall foul of GATT disciplines unless they can be justified under a GATT Article XX exception. While GATT Article XX enumerates ten public policy rationales, including measures adopted in pursuit of human, animal or plant life, and the conservation of natural resources, it does not expressly encompass climate change policies. This issue has not yet been considered by the WTO Dispute Settlement Body and, while it is likely that climate change measures will be accommodated within one of these provisions, an element of uncertainty remains.

A further unresolved doctrinal issue relates to the application of the GATT Article XX exceptions to other WTO agreements such as the TBT and the SCM

agreement; the latter does not contain any exceptions carving out regulatory space for domestic public policy. This uncertainty can have a chilling effect on potential climate change measures as states have difficulty ascertaining the compatibility of measures with WTO law.

Short of amending the WTO agreements, an affirmative clarification of some of these ambiguities would provide important security for states when adopting climate change measures, for example, by expressly confirming that climate change falls under the GATT Article XX exceptions or that the GATT Article XX exceptions can be relied upon in respect of other WTO agreements. This could either be achieved by 'greening' the jurisprudence of the Appellate Body or, alternatively, through a formal clarification through the Ministerial Conference, both of which are now discussed in detail.

Appellate Body jurisprudence

The Appellate Body could clarify the scope of the general exceptions by expressly acknowledging that climate change measures fall within the existing exceptions, namely GATT Article XX(g) or Article XX(b), and by showing a greater willingness to resolve conflicts between trade and the environment in favour of the latter. As discussed in Chapter 2, the Appellate Body has begun to take steps in this direction, for example, by relaxing the 'necessity' test under GATT Article XX. However, further progress can be made.

Specifically, a clear statement on the compatibility of PPMs with the principle of non-discrimination would be welcome. The Appellate Body is also encouraged to place greater emphasis on regulatory purpose when determining whether a measure violates the principle of discrimination.

Further clarification of the relationship between WTO law and other branches of international law, particularly international environmental law, is desirable. While the Appellate Body has held that the WTO agreements must not be 'read in clinical isolation from public international law'[735] and must be read in conjunction with 'any relevant rules of international law applicable in the relations between the parties',[736] in *EC-Biotech*, a panel refused to consider international environmental agreements, particularly the Convention on Biological Diversity and the Biosafety Protocol, when interpreting the relevant WTO agreements.[737] The Task Force would therefore welcome a clarification of the Appellate Body's position on the relationship between obligations arising under both international environmental law and MEAs and WTO law. Similarly, the Appellate Body should expressly endorse the precautionary principle, an emerging principle of customary international law, enabling states to invoke 'precaution' when demonstrating that a trade-restrictive climate change measure is justified or the least-restrictive alternative where the scientific evidence is not yet definitive. To date, the Appellate Body has confined reliance on the precautionary principle to a specific provision of the SPS Agreement.[738]

Conversely, the paucity of cases litigated on these issues to date suggests that the judicial development of this area may be too slow in light of the urgency characterising the present climate change debate. Furthermore, there may be concerns about the legitimacy of 'greening' the WTO disciplines through an adjudicative organ.

Clarification of the scope of the Article XX exceptions by an authoritative interpretation of the WTO Ministerial Conference

Alternatively, the Task Force recommends that WTO Members ask the Ministerial Conference of the WTO to adopt an interpretive decision defining and clarifying the contours and scope of application of GATT Article XX. The power to adopt interpretive decisions is derived from Article IX(2) of the WTO Agreement, which provides that the Ministerial Conference and General Council 'shall have the exclusive authority to adopt interpretations' of the multilateral trade agreements, by a majority of three-fourths of members.

A decision by enhanced majority of the highest political body of the WTO, which binds all members, has the advantage of conferring a high degree of legitimacy and certainty on the decision. In addition, unlike the Appellate Body, which can only provide guidance on an issue when a dispute on that issue is presented to it, the Ministerial Conference is not so constrained and therefore is positioned to provide a more timely response to this pressing problem. The 2001 Doha Declaration on the TRIPS Agreement and Public Health[739] – which clarified aspects of TRIPS, and could impact on states' right to protect public health and expressly recognised certain measures that states could take to promote access to medicines for all – is a useful precedent in this regard.

(iii) Amending the WTO agreements

The WTO agreements may be amended by a two-thirds majority of the Ministerial Conference or General Council. The amendment must then be submitted to each WTO Member State for approval in accordance with national constitutional requirements.

First, a relatively simple and effective reform would be to extend the list of exceptions in GATT Article XX to explicitly allow climate change measures, in line with the discussion herein. An alternative option would be to extend the list of exceptions in GATT Article XX to permit measures taken in accordance with Member States' obligations under Multilateral Environmental Agreements approved by the Ministerial Conference.[740] In the long-term, the Task Force recommends that WTO Members work towards adopting such amendments.

Secondly, reform of the SCM Agreement could have a significant impact on climate change measures. There are a number of potential avenues for reform.

Clarify the definition of a subsidy and facilitate the procedure for challenging subsidies

The definition of a subsidy pursuant to the SCM Agreement can be criticised for being both under-and over-inclusive, prohibiting local-content subsidies while allowing production subsidies, despite the fact that they often produce similar effects.[741] The indeterminacy of the subsidy definition leads to uncertainty. For example, uncertainty about whether the free allocation of emissions allowances will be considered subsidies for the purposes of the SCM, while renewable energy feed-in-tariffs were recently found to be out of the SCM Agreement because it was not possible to determine whether they conferred a benefit.[742] Subsidies for green products may be challenged or countervailed by another country if it believes its own production is being adversely affected.

A more targeted definition would not only bring greater clarity to this area, thus affording states the certainty that renewable energy subsidies will be upheld and supporting states' efforts to transition their economies and energy systems away from a dependence on fossil fuels, but also provide impetus to states to challenge questionable fossil fuel subsidies.

Establish a category of 'non-actionable' subsidies

As discussed in Chapter 2, the category of non-actionable subsidies lapsed in 1999 and was not renewed. Therefore, in the absence of any public policy exceptions under the SCM Agreement, a subsidy that is prima facie prohibited or actionable cannot be exempted or justified, regardless of its positive impact on the environment or climate change.

The Task Force recommends redefining and reinstating a category of non-actionable subsides, including an express category of renewable energy and climate change subsidies. Scholars suggest that this could be simply achieved by defining non-actionability in terms of the Kyoto Protocol commitments or policies.[743] For example, the EU adopted special guidelines in relation to its state aid rules, which provide carve-outs for the production of renewable energy and in relation to the emission trading system[744] – these may provide guidance on this issue. Alternatively, the GATT Article XX exceptions could be expressly extended to the SCM, as discussed herein.

Adopt an agreement on climate change, the environment or sustainable energy

Over the long-term, the Task Force supports the consideration of a standalone environmental or climate change agreement within the framework of the WTO. This would evidently provide the greatest coherency of all of the proposed WTO reforms, since it would address the range of issues discussed in a single text. Conversely, the range of issues to be addressed signifies that consensus could be elusive. As a starting point, a potential agreement could incorporate issues identified in paragraph 31 of the Doha Ministerial Declaration with regard to trade and the environment, one of 21 subjects listed for negotiation. Paragraph 31 of the Doha Ministerial Declaration provides for negotiations on: (i) the relationship between WTO disciplines and the obligations in MEAs; (ii) provision for regular information exchange with other WTO committees; and

(iii) the reduction or, as appropriate, elimination of tariff and non-tariff barriers to EGS.

Liberalisation of EGS has received the most attention to date. However, states have differed markedly on how to define EGS, namely whether to define a list of EGS by reference to their contribution towards climate change goals, by reference to 'environmentally preferable products', or an 'environmental project approach'.[745] As we have seen, this has led to a small group of states forging ahead with a proposed agreement on green goods, building on the APEC list of EGS (as discussed in Chapter 2). Meanwhile, elimination of non-tariff barriers, such as subsidies, technical standards and eco-labelling, for example, has received little attention. The agreement must also address issues such as the relationship and linkages with other WTO agreements and between WTO disciplines and the trade obligations arising under MEAs.

Evidently, there is a long way to go in this process. However, trade reform to accommodate climate change measures is an increasingly urgent issue, requiring a prompt response. For this reason, incremental and bottom-up changes may, at this stage, be the most effective way forward.

3.3.2 Bilateral and regional trade agreements

Bilateral and regional FTAs, whether RTAs or bilateral FTAs, such as the current TPP or TTIP negotiations, are increasingly being used by states to negotiate trade advantages and secure investor protection *outside* the traditional multilateral WTO negotiating rounds. In an encouraging trend, states are using these smaller negotiations to include a number of pro-environmental measures in trade and investment agreements. Bilateral and plurilateral agreements could become a powerful climate change tool by enhancing commitments made under environmental chapters and ensuring their effectiveness through legally binding commitments to uphold and improve climate change measures.

This issue is particularly salient in light of ongoing negotiations concerning the TPP between the countries of the Asia-Pacific region,[746] and TTIP between the EU and the US, two landmark trade agreements that will cover huge sections of global trade. Collectively, these agreements present an unrivalled opportunity to develop synergies between trade and climate change by incorporating robust climate change measures into a trade agreement. However, recent reports suggest that the proposed Environment Chapter of the TPP has been significantly watered down due to disagreements between the parties and that it will not be enforceable.[747] This would be a significant missed opportunity.

In particular, incorporating climate change measures into trade and investment regimes, which traditionally have better enforcement mechanisms, will enhance and incentivise compliance. There are few incentives for one state to punish another state for defaulting from reciprocal climate change obligations; conversely, the risk of trade sanctions will have a strong deterrent effect. There are a number of pro-environment provisions that are being incorporated into bilateral, regional and plurilateral trade

and investment agreements, including both substantive undertakings and enforcement mechanisms, discussed in turn below.

(i) Clauses supporting environmental non-derogation measures

Recent BITs and FTAs have included introductory and hortatory provisions that signal the parties' commitment to sustainable development and combating climate change. In addition, many trade agreements contain 'non-derogation' provisions which require parties to refrain from weakening or waiving their environmental rules in order to encourage or incentivise foreign investment. For example:

- The Japan-Switzerland Economic Partnership Agreement states in its preamble that the parties are '[d]etermined, in implementing this Agreement, to seek to preserve and protect the environment, to promote the optimal use of natural resources in accordance with the objective of sustainable development and to adequately address the challenges of climate change'; and Article 9 of the same agreement includes a more substantive obligation to 'encourage trade and dissemination of environmental products and environmental-related services' in pursuit of a 'climate-change related goal'.[748]
- Similarly, the Korea-EU FTA includes an obligation in Article 13.6(2) to 'strive to facilitate and promote trade and foreign direct investment in EGS, including environmental technologies, sustainable renewable energy, energy efficient products and services and eco-labeled goods'.[749]
- In Articles 1701 and 1702 of the Canada-Colombia FTA, the parties recognise that 'each Party has sovereign rights and responsibilities to conserve and protect its environment and affirm their environmental obligations under their domestic law, as well as their international obligations under multilateral environmental agreements to which they are party.' This agreement further recognises that 'the mutual supportiveness between trade and environment policies and the need of implementing this Agreement in a manner consistent with environmental protection and conservation and sustainable use of their resources' and that '[n]either Party shall encourage trade or investment by weakening or reducing the levels of protection afforded in their respective environmental laws'.[750]
- The 2012 US Model BIT (which is used as a template for future treaty negotiations and which has recently been updated to address and prioritise environmental concerns)[751] stipulates that parties must not derogate from their domestic environmental laws, or fail to 'effectively enforce' them, in order to attract investment.[752]
- The renegotiated Canada and Czech Republic BIT provides in Article II that '[t]he Contracting Parties recognize that it is inappropriate to encourage investment

by relaxing domestic health, safety or environmental measures. Accordingly, a Contracting Party should not waive or otherwise derogate from, or offer to waive or otherwise derogate from, such measures as an encouragement for the establishment, acquisition, expansion or retention in its territory of an investment of an investor.'[753]

- Canada's 2004 model foreign investment promotion and protection agreement includes a general exception 'to protect human, animal or plant life or health' and a requirement that parties should not relax their environmental measures in order to encourage investment.[754]

These recent BITs and FTAs show a clear trend towards a balanced approach that, in protecting foreign investments, public interest values such as the environment and, consequently, climate change matters have to be taken into consideration, particularly where so-called 'non-derogation clauses' are used, such as that used in the Canada-Czech BIT, previously referred to in this report. The Task Force encourages all states when negotiating BITs and FTAs to include provisions supporting domestic climate change measures, including non-derogation clauses requiring the States Parties to refrain from weakening or waiving their environmental rules in order to encourage or incentivise foreign investment.

(ii) Environmental chapters and side agreements

Many bilateral, preferential and regional trade agreements have begun to incorporate specific climate change and environmental chapters and side agreements (in contrast, only a limited number of international investment agreements have incorporated climate change language).[755] NAFTA was the first agreement to include such a side agreement on the environment, the NAAEC, which entered into force in 1994 at the same time as NAFTA. The NAAEC was designed to allay concerns that NAFTA would generate economic growth at the expense of the environment.

Usefully, in some existing RTAs, states have undertaken to work together to adopt and implement climate finance instruments, to pursue capacity and institution-building activities in pursuance of CDM and REDD+ projects or to assist in the creation of domestic carbon markets. Other fruitful areas of collaboration include technical regulation, standard-setting, for example, with regard to energy-efficiency calculation or conformity assessment, exchange of information and best practices and the promotion of scientific exchanges on climate change adaptation and mitigation. The EU has included commitments to collaborate on clean technology transfer in a number of its agreements.[756]

Unfortunately, the commitments made in such environmental chapters and side agreements are rarely supported by binding legal obligations and have been largely confined to preambular undertakings to act in a manner consistent with environmental protection, or weak or hortatory commitments to cooperate. The effectiveness of the above measures will depend on the establishment of a strong enforcement and compliance mechanism which

provides for recourse to trade sanctions. For example, NAAEC, the environmental side agreement to NAFTA, provides for an inter-state dispute resolution mechanism whereby a state may initiate a claim against another state on the grounds that it has not observed its environmental laws. An arbitral tribunal may impose an action plan or fines and may ultimately suspend NAFTA benefits if the state refuses to comply.

In the long-term, the Task Force endorses efforts by states to ensure that commitments to the environment and climate change justice made in separate chapters and side agreements are subject to strong enforcement and compliance mechanisms.

(iii) Supporting existing obligations under multilateral environmental agreements

States are supporting existing obligations under MEAs (such as the UNFCCC) in their bilateral trade and investment agreements.

For example, the Peru-US Trade Promotion Agreement stipulates that the parties 'shall adopt, maintain, and implement laws, regulations, and all other measures' to fulfil their obligations under a specified list of MEAs.[757] This is the first trade agreement to directly incorporate environmental agreements into a dispute settlement-enforced system.[758] The obligation to comply is confined, however, to failure to fulfill an obligation under an MEA 'in a manner affecting trade or investment' between the two parties to the agreement.

The Task Force encourages states to consider including in future trade or investment agreements a specific recognition that obligations arising under MEAs take precedence over conflicting trade measures.[759]

3.3.3 UNFCCC negotiations

The UNFCCC process currently represents the greatest effort among nations to collectively combat the effects of human-induced climate change, and remains the most promising framework for attaining a global international agreement. As such, any serious attempt to address climate change justice must be integrated within the UNFCCC negotiations, despite the 'ambition gap'[760] between current emission reduction pledges and the UNFCCC stated goal to limit global temperature rise to 2°C above pre-industrial levels.[761]

(i) Endorsing the UNFCCC process and a 2015 agreement

The ADP was established in 2011 within the negotiations as the body to develop a global instrument under the UNFCCC. It is critical that states should support the urgent work of the ADP as it represents the most promising initiative of the UNFCCC process to implement a long-term coordinated reduction in global GHG emissions. The ADP mandate is to, inter alia, develop 'a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties'.[762] Such legal

instrument or outcome is to be adopted at the Paris Conference in 2015 to enter into effect by 2020, and is intended to include all existing parties to the UNFCCC.

Although there is some emerging common ground amongst states that a hybrid architecture combining nationally determined contributions or commitments with 'top down' elements such as rules on transparency and accounting, as well as an assessment/consultative process will be the architecture of a 2015 agreement, there is less common ground on the cross-cutting issues of differentiation between states and equity (incorporating the significant controversy around historical responsibility, respective capabilities and development imperatives).[763] Equity and differentiation have proven to be deeply contentious in the UNFCCC negotiations, but states must perceive the agreement to be equitable if they are to accept it. One achievable option for progressing the focus on climate justice and equity is for the 2015 instrument to reference the impact of climate change on human rights, for example in the preamble of the instrument. The Task Force supports ongoing attempts in the negotiations to achieve this.

Additionally, while the 2015 instrument is intended to include all states, rather than the more limited group of parties to the Kyoto Protocol, it is important that States Parties to the Kyoto Protocol strive to ratify the Doha Amendment. The Doha Amendment establishes net emission reductions for the second commitment period between 2013 and 2020 (the Kyoto Protocol contemplates specific carbon emission reductions over two commitment periods: the first from 2008 to 2012, and the second from 2013 to 2020).[764] Pursuant to the Doha Amendment, the Kyoto Protocol parties taking on commitments during this eight-year period are required to reduce their aggregate emissions by 18 per cent below 1990 levels by the end of 2020 (eg, the EU, as a whole, is required to reduce its emissions by 20 per cent).[765] However, currently, only nine nations have ratified the Doha Amendment.[766]

(ii) Tracking states' climate change prevention and mitigation commitments

In 2010, the COP in Cancun reached a significant decision by formally recognising the emissions reduction pledges proposed in the Copenhagen Accord. For the first time, the COP formally recognised both (i) quantified economy-wide emissions reductions targets (self-stated targets from Annex I countries);[767] and (ii) nationally appropriate mitigation actions by non-Annex I developing countries.[768] This was a breakthrough in recognising non-binding and self-stated commitments under the formal UNFCCC process, in sharp contrast to the Kyoto Protocol, where only Annex I developed nations had formally recognised commitments.

Aside from emphasising the need for more ambitious and widespread targets, in the short-term the Task Force endorses the COP efforts to develop a coherent international framework for measuring, reporting and verifying national efforts of all states to combat climate change. For example, a series of technical papers have been issued seeking to

develop a series of common metrics for clarifying various Annex I party commitments while taking into account individual national circumstances.[769] As Australia observed in its 2013 report, clarifying ex ante how '2020 pledges' are defined and their expected mitigation effects is critically important to build trust and confidence between states, to support increased ambition, to understand the level of collective emissions reductions for the period to 2020 and to promote full international recognition of the mitigation being undertaken by parties.[770]

(iii) Expanding aid for domestic migration adaptation programmes

Much, if not most, of climate change-related migration will be internal to national borders.[771] Funding to help developing countries resettle people internally is greatly needed. Many LDCs have drafted NAPAs under the UNFCCC process, identifying priority activities that respond to urgent adaptation needs.[772] The UNFCCC Least Developed Countries Fund finances the preparation and implementation of NAPAs.[773] Being resource-scarce, most LDC NAPAs focus on reducing migration flows, viewing it as a symptom of failed development or a barrier to adaptation, rather than recognising migration as a vital adaptation strategy.[774] Better funding from the LDC Fund and other sources would help countries deal with internal migration, such as by improving destination cities' and regions' abilities to absorb migrants and resist flooding and extreme weather themselves. Funding would also help integrate NAPAs into national poverty reduction strategies and other development assistance programmes. Accordingly, the Task Force recommends the international community make medium-term efforts to increase funding for NAPAs and national adaptation plans through the LDC Fund.

(iv) Improving the UNFCCC process: REDD+ and the CDM

As discussed in other sections, although the COP has recognised that 'parties to the [Framework Convention] should, in all climate change-related actions, fully respect human rights',[775] there are no practical mechanisms to ensure accountability. In light of the justice concerns raised regarding the REDD, REDD+ and CDM programmes discussed in Chapter 1, the Task Force supports efforts to address these issues to promote improved integration of and enforcement of rights and accountability in climate mitigation efforts.

First, the prevailing developmental thrust for REDD programmes, REDD+ goes beyond reforestation to include conservation, sustainable management of forests and enhancing forests' carbon storage capacity.[776] Globally, parties to the Framework Convention agreed in 2010 to specific safeguards that must be promoted for REDD+ activities. These social and environmental protections include: (i) consistency with international obligations; (ii) respect for the rights of indigenous peoples and local communities; (iii) full and effective participation of stakeholders; (iv) good governance systems; and (v) avoided damage to biodiversity and ecosystems.[777]

While these safeguards represent an important initial step, there remains a need to articulate universal principles that justify the REDD+ safeguards and provide a template for future efforts.[778] These universal safeguard principles can and should be developed at two distinct levels. At the international level, institutions like the Centre for Biological Diversity should work to articulate safeguards applicable across climate change adaptation and mitigation mechanisms that affect communities and human rights. These generally applicable principles should be developed and discussed in a cross-sectorial effort that reasonably and efficiently accounts for the common human rights issues implicated by development mechanisms, to prevent an endless proliferation of principles applicable only in narrow venues.[779] Efforts should be taken at the country level to translate these universal principles into specific safeguards, keeping in mind the lessons of other, similar countries and mechanisms.[780]

For example, one primary universal safeguard should be effective monitoring of programme effectiveness to ensure that resources are not wasted on programmes with poor track records. Under the Warsaw Framework, developing countries seeking to receive results-based payments must provide summaries of the way their programmes address and respect applicable safeguards.[781] However, there is no mechanism for payments to be refused, reduced or disputed based on poor performance, so long as a summary is provided. Consideration should be given to ensuring that future resource allocation decisions take the findings of these summaries into account as a means of ensuring that safeguards are respected in practice. As universal safeguard principles are established, they should be used as benchmarks to evaluate the effectiveness of country programmes, including as a means of ensuring that safeguards are respected in practice by ceasing funding for poor performers.

Secondly, over the longer term, to meet the concerns regarding the poor human rights record of certain CDM projects, the Task Force recommends that the CMP should consider how best to recognise existing applicable human rights obligations for CDM projects, and adopt explicit and binding language to protect human rights during climate change-related activities.[782]

In 2011, the CDM Executive Board expressly reported that it had been 'confronted with the issue of human rights, specifically the rights of people affected or potentially affected by a CDM project' and that, as a result, it had initiated work to improve CDM rules, in particular the extent to which stakeholder comments are solicited and taken into account in the vetting of a project.[783] The Task Force endorses the adoption of specific tools to foster human rights protection, which could include the disclosure of environmental assessments, an increase in the number of channels available for public participation (as well as the widening of existing ones), the monitoring of compliance, and a system for redress of human rights violations to service those negatively affected by the projects.[784]

Thirdly, the Task Force recommends the development of a dispute-settlement mechanism or grievance procedure to address human rights contentions concerning the CDM approval process.[785] Such a mechanism would permit affected parties, project

investors, organisations constructing and managing the project, as well as designated national authorities of the host country to challenge decisions on project eligibility.[786] Since 2010, the Framework Convention implementation body has been working on consecutive drafts on a framework procedure for CDM appeals against rulings by the Executive Board regarding requests for registration of projects or issuance of certificates.[787] Standing for lodging complaints should be broadly construed to permit any interested or affected stakeholder to file an appeal.[788] This could allow appeal by affected parties against the approval of projects that are expected to cause human rights violations, or for appeal against the denial of projects that would substantially contribute to the furtherance of basic human needs.[789]

In particular, the Task Force applauds those proposals that have developed from a narrow appellate system, where only project participants and national authorities were allowed to appeal the rejection or alteration of a given project,[790] towards a broader framework, which would allow for any interested party to file an appeal.[791] This is consistent with access to justice principles, standing rights, rights of public participation in appeals, and judicial review that many states require as part of their development consent process. Moreover, this development serves to ensure that human rights concerns are embedded in climate change mitigation measures.

Although these proposals relate to CDM and REDD+ specifically, the Task Force endorses applying such measures – in particular dispute resolution mechanisms and procedural rights – across the board to all climate mechanisms.

(v) Regulation of global fossil fuel reserves and the cumulative carbon budget

There is a growing consensus that in order to keep global warming below 2°C, the world must take steps to limit the development of fossil fuels by creating a finite 'carbon budget'. As previously noted, even a 2°C increase carries risk of negative impact.[792] The IPCC has recently concluded that total carbon emissions should be capped at one trillion tonnes if humanity is to avoid the grave consequences of anthropogenic climate change.[793] A research team led by James Hansen, formerly the head of the NASA Goddard Institute for Space Studies and now at the Columbia University Earth Institute, found that an even lower limit of 600 billion tons would be necessary to safeguard the climate system for future generations.[794]

Estimated cumulative emissions since industrialisation are currently well over half of the IPCC budget – the IPCC found that 515 billion tonnes of carbon had already been emitted by 2011.[795] About half of cumulative anthropogenic CO2 emissions between 1750 and 2010 have occurred in the last 40 years.[796] The IPCC projected in its latest report that without additional mitigation measures, the planet will experience global temperature increases of 3.7°C to 4.8°C above pre-industrial levels.[797]

Burning most of our known fossil fuel reserves, especially GHG-intense coal and oil, would easily put the world over the carbon budget, with global average temperatures

soaring past the IPCC target.[798] The International Energy Agency has asserted in their flagship 2012 report that two-thirds of proven reserves must stay in the ground in order to meet the 2°C target.[799] Other estimates have stated that up to 80 per cent of the current fossil fuel reserves must remain unused in order to avoid a 2°C rise in global temperature.[800]

Little work has been done to consider the regulation of oil reserves on a global level. The ADP, as discussed,[801] remains the most likely avenue through which to incorporate a cumulative carbon budget into an international framework. Scholars have also advanced subsidy reform as an effective option for climate change mitigation under ADP Workstream 2, whereby developing countries could implement subsidy reforms as nationally appropriate mitigation actions.[802] The G20, the APEC and the Kyoto Protocol itself all assert that these fossil fuel subsidies should be eliminated.[803] The UN Secretary General's High Level Panel on Global Sustainability unequivocally called for their removal.[804] In light of this, the Task Force recommends that the UNFCCC Conference of Parties take account of the increasing calls for hard measures on fossil fuels to ultimately recognise a cumulative carbon budget, including more stringent regulation of global fossil fuel reserves.

3.3.4 Multilateral adaptation measures

As identified in Chapter 2, there is significant need for even greater multilateral engagement on adaptation to climate change. Although the Framework Convention recognised the necessity of adaptation, the development of adaptation law and policy has thus far lagged behind that of mitigation, and States Parties to the Framework Convention have undertaken few concrete commitments. To address the complexities of adaptation, the Task Force recommends: (i) increased regulation of emerging carbon engineering technologies; (ii) engaging UN expertise on the issues of rising sea levels; and (iii) the creation of an IBA Working Group on the Legal Aspects of Adaptation.

(i) Increased regulation of emerging carbon engineering technologies

Among the most radical solutions to climate change are proposals to combat it through human ingenuity. Geo-engineering seeks to utilise radical advances in technology and our understanding of the atmosphere, along with humanity's immense industrial capacity, to 'engineer' the reversal of climate change effects or the sequestration of atmospheric GHGs on a planetary scale.

Numerous such technologically ambitious proposals exist, which fall under two major categories: carbon dioxide removal (which seeks to control or reduce GHGs) and solar radiation management (which seeks to control solar radiation – the source of the heat captured by GHGs). Within these categories, proposals range from the currently feasible carbon capture and sequestration, ocean fertilisation, afforestation and use of stratospheric sulfate aerosols, to highly radical plans for space-based reflectors.[805]

Unsurprisingly, reactions to engineering projects of such global magnitude have

been cautious. As their aim is no less than to modify the balance of the earth's climactic systems, the consequences of failure or mistakes are dire. Thus, while there is no policy consensus as to where to take these proposals, governments are in agreement that they should not be carried out without experimentation and oversight.[806]

Of the major carbon dioxide removal proposals, some of the most well-known are 'ocean-based carbon capture and sequestration' and 'ocean fertilisation'. Specifically, oceanic carbon capture and sequestration efforts are aimed at capturing carbon dioxide for permanent storage in large sub-seabed geological formation, for example, depleted petroleum reservoirs.[807] Ocean fertilisation, on the other hand, seeks to add nutrients such as iron to the ocean on an enormous scale, so as to expedite the growth of phytoplankton, which consume carbon dioxide as a part of their life cycles.[808] Of the two, ocean fertilisation is by far the more controversial proposal, due to its unpredictable consequences for marine eco-systemic balance and human health.[809]

The ocean is among the most important frontiers in the global struggle to address climate change as it stores over a quarter of anthropogenic carbon emissions,[810] therefore the intelligent and thoughtful management of the oceans is critical. The IMO has led the way in organising global efforts to regulate oceanic geo-engineering. The IMO is charged with enforcing the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the 'London Convention') and a related 2006 protocol (the 'London Protocol') which regulate marine pollution. Parties to the London Convention and Protocol meet annually within the IMO to discuss issues related to oceanic pollution. More recently, the IMO has included in the parties' agenda the topic of marine geo-engineering, which it defines as 'a deliberate intervention in the marine environment to manipulate natural processes, including to counteract anthropogenic climate change and/or its impacts, and that has the potential to result in deleterious effects, especially where those effects may be widespread, long-lasting or severe'.[811]

As testament to their efforts at understanding and regulating geo-engineering, in 2006 the parties to the London Protocol adopted rules allowing and regulating the sub-seabed sequestration of carbon dioxide.[812] In 2008, after observing the caution advised by scientific advisors, the parties to the London Convention further adopted a resolution disallowing ocean fertilisation, except for the purposes of legitimate research.[813] In 2010, the parties to the London Convention adopted an Assessment Framework for Scientific Research Involving Ocean Fertilization. Developed by scientific groups, the framework is designed to assess whether proposals for ocean fertilisation constitute legitimate scientific research, and listed 'criteria for an initial assessment of a proposal and detailed steps for completion of an environmental assessment, including risk management and monitoring'.[814]

Finally, in 2013, parties to the London Protocol adopted amendments to the Protocol that seek to generally regulate marine geo-engineering activities, including specifically ocean fertilisation. The amendments prevent the placement of matter into the sea for listed marine geo-engineering activities, unless the listing provides that the activity may be authorised under a permit.[815] A further annex specifies an assessment framework used to determine which geo-engineering activities are permitted or prohibited.[816]

The IMO and the London Convention and Protocol's parties' efforts towards creating a regulatory framework for marine geo-engineering, and the resulting regulations, make the London Protocol one of the most advanced international regulatory instruments on oceanic geo-engineering. However, only 87 states are parties to the London Convention, and 44 to its Protocol. While all the wealthy industrialised countries capable of conducting geo-engineering projects are parties to the Convention, several are not parties to the Protocol, and many of those states most vulnerable to climate change – whose voice matters even though they do not conduct geo-engineering – are members of neither.[817] The Task Force therefore recommends that, over the medium-term, more states accede to the London Convention and Protocol and adopt the IMO regulations and that, in the short-term, all states abide by the IMO Assessment Framework.

Like carbon dioxide removal, solar radiation management has the potential to mitigate the impact of climate change on the environment but carries significant risks of severe transboundary harms.[818] Unlike marine geo-engineering, however, solar radiation management technologies to mitigate climate change effects have not been subject to international agreement. Currently, the most feasible form of solar radiation management involves the use of stratospheric sulfate aerosols to counteract the impacts of climate change by reflecting light back into space.[819]

The relatively low cost of solar radiation management technology – possibly just a few billion dollars per year[820] – makes it possible for one mid-sized nation to implement it unilaterally, with potentially serious consequences for other states as well as for future generations.[821] The effects of solar geo-engineering will not be evenly distributed across the globe; instead, the deflection of solar radiation is likely to be magnified towards the equator, increasing the likelihood of drought in those regions.[822] Further, commentators caution that successful implementation of solar radiation management is likely to shift international efforts away from emissions reduction strategies.[823] This would bind future generations to continued use of solar radiation management to stave off the rapid and catastrophic warming that would occur if the atmosphere were to once again absorb current levels of solar radiation.[824]

The widespread and potentially severe collateral effects of solar radiation management have prompted commentators to call for the adoption of a global governance arrangement to regulate research and deployment of such technologies.[825] Although the UN Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD) is applicable only to the use of geo-engineering in armed conflict, commentators have suggested that its definition of deliberate environmental modification and complaint mechanism could provide the basis for a further international agreement on geo-engineering in the context of climate change mitigation.[826] ENMOD prohibits the use in armed conflict of 'any technique for changing… the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space.'[827] It calls upon States Parties to cooperate in the preservation of the environment[828] and

provides for the creation of a committee of consultative experts to adjudicate disputes arising under the Convention.[829]

Civil society organisations have further recognised that the development of a governance framework for solar radiation management must involve stakeholders from developing countries as well as those from various disciplines, including government, natural and social science, and development.[830] Accordingly, organisations such as the Solar Radiation Management Governance Initiative, an international NGO-driven project co-convened by Environmental Defense Fund, the Royal Society and The World Academy of Sciences have convened stakeholder workshops in Africa and Asia.[831] Therefore, the Task Force recommends that states work towards the creation of international legal obligations governing research, development and implementation of solar radiation management.

(ii) Engaging UN expertise on challenges posed by rising sea levels

The Task Force is cognisant that climate change has various effects through sea-level rise, the chief among them the loss of territory. With a raised global sea level, states' coastal features may change or disappear, creating uncertainty in the existing legal framework governing states' maritime borders, the UNCLOS. For low-lying states, particularly low-lying island states, there are concerns that sea-level rise will negatively impact their maritime zones or, in some cases, lead to a loss of significant territory.[832]

The Task Force supports the international community relying on *existing* institutions to foster attentiveness, knowledge and political will around this issue. For example, one way of approaching the issue of global sea level rise would be for the UN General Assembly to adopt a resolution recognising that rising sea levels should not threaten the permanence of all states current maritime zones (including exclusive economic zones).[833] 'Freezing' maritime zones in this way for all states may be more palatable than freezing the zones just for low-lying nations threatened by the loss of land.

Other UN organs that may be able to address concerns include the special rapporteurs (appointed by Special Procedures of the UN Human Rights Council), who can address pressing areas in human rights on which they possess expertise. Their job is to research, report, raise awareness and exhort.[834] The General Assembly can also request that the Secretary-General commission a report, as was done in 2009, when the General Assembly commissioned a report on climate change and its possible security implications.[835]

However, neither the Human Rights Council nor the General Assembly has appointed a rapporteur or commissioned a report that offers detailed multilateral solutions to concerns raised by rising sea levels. And although the Pacific Small Island Developing States have been persistent in their efforts to have the Security Council address these issues, their efforts have produced little by way of concrete solutions.[836]

The Task Force recommends that, in the medium-term, the Human Rights Council task a special rapporteur to comprehensively research human security issues triggered by sea-level rises caused by climate change and to recommend multilateral solutions to these challenges.

(iii) IBA Working Group on the Legal Aspects of Climate Change Adaptation

As discussed in Chapter 2, as the experience of climate change becomes increasingly real, the challenge of developing appropriate and adequate adaptation policies has gained in importance at international, national, regional and local levels. However, relatively little attention has so far been paid to the legal dimensions of climate adaptation.[837] The Task Force recommends, in the short-term, the creation of an IBA Working Group on the Legal Aspects of Adaptation to develop effective and practical solutions for global adaptation problems. The Working Group's mandate would be to explore and propose legal and policy recommendations in the critical adaptation areas, including, but not limited to: (i) climate change-related migration; (ii) food security; and (iii) access to adaptation technologies. For each adaptation challenge, the Working Group's Terms of Reference would include analysing the existing protections in international law and proposing areas for improvement in the law.

Climate change-related migration

The UNHCR has succinctly articulated the important role that international cooperation must play in addressing climate change-related migration. In 2011, the UNHCR explained:

> 'The primary, albeit non-exclusive, duty and responsibility of states is to prevent and protect people from displacement, mitigate its consequences, provide protection and humanitarian assistance and find durable solutions. The context of climate change, however, raises particular questions around shared state responsibilities and international cooperation. As climate change is a global phenomenon, and climate-related displacement will affect many countries, collaborative approaches and partnerships based on principles of international cooperation and burden-and responsibility-sharing are called for.'[888]

As discussed in Chapter 2, the international refugee framework and national immigration laws are ill-suited to addressing climate change-related cross-border migration and internal displacement. In light of these limitations, some commentators have called for a variety of legal reforms, ranging from the revision of the 1951 Refugee Convention[889] to the creation of a multi-disciplinary legal instrument to address all aspects of climate change-related displacement.[840] However, others have questioned the ultimate usefulness and political viability of such proposals, and cautioned that they fail to account for the nature of climate-related movement based on existing empirical evidence.[841]

One of the more promising developments in migration protection has been the wide endorsement and approval of the UN Guiding Principles on Internal Displacement.[842] Scholars have noted that the Guiding Principles raise international awareness of the looming crisis of climate change-induced internal displacement and support future policy formulation.[843] Encouragingly, the international community has endorsed the principles at the 2005 World Summit and in the United Nations General Assembly and Human Rights Council.[844] The Guiding Principles have been adopted at the national

and regional levels as well, with the most significant regional advancement taking place in Africa where the Guiding Principles have been recognised in the African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa and the Kampala Convention.[845] In 2011, the Special Representative of the Secretary-General on the Human Rights of Internally Displaced Persons noted that 'there are some indications that the Guiding Principles are emerging as customary law, providing a binding interpretation of the international legal norms upon which they are based.'[846] However, the Guiding Principles do not specifically reference climate change.

Building on the Guiding Principles on International Displacement, in 2013 a group of climate change experts and international lawyers adopted the Peninsula Principles on Climate Displacement Within States, which attempts to offer 'a comprehensive normative framework, based on principles of international law, human rights obligations and good practice, within which the rights of climate displaced persons can be addressed'.[847] The Peninsula Principles apply to internal displacement and call upon states, among other things, to prevent and avoid conditions that might lead to climate displacement, provide assistance to affected individuals, implement national climate displacement prevention programmes and coordinate adaptation assistance with other states and international agencies.[848] The Principles also offer institutional planning guidance, including for climate displacement risk management, participation and consent of affected individuals, land identification and post-displacement and return.[849] However, the principles lack formal endorsement from international organisations or states.

Quite a few international organisations and a handful of states have initiatives examining climate change migration. For example, the International Labour Organization has partnered with Economic and Social Commission for Asia and the Pacific and UNDP to develop the ability of Pacific Island countries to address the impacts of climate change on migration 'through well-managed, rights-based migration schemes and policy frameworks, supported by comprehensive research and knowledge building'.[850] The project is aimed at assisting the most vulnerable states in developing tools and building capacities to adapt effectively to climate change migration. And the International Organization for Migration, along with the UNEP and others, established the Climate Change, Environment and Migration Alliance, which aims 'to bring migration considerations to the environment, development, and climate change agendas and vice versa'.[857]

The Nansen Principles and the Nansen Initiative are important state-led efforts that bear mentioning. In 2011, the Norwegian Government held a conference with more than 220 academics and international organisation and government officials on climate change and displacement, which resulted in an agreement on a general set of recommendations known as the Nansen Principles.[852] The Nansen Principles offer a set of ten broad but succinct guiding principles relating to the management and prevention of unnecessary displacement.[853] These principles, covering states' and the international community's duties and highlighting areas for improvement, provide a helpful frame of reference from which participants in the process may draw guidance.[854] The Principles

recognised that '[a] more coherent and consistent approach at the international level is needed to meet the protection needs of people displaced externally owing to sudden-onset disasters.'

To address this challenge, the governments of Norway and Switzerland developed the Nansen Initiative on Disaster-Induced Cross-Border Displacement, with the aim of developing consensus on the key principles and action items on the national, regional and international levels with respect to the protection of displaced persons.[855] The Nansen Initiative will take place over a three-year period and involves a series of regional and sub-regional consultation meetings, including government officials, civil society representatives, the UNHCR and experts. Experts have recognised the Nansen Initiative as the most practicable approach to coordinated international action on climate change-induced cross-border migration.[856] Nansen Initiative regional consultations have highlighted the need for a range of local initiatives, including improving the resilience of communities through risk assessments, planning and preparing for population movements, and reviewing existing admission and immigration policies to permit climate change related-migrants to voluntarily migrate.[857] These consultations have also affirmed the need for regional and international coordination and cooperation in addressing climate change-related displacement.[858]

Similarly, governments at the 2010 Global Forum on Migration and Development acknowledged the benefits of cooperative agreements between neighbouring states to assist with climate change-related migration.[859] Several states have already used bilateral programmes to facilitate migration in nearby or neighbouring states in the face of environmental disasters. For example, the Temporary and Circular Labour Migration project, originally conceived as a way to facilitate seasonal agricultural labour migration from Spain to Colombia, was used in the aftermath of volcanic eruptions in southwestern Colombia in 2006 to provide a migration opportunity for thousands of displaced Colombians. The programme was subsequently expanded to rural populations whose lands are especially vulnerable to floods, droughts and other environmental disruptions.[860] Similarly, when Cyclone Heta destroyed infrastructure on the tiny Pacific island of Niue in 2003, New Zealand offered to resettle the island's entire population of over 1,000. While some relocated, many chose to remain on the island and rebuild with the help of aid. Some returned to the island after reconstruction and three years after the hurricane, the population matched pre-disaster levels.[861] These programmes may provide useful starting points or models for climate change-related migration agreements or programmes.

Therefore, on the topic of cross-border migration and internal displacement, the Working Group should consider, among other issues, whether:

- the Guiding Principles on Internal Displacement, the Peninsula Principles on Climate Displacement Within States, the Nansen Principles, and/or the Nansen Initiative are models for more expansive, global efforts in the area of climate change-related migration. And if so, can the international legal community use these models,

in coordination with existing initiatives and without duplicating efforts, to build consensus toward new norms, institutions and coordinated action;

- the international community should promote the adoption of bilateral and regional agreements and programmes and/or local initiatives, such as reconsideration of domestic immigration laws, to assist with climate change-related migration; and
- the international community and individual states can facilitate opportunities for migration as a form of adaptation.

Food security

Food security has emerged as a primary justice concern connected with climate change and is foregrounded in the IPCC *Fifth Assessment Report* in 2014.[862] The links between food security and climate change are many and complex, and their legal dimensions are only now coming under scrutiny. Food production and distribution today take place within a global context in which producers and consumers may be located tens of thousands of miles apart, each vulnerable in different ways to shocks to the wider food system. As detailed in Chapter 2, climate-related shocks to food security may be direct and immediate, such as those directly attributable to climate change (ocean acidification affecting fish stocks, droughts leading to ruined harvests, damaged transport and supply links). On the other hand, they may be indirect, the knock-on effects of other policies intending to alleviate climate change (such as agrofuels or REDD+) or simply to the responses of international markets to the unfolding uncertainties surrounding climate change. Additionally, agriculture itself is a major source of GHG emissions.

To take one example, when the EU and US adopted policies in 2007 to support agrofuel production, one result was food price spikes that led to riots in a number of countries and lifted the number of hungry in the world to a new high at over one billion persons.[863] Research undertaken since then by a slew of international agencies, including the World Bank, the Food and Agricultural Organization of the United Nations (FAO) and other UN bodies, has begun to untangle the complexities of these events, establishing that agrofuel policy was a contributory factor, along with increased energy prices, land-use pressures and commodity speculation.[864] Increased reliance on agrofuels displaces land that is otherwise used for crop production, reducing supply and driving up prices. This in turn results in price volatility on international food commodity markets, a main cause of reduced food accessibility for vulnerable populations.[865] Moreover agrofuels are generally sourced in developing countries, leading to competition over land and water resources as well as land speculation and 'land grabs', all of which in turn exacerbate food insecurity.[866]

The 2008 crisis was eventually contained, albeit too late for many thousands of affected persons. But it illustrated the propensity for severe domino effects in a highly interconnected international food regime and the degree to which millions of individuals and communities are vulnerable to climate-related food insecurity due to circumstances entirely beyond their control. In conditions of climate change, where crops are likely to

fail and energy prices to rise, while commodity markets remain volatile, the probability that crises such as that of 2008 will be repeated or surpassed are inordinately high.[867]

For the Task Force, an obvious way into the link between climate change and food security is provided by the internationally protected human right to adequate food. Some research has been undertaken to determine the degree to which climate change poses a threat to the right to food, notably that undertaken by the most recent UN Special Rapporteur on the Right to Adequate Food, Olivier de Schutter. An IBA Working Group on the Legal Dimensions of Climate Change Adaptation would be well placed to further that work, identifying the pressures on food security due at least in part to a combination of legal regimes. This includes a focus on areas other than the by now well-documented areas of direct climate impacts, on one hand, and agrofuel support, on the other. For example, forest preservation measures of the type foreseen in REDD+ programmes raise similar concerns about food security, as they will tend to put lands used for informal food production off limits.[868] There is also the larger question of the governance of international food supply chains, which were shown in the recent horsemeat scandal that rocked the UK and other European countries to be extraordinarily poorly governed even within the highly regulated space of the EU.[869] Further examination is also required in the recently established field of 'water law' as well as the emerging consensus on the need to monitor, predict and pre-empt price volatility on international commodity markets and questions of security of tenure in large-scale international land transactions.

One available approach would be to pursue the implications of the human right to adequate food for international food regime governance. The FAO has already articulated a right to food in the context of food security[870] and there are indications that such a synthesis between human rights and food insecurity is emerging on regional and national levels.[871] The international climate-change regime could similarly adopt a rights-based perspective that would be responsive to the food security needs of the most vulnerable populations while addressing the need for mitigation measures including alternative fuel sources and forest preservation. Commentators have suggested that a rights-based approach would provide both the practical and conceptual framework for effective international action.[872] A human rights perspective would elucidate the harm to the individual, draw attention to the most vulnerable populations, emphasise monitoring and accountability, and establish clear procedural guarantees by identifying rights-holders and duty-bearers.[873] Further, linking climate change to the right to food would bring additional human rights mechanisms and institutional resources to bear on the international effort to adapt to climate change.[874] International human rights courts and non-judicial bodies could 'treat climate change as the immediate threat to human rights that it is', taking states to task when their policies focus too narrowly on their own populations at the expense of the world's most vulnerable.[875] In each case, a full understanding of the threats to the right to food necessitates scrutiny of the relevant bodies of international law and governance that render individual rights vulnerable in the context of climate change.

Therefore, on the topic of food security, the Working Group should identify and scrutinise the bodies of law relevant to food security in the context of climate change with a view to making recommendations on how to integrate a right-based approach into the climate change regime. This would include an assessment of current legal protections related to food security and how these might be used and strengthened to inform rights-based approaches to climate change policy-making.

Technology transfer

As discussed in Chapter 2, international environmental law has not adequately promoted the transfer of mitigation or adaptation technologies and may in some cases work at cross-purposes with international intellectual property protections. However, some experts have suggested that intellectual property rights need not impede effective technology transfer; many of the relevant technologies do not involve significant patent royalties.[876] At the same time, commentators agree that an international solution to facilitate cross-border transfer of mitigation and adaptation technologies must establish linkages across various environmental and trade regimes[877] and strike a balance between incentivising innovation and investment and facilitating widespread diffusion of necessary adaptation technologies.[878]

Accordingly, the international community should, among other actions, 'move forward proactively with incentives and subsidies to promote patent pools and open licensing for the development of adaptation technologies for both mitigation and adaptation'.[879] Developing countries have called for increased flexibility within the TRIPS regime.[880] Some experts have suggested that this may include the creation of exemptions to patentability and patent rights for technologies in the public interest, as well as compulsory licensing for certain patented technologies.[881]

Where multilateral negotiation breaks down, the international community should consider alternative unilateral, bilateral or regional approaches to technology transfer.[882] To this end, the international community should also facilitate cooperation among various stakeholders, including civil society, the private sector, governments and multilateral institutions. This may entail multilateral agreements and programmes, including public-private partnerships and partnerships between developed and developing countries.[883] For example, '[m]ajor companies including IBM and Pitney-Bowes have agreed to allow free use of thirty-one patents that can reduce pollution'.[884] In Sierra Leone, a coalition of organisations, including the West African Research Development Association and Sierra Leonean farmers and agricultural researchers, developed a new variety of mangrove rice and distributed it to local communities.[885] Finally, Brazil has signed agreements with states in Africa, Latin America and the Caribbean under which Brazil will offer its expertise in converting sugarcane husks and straw into ethanol.[886] In exchange, Brazil may expand its ethanol market.[887]

Finally, the international community should consider methods to further incentivise and enforce compliance with climate change-related technology transfer. To this effect,

commentators have suggested that the international community should 'explore the degree to which obligations undertaken through the Framework Convention, human rights treaties, or elsewhere may leave States or private entities liable for actions that have blocked or failed to facilitate technology transfer with human rights consequences'.[888] In particular, some scholars have suggested that human rights norms and the 'polluter pays' principle in environmental law establish a duty on the part of developed states to facilitate the transfer of climate change-related technologies.[889]

On the topic of technology transfer, the IBA Working Group should consider, among other issues:

- how the international environmental and trade regimes may be brought into conformity with each other to promote technology transfer;
- how the international environmental law framework be reformed to incentivise innovation while facilitating technology transfer; and
- how the international legal community can promote and facilitate cooperation among various stakeholders.

Notes

464 Notable exceptions are the African [Banjul] Charter on Human and Peoples' Rights, Art 24, see n 201, and the San Salvador Protocol to the American Convention on Human Rights, Art 11, adopted 17 November 1988, 28 ILM 156 (1989), entered into force 16 November 1999 ('(1) Everyone shall have the right to live in a healthy environment and to have access to basic public services. (2) The States Parties shall promote the protection, preservation, and improvement of the environment.'). See generally Chapter 2, section 2.2.

465 See, for example, Arab Charter on Human Rights (2004) Art 38 adopted 22 May 2004, Int'l Hum Rts Rep 893 (2005), entered into force 15 March 2008 ('Every person has the right to an adequate standard of living for himself and his family, which ensures their well-being and a decent life, including food, clothing, housing, services and the right to a healthy environment.'); ASEAN, Human Rights Declaration para 28, n196 ('Every person has the right to an adequate standard of living for himself or herself and his or her family including: . . . the right to a safe, clean and sustainable environment.'); Convention on the Rights of the Child Art 24 para 2(c) (recognising the 'dangers and risks of environmental pollution' that threaten the provision of 'adequate nutritious foods and clean drinking-water'); ICESCR Art 12 para 2(b) (recognising that the 'right of everyone to the enjoyment of the highest attainable standard of physical and mental health' can only be fully realised by '[t]he improvement of all aspects of environmental and industrial hygiene.').

466 See, for example, UN OHCHR, *Report on the relationship between climate change and human rights*, 15 January 2009, UN Doc A/HRC/10/61 paras 20–41; UN General Assembly Resolution 45/94, 68th plenary meeting, 14 December 1990, UN Doc A/RES/45/94 ('[A] better and healthier environment can help contribute to the full enjoyment of human rights by all.' The plenary meeting also saw the airing of support for the idea that environmental protection is itself a human right, as evinced by the statement: 'all individuals are entitled to live in an environment adequate for their health and well-being').

467 As set out in more detail below, various human rights bodies 'have found that environmental harm can give rise to violations of rights to life, health, property and privacy, among others'. Lee n 190, para 24. See generally *ibid* at para 19; see also n 206, Knox, 194-195.

468 See n 34, 29–30.

469 See n 190, paras 12–13.

470 *Ibid*.

471 See n 193, UN OHCHR, para 18.

472 CESCR, General Comment 14, The Right to the Highest Attainable Standard of Health para 4, 11 August 2000, UN Doc E/C.12/2000/4.

473 See n 190, paras 32, 37, 49, 56, 64.

474 *Öneryildiz v Turkey*.

475 *Guerra and Others v Italy* para 60, 1998-I ECHR (1998); *Lopez Ostra v Spain* para 58, App No 16798/90 (9 December 1994); see also *Arrondelle v UK*, (1980) 19 DR 186; (1982) 26 DR 5; *Baggs v UK*, (1985) 44 DR 13; (1987) 52 DR 29.

476 *Öneryildiz v Turkey*, see n 474.

477 See *Tyrer v UK* para 31, App No 5856/72 (1978).

478 *Marangopoulos Foundation for Human Rights (MFHR) v Greece* paras 195–96 (6 December 2006).

479 See n 214.

480 See n 190, para 38.

481 *Ibid*, 69.

482 See n 193, UN OHCHR; Human Rights Council Resolution 10/4, Human rights and climate change, 10th Session, 25 March 2009, UN Doc A/HRC/RES/10/4; Human Rights Council Resolution 18/22, Human rights and climate change, 18th Session, 7 October 2011, UN Doc A/HRC/RES/18/22; Human Rights Council Resolution 13/17, The Social Forum, 15 April 2010, UN Doc A/HRC/RES/13/17.

483 See n 38, Human Rights Council Resolution.

484 *Ibid*.

485 Human Rights Council, 26th Session, Agenda Item 3, Human Rights and Climate Change, 23 June 2014, A/HRC/26/L.33 paras 6–7.

486 See, for example, n 190, para 29, quoting Principle 10 of the 1992 Rio Declaration ('Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.'); see also Ecuador Const Art 398 ('All state decision or authorization that could affect the environment shall be consulted with the community, which shall be informed fully and on a timely basis… The State shall take into consideration the opinion of the community on the basis of the criteria provided for by law and international human rights instruments.') (English translation available at http://pdba.georgetown.edu/Constitutions/Ecuador/english08.html); 155/96 *Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) v Nigeria* (*Ogoniland* case), para 53, available at http://caselaw.ihrda.org/doc/155.96/view; n 190, para 41.

487 For more detail on the Aarhus Convention, see section 3.2.2, page 158 of this report.

488 UN Rio Declaration on Environment and Development (Rio, 13 June 1992) 31 ILM 874 (1992).

489 International Law Commission, 'Draft articles on Prevention of Transboundary Harm from Hazardous Activities Art 13' *Y Bk Int Law Com Vol II, Part 2* (2001).

490 UN General Assembly Resolution, Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms, 8 March 1999, A/RES/53/144.

491 See n 190, para 46.

492 Human Rights Council Resolution 17/4, Human rights and transnational corporations and other business enterprises para 1, 17th Session, 6 July 2011, UN Doc A/HRC/RES/17/4 (endorsing the Guiding Principles on Business and Human Rights, HR/PUB/11/04).

493 See n 204, Guiding Principles, 3.

494 For an overview of environmental provisions in national constitutions and their effectiveness, see generally David Richard Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (University of British Columbia Press, 2011) 233.

495 See n 201, *Ogoniland* case, para 52.

496 See generally, n 494; see, for example, South Korea Const Art 35 ('(1) All citizens shall have the right to a healthy and pleasant environment. The State and all citizens shall endeavor to protect the environment. (2) The substance of the environmental right is determined by Act. (3) The State shall endeavor to ensure comfortable housing for all citizens through housing development policies and the like.').

497 See Portugal Const Art 66: 'In order to ensure enjoyment of the right to the environment within an overall framework of sustainable development, acting via appropriate bodies and with the involvement and participation of citizens, the state shall be charged with: b) Conducting and promoting town and country planning with a view to a correct location of activities, balanced social and economic development and the enhancement of the landscape').

498 Ecuador Const Art 27 (guaranteeing '[t]he right to live in a healthy environment that is ecologically balanced, pollution-free and in harmony with nature'.); *Ibid* Portugal Const, ('In order to ensure enjoyment of the right to the environment within an overall framework of sustainable development, acting via appropriate bodies and with the involvement and participation of citizens, the state shall be charged with: a) Preventing and controlling pollution and its effects and the harmful forms of erosion.').

499 Treaty on European Union Art 6.1 ('The Union recognises the rights, freedoms and principles set out in the Charter of Fundamental Rights of the European Union of 7 December 2000, as adapted at Strasbourg, on 12 December 2007, which shall have the same legal value as the Treaties.').

500 For ECtHR cases referring to the Charter, see *I v UK* para 80, App No 25680/94 (11 July 2002); *Christine Goodwin v UK* para100, App No 28957/95 (11 July 2002). For a CJEU case referring to the Charter, see Case C-540/03 *Parliament v Council* para 38, ECR I-05769 (2006).

501 K Lenaerts and K Vanvoorde, 'The right to property in the case law of the Court of Justice of the European Communities' in H Vandenberghe (ed), *Property and Human Rights* (die Keure, 2006) 211; *Roquette Frères* para 29, Case No C-94/00, ECR I-9011 (2002); *Hoechst v Commission* para 18, Case Nos 46/87, 227/88, ECR 2859 (1989).

502 *Ibid*, K Lenaerts and K Vanvoorde.

503 UN Secretary-General, Report on Intergenerational Solidarity and the Needs of Future Generations para 3, 68th Session, 5 August 2013, UN Doc A/68/x.

504 See n 92.

505 Mary Robinson Foundation, *Climate Justice: An Intergenerational Approach* (Mary Robinson Foundation, November 2013) 1–2.

506 UNFCCC Art 3.

507 See, for example, Mary Christina Wood, Stephen Leonard, Daniel Bartz and Nicola Peart, 'Securing Planetary Life Sources for Future Generations: Legal Actions Deriving from the Ancient Sovereign Trust Obligation' in Michael B Gerrard and Gregory E Wannier (eds), *Threatened Island Nations: Legal Implications of Rising Seas and a Changing Climate* (Cambridge University Press, 2013); *Robinson Twp v Pennsylvania*, 83 A.3d 901, 954–59, 978–79 (Pa 2013) (holding that private citizens could bring suit under the Public Trust doctrine, as enshrined in Art 1 s 27 of Pennsylvania's constitution, that the beneficiaries of the trust were '"all the people" of Pennsylvania, including generations yet to come' and that a law requiring municipalities to include oil and gas operations in all zoning districts was a violation of Art 1 s 27 and therefore unconstitutional).

508 See n 84, 1.

509 World Future Council, 'National Policies & International Instruments to Protect the Rights of Future Generations', Legal Research Paper (World Future Council and CISDL) 9.

510 *Ibid*, 28–29.

511 See generally Sébastien Jodoin and Yolanda Saito, 'Crimes Against Future Generations: Harnessing the Potential of Individual Criminal Accountability for Global Sustainability' (2011) 7(2) McGill Int'l J of Sustainable Development L & Pol'y 117; see also Andrew C Revkin, 'A Push to Stop Crimes Against the Future' *New York Times Blog* (1 June 2009) http://dotearth.blogs.nytimes.com/2009/06/01; Gregory Unruth, 'Climate Crimes Against Humanity?' *Forbes* (29 October 2012) at www.forbes.com/sites/csr/2012/10/29/climate-crimes-against-humanity; Bianca Jagger, Address at the International Bar Association Climate Change Justice Showcase (2013), at www.ibanet.org/Article/Detail.aspx?ArticleUid=a22aa038-40ac-4fc3-be79-f560fcb65955.

512 *Ibid*, Jodain and Saito, 148-149 (stating that even if crimes against future generations are recognised via a standalone convention 'the question that remains […] is whether the concept of crimes against future generations could ever generate enough support among States to become binding international law.').

513 See n 492, 233.

514 See, for example, James R May and William Romanowicz, 'Environmental Rights in State Constitutions' in James R May (ed), *Principles of Constitutional Environmental Law* (American Bar Association, 2011) 315–321 at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1932753 (Outlining the environmental rights available in various state constitutions.) For example, Art XX, s 21 of New Mexico's constitution states, '[t]he state's beautiful and healthful environment is hereby declared to be of fundamental importance to the public interest, health, safety and the general welfare. The legislature shall provide for control of pollution and control of despoilment of the air, water and other natural resources of this state, consistent with the use and development of these resources for the maximum benefit of the people.' Art XI, s 1 of the Virginia constitution states that, '[t]o the end that the people have clean air, pure water, and the use and enjoyment for recreation of adequate public lands, waters, and other natural resources, it shall be the policy of the Commonwealth to conserve, develop, and utilize its natural resources, its public lands, and its historical sites and buildings. Further, it shall be the Commonwealth's policy to protect its atmosphere, lands, and waters from pollution, impairment, or destruction, for the benefit, enjoyment, and general welfare of the people of the Commonwealth.'

515 See n 201.

516 Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa Art 18, Adopted by the 2nd Ordinary Session of the Assembly of the Union, Maputo, CAB/LEG/66.6 (13 September 2000), entered into force 25 November 2005.

517 See n 201, San Salvador Protocol Art 11.

518 Parliamentary Assembly, Council of Europe, Drafting an additional protocol to the ECHR concerning the right to a healthy environment para 10.1, Recommendation 1885 (2009).

519 The nine treaties concern: (i) civil and political rights, set out in the ICCPR; (ii) economic, social and cultural rights, set out in the ICESCR; (iii) torture and cruel, inhuman, or degrading treatment or punishment, defined in the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment; (iv) racial discrimination, proscribed by the International Convention on the Elimination of All Forms of Racial Discrimination; (v) gender discrimination, defined in the Convention on the Elimination of All Forms of Discrimination against Women; (vi) rights of persons with disabilities, set out in the Convention on the Rights of Persons with Disabilities; (vii) protection of all persons from enforced disappearance, established by the International Convention for the Protection of All Persons from Enforced Disappearance; (viii) rights of migrants workers and members of their families laid down by the International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families; and (ix) rights of the child, contained in the Convention on the Rights of the Child and its Optional Protocols.

520 Human Rights Council Resolution 5/1, Institution-building of the United Nations Human Rights Council, 18 June 2007 at para 85.

521 See n 472 and accompanying text.

522 See n 201, *Ogoniland* case, para 52.

523 See n 460 and accompanying text.

524 See, for example, Victoria Nuland, 'ASEAN Declaration on Human Rights' US Department of State (20 November 2012) at www.state.gov/r/pa/prs/ps/2012/11/200915.htm ('Concerning aspects include: the use of the concept of "cultural relativism" to suggest that rights in the UDHR do not apply everywhere; stipulating that domestic laws can trump universal human rights; incomplete descriptions of rights that are memorialized elsewhere; introducing novel limits to rights; and language that could be read to suggest that individual rights are subject to group veto.').

525 ASEAN, Human Rights Declaration para 28, n 195.

526 See Tan Hsien-Li, 'ASEAN's Impact on Myanmar's Transformation: Human Rights and Beyond' (2013) 107 Am Soc'y Int'l L Proc 293, 295 ('None of the human rights documents in relation to AICHR – the ASEAN Human Rights Declaration, Terms of Reference (TOR), Blueprints, Rules of Procedure, and Work Plan – is binding, and they are not intended to become so in the foreseeable future.'); Vitit Muntarbhorn, 'Asean must boost protection work' *Bangkok Post* (1 July 2014): www.bangkokpost.com/opinion/opinion/418249/asean-must-boost-protection-work ('AICHR has not yet agreed to receive complaints from victims, nor undertaken investigations on key situations, even though its [Terms of Reference] opens the door to these possibilities – if […] interpreted purposively.').

527 UN News Centre, *Arab rights charter deviates from international standards, says UN official* (30 January 2008): www.un.org/apps/news/story.asp?NewsID=25447 ('The Arab Charter on Human Rights contains provisions that do not meet international norms and standards, including the application of the death penalty for children, the treatment of women and non-citizens and the equating of Zionism with racism, the United Nations human rights chief said today. UN High Commissioner for Human Rights Louise Arbour issued a statement saying that her office "does not endorse these inconsistencies [and] we continue to work with all stakeholders in the region to ensure the implementation of universal human rights norms."').

528 See n 465, Arab Charter on Human Rights (2004) Art 38.

529 See Mohamed Y Mattar, 'Article 43 of the Arab Charter on Human Rights: Reconciling National, Regional, and International Standards' (2013) 26 Harv Hum Rts J 91, 94.

530 Christoph Schwarte, 'International Climate Change Litigation And The Negotiation Process' (October 2010) FIELD 5–6 (eg, breach of international law obligations such as UNFCCC commitments, UNCLOS pollution control, 'no harm' rule); Maxine Burkett, 'Legal Rights and Remedies' in Michael B Gerrard and Katina Fischer Kuh (eds), *The Law of Adaptation to Climate Change: US and International Aspects*

(American Bar Association, 2012) 822–829 (eg, US Alien Tort Claims Statute; common law tort claims, common law negligence claims, public nuisance claims).

531 Howard Holtzmann and Joseph Neuhaus, *A Guide to The UNCITRAL Model Law on International Commercial Arbitration* (Kluwer, 1989); see also UNCITRAL Model Law on International Commercial Arbitration (1985), with amendments as adopted in 2006 at www.uncitral.org/uncitral/en/uncitral_texts/arbitration/1985Model_arbitration.html.

532 See, for example, T Merrill, 'Global Warming as a Public Nuisance' (2005) 30 Colum J Envir L 293 (discussing standing issues of federal case adjudicating global warming as a public nuisance).

533 See *Friends of the Earth, Inc v Laidlaw Envir Servs*, 528 US 167, 180–81 (2000) (discussing *Lujan v Defenders of Wildlife*, 504 US 555 (1992)).

534 In New South Wales, Australia, for example, as the Hon Justice Brian J Preston, Chief Judge of the Land and Environment Court has written: 'Increasingly, however, environmental legislation is making specific provision for citizens and non-governmental organisations to have standing to bring civil proceedings to remedy or restrain breaches of the legislation. The most liberal provisions are those which effectively abolish the common law standing requirement and instead allow open standing to any person. An example of the use of the open standing provisions is in the *Gray v Macquarie Generation* case. The applicant brought proceedings under the open standing provision, seeking an order that the respondent electrical power generator cease disposing of waste through the emission of carbon dioxide into the atmosphere in contravention of s 115(1) of the POEO Act [Protection of the Environment Operations Act 1997 (NSW)], which states that it is an offence to wilfully or negligently dispose of waste in a manner that harms or is likely to harm the environment.' Hon Justice Brian J Preston, Chief Judge of the Land and Environment Court, *Enforcement of Environmental and Planning Laws in New South Wales*, 77–78 (2011) 16 LGLJ 72. See also the Ontario *Environmental Bill of Rights, 1993*, SO 1993, c 28, which provides for the rights of person to participate in environmental decision-making and appeals from decisions by 'persons resident in Ontario'.

535 *Oposa et al v Fulgencio S Factoran Jr et al*, Supreme Court of the Philippines (30 July 1993) 10–11, www.elaw.org/node/1343.

536 See, eg, US National Climate Assessment at http://nca2014.globalchange.gov.

537 See, eg, R Pavoni, 'Environmental Jurisprudence Of The European And Inter-American Courts Of Human Rights: Comparative Insights', in B Boer (ed), *The Environmental Dimension of Human Rights* (Oxford University Press, forthcoming) 19–22.

538 See n 134, Humphreys, 31.

539 See n 214, The Inuit Petition before the IACHR.

540 See n 528, Burkett, 828–829 ('Perhaps the biggest challenge for any climate change claimant – whether under human rights theory, the Law of the Sea, or tort law – is proving the causal link between a defendant's action and the costs for which the claimant seeks compensation or the impacts to which the claimant seeks to successfully adapt.').

541 *Ibid*, 829 ('A simple causal chain does not readily exist to prove actual or proximate cause.'); Christina Voigt, 'State Responsibility for Climate Change Damages' (2008) 77(1–2) Nordic Journal of International Law 15–16; Schwarte, n 530, 10.

542 *Massachusetts v EPA*, 549 US 497, 127 S Ct 1438 (2007).

543 See n 87, 43–45.

544 See n 530, Schwarte, 10–11; Simon Marr, 'The Southern Bluefin Tuna Cases: The Precautionary Approach and Conservation and Management of Fish Resources' (2000) 11 European J Int'l Law, 815; Alexander Yankov, 'Current Fisheries Disputes and the International Tribunal for the Law of the Sea' in Myron H Nordquiest and John Norton Moore (eds), *Current Marine Environment Issues and the International Tribunal for the Law of the Sea* (Martinus Nijhoff Publishers, 2001) 223.

545 See n 214, The Inuit Petition before the IACHR.

546 Mossman and Marchant, 'Precautionary Principle & Radiation Protection' (Spring 2002) 13 Risk: Health, Safety & Environment 137, 139–140; *Case Concerning Pulp Mills on the River Uruguay (Argentina v Uruguay)*, 2010 ICJ (20 April 2010) para 164 ('*Pulp Mills*').

547 Cf McDonald, 'Paying the Price of Adaptation: Compensation for Climate Change Impacts' in T Bonyhady, A Macintosh and J McDonald (eds), *Adaptation to Climate Change Law and Policy* (Federation Press, 2010) 243.

548 *Trail Smelter* case *(US v Canada)*, 3 UN Rep Int'l Arb Awards 1905 (1941); Restatement (Second) of Torts s 431; see n 530, Burkett, 829.

549 *Ibid*; Restatement (Second) of Torts s 431.

550 *Ibid*; see n 547, 243.

551 See n 3, 17.

552 *Ibid*, 164, n 16.

553 *Ibid*, 7, tbl.SPM 1. 'Low confidence' for 'human contribution' to 'increases in intensity and/or duration of drought' since the middle of the 20th century. 'Low confidence' for 'human contribution' to 'increases in intense tropical cyclone activity' since the middle of the 20th century. 'Medium confidence' for 'human contribution' to 'heavy precipitation events' since the middle of the 20th century.

554 *Ibid*, 119. 'It is very likely that the mean rate of global averaged sea level rise was 1.7 [1.5 to 1.9] mm yr–1 between 1901 and 2010, 2.0 [1.7 to 2.3] mm yr–1 between 1971 and 2010 and 3.2 [2.8 to 3.6] mm yr–1 between 1993 and 2010. It is likely that similarly high rates occurred between 1920 and 1950.'

555 *Id*. at 7, tbl.SPM1 note L.

556 See n 530, Burkett, 828–829. (A climate change plaintiff 'will have to prove specific causation – that the anthropogenic emissions have caused the plaintiff's particular injuries.'). However, a recent study conducted by Carbon Majors was able to attribute 63 per cent of the carbon dioxide and methane emitted between 1751 and 2010 to just 90 entities. For further details on this study, see Richard Heede, 'Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854–2010' (22 November 2013) Climatic Change 234.

557 See n 190, para 47.

558 *Ibid*, para 49.

559 *Ibid*, para 81.

560 R Verheyen and P Roderick, *Beyond Adaptation: The legal duty to pay compensation for climate change damage* (WWF-UK, 2008); International Law Commission, Articles on Responsibility of States for Internationally Wrongful Acts, Art 39, 53 UN GAOR Supp (No 10) 43, UN Doc A/56/83 (2001) ('ILC Articles on State Responsibility'), Art 39 ('In the determination of reparation, account shall be taken of the contribution to the injury by willful or negligent action or omission of the injured State or any person or entity in relation to whom reparation is sought.').

561 See n 530, Schwarte, 10–11.

562 Daniel Farber, 'Adapting to Climate Change: Who Should Pay' 23 J Land Use & Envir Law 1 (Fall 2007); n 530, Burkett, 822.

563 *Ibid*, 19.

564 See n 209, Heede.

565 11, 14; See n 530, Schwarte, *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, ICJ Reports para 30; ILC Draft Articles on State Responsibility, Arts 35, 39.; Cf *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, ICJ Reports para 30.

566 See n 190, paras 62–68.

567 As discussed in Chapter 2, section 2.1.3, states have international environmental obligations under both treaties and customary international law, such as for example, the principle that states must ensure that activities in their territory must respect the environment of other states, as recognised by the ICJ. See *Corfu Channel (United Kingdom of Great Britain and Northern Ireland v Albania)*, ICJ Reports 1949, 4, 22, where the Court identified the obligation of every state 'not to allow knowingly its territory to be used for acts contrary to the rights of other States'; *Legality of the Threat or Use of Nuclear Weapons*, ICJ Reports 1996, para 29. See also the principle set out in the *Trail Smelter* case, 35 AJIL 1941 at 1965.

568 See generally n 560, *ILC Draft Articles on State Responsibility*.

569 *Ibid*, Commentary to ILC Articles on State Responsibility, Art 1, 33.

570 *Barcelona Traction, Light and Power Company Limited, Judgment*, ICJ Reports 1970, 3 at 32, para 33.

571 *Ibid*.

572 See n 560, *ILC Draft Articles on State Responsibility*, Art 48.

573 See generally n 146, 130–132.

574 See also UNCLOS, 16 November 1994, 1833 UNTS 3, 397; 21 ILM 1261 (1982) (UNCLOS), Annex V; Convention on Environmental Impact Assessment in a Transboundary Context, 25 February 1991, 1989 UNTS 309 ('Espoo Convention'), Art 4.

575 However, pursuant to n 560 above, ILC Articles on State Responsibility, Art 49, only an *injured* state may take countermeasures against a state responsible for an internationally wrongful act. Therefore, unilateral countermeasures may not be lawfully taken by a third state seeking to enforce global climate change responsibilities.

576 The Charter of the United Nations, Chapter XIV at www.un.org/en/documents/charter. The ICJ is one of six principal organs of the UN and the principal judicial organ.

577 See n 71, UNFCCC, Art 14(2) provides 'When ratifying, accepting, approving or acceding to the Convention, or at any time thereafter, a Party which is not a regional economic integration organization may declare in a written instrument submitted to the Depositary that, in respect of any dispute concerning the interpretation or application of the Convention, it recognizes as compulsory ipso facto and without special agreement, in relation to any Party accepting the same obligation:
(a) Submission of the dispute to the International Court of Justice, and/or
(b) Arbitration in accordance with procedures to be adopted by the Conference of the Parties as soon as practicable, in an annex on arbitration.'
A number of inter-state environmental disputes have been determined by ad hoc arbitration, see for example, *Trail Smelter; Lac Lanoux*.

578 See, for example n 71, UNFCCC, Art 14(2); n 166, UNCLOS, Part XV 'Settlement of Disputes.'

579 See, for example, the grant of interim measures in a case of armed conflict in *Georgia v Russia*, www.icj-cij.org/docket/index.php?p1=3&p2=3&k=4d&case=140&code=GR&p3=4. (See ECHR Application No 38263/08 *Georgia v Russia* (13 December 2011).

580 There are three known cases: *Peru v Chile; Italy v Cuba; Ecuador v US*.

581 However, environmental state-to-state disputes cannot be brought under Arts 6(7), 19(2), 27(2) of the Energy Charter Treaty, which expressly excludes disputes concerning the environment and competition from the purview of the inter-state dispute-settlement mechanism; these disputes must instead be settled by way of mediation.

582 See generally Malcolm N Shaw, *International Law* (6th edn,Cambridge University Press, 2008), 853 and following.

583 See n 146, 179; *ibid*, 851.

584 Decision X/10: Review of the non-compliance procedure, Tenth Meeting of the Parties (Cairo, 23–24 November 1998).

585 The Implementation Committee was first established on an interim basis by Decision II/5: Non-compliance, Second Meeting of the Parties to the Protocol (London, 27–29 June 1990). It was established on a permanent basis by Decision IV/5: Non-Compliance Procedure (Copenhagen, 23–25 November 1992).

586 Annex IV: Non-compliance procedure, Fourth Meeting of the Parties (Copenhagen, 23–25 November 1992). The Committee can consider and report on submissions alleging non-compliance with the Protocol and can ultimately make recommendations to the Meeting of Parties on measures that should be taken to support compliance, ranging from provision of technical or financial assistance, issuance of a caution or suspension. Annex V: Indicative list of measures that might be taken by a Meeting of the Parties in respect of non-compliance with the Protocol, Fourth Meeting of the Parties (Copenhagen, 23–25 November 1992).

587 Espoo Convention Art, n 574 above, 14 ('Review of Compliance') and Art 15 ('Settlement of Disputes')

588 Megan Chapman, 'Climate Change And The Regional Human Rights Systems' (Spring 2010) Sus Dev L & Pol'y 37.

589 See Conference Report, 'The George Washington University Law School Conference on International Environmental Dispute Resolution' (2000) 32 GW J Int'l L & Econ, 325, 326–27; see also Phillipe Sands, 'Litigating Environmental Disputes: Courts, Tribunals and the Progressive Development of International Environmental Law' (2007) 37(2–3) Environmental Pol'y & L.

590 See, for example, the criticisms raised in Stephen Hockman QC, 'The Case for an International Court for the Environment' (2011) Effectius Newsletter 14.

591 See Alfred Rest, 'The indispensability of an international Environmental Court' (1998) 7(1) Rev of Eur Com & Int'l Envtl L, 65; see also Vespa, 'An Alternative to an International Environmental Court? The PCA's Optional Arbitration Rules for Natural Resources and/or the Environment' (2003) 2 Law & Prac Int'l Cts & Tribunals.

592 See Final Conference Resolution, Conference at George Washington University (15–17 April 1999), in Amedeo Postiglione, *Global Environmental Governance* (Bruylant, 2010) 241–242.

593 These cases include four contractual disputes conducted pursuant to the PCA *Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment* (none of which are public), and arbitrations arising under various treaties, including five Annex VII UNCLOS arbitrations (*Ireland v United Kingdom* or '*The MOX Plant Case*', *Barbados v Trinidad and Tobago*, *Guyana v Suriname*, *Malaysia v Singapore*, *Mauritius v United Kingdom*), the OSPAR Convention (*Ireland v United Kingdom* or '*The OSPAR Convention*'), the Rhine Chlorides Convention (*The Netherlands and France*), NAFTA (*Bilcon of Delaware et al v Canada*, *Vito G Gallo v Canada*), various BITs (eg, *Chevron Corporation and Texaco Petroleum Company v The Republic of Ecuador* (PCA Case No 2007-2), *Chevron Corporation and Texaco Petroleum Corporation v The Republic of Ecuador* (PCA Case 2009-23), and disputes arising under other arbitration agreements or compromise (eg, *Eritrea v Yemen*, *The Abyei Arbitration*). For further information on PCA past and pending cases, visit www.pca-cpa.org/showpage.asp?pag_id=1029.

594 See Art 1(1) of the PCA *Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment*: 'Where all parties have agreed in writing that a dispute that may arise or that has arisen between them shall be referred to arbitration under the Permanent Court of Arbitration Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment, such disputes shall be settled in accordance with these Rules subject to such modification as the parties may expressly agree upon in writing. The expression "agreed upon in writing" includes provisions in agreements, contracts, conventions, treaties, the constituent instrument of an international organization or agency or reference upon consent of the parties by a court. The characterization of the dispute as relating to natural resources and/or the environment is not necessary for jurisdiction where all the parties have agreed to settle a specific dispute under these Rules'; Art 1(1) of the PCA Arbitration Rules 2012: 'Where a State, State-controlled entity, or intergovernmental organization has agreed with one or more States, State-controlled entities, intergovernmental organizations, or private parties that disputes between them in respect of a defined legal relationship, whether contractual, treaty-based, or otherwise, shall be referred to arbitration under the Permanent Court of Arbitration Arbitration Rules 2012, then such disputes shall be settled in accordance with these Rules subject to such modification as the parties may agree'; www.pca-cpa.org/showpage.asp?pag_id=1188.

595 See n 327, Vespa, 305–306; see also Dapo Akande, 'The Peace Palace Heats Up Again: But Is Inter-State Arbitration Overtaking the ICJ?' *EJIL Blog* (17 February 2014) at www.ejiltalk.org/the-peace-palace-heats-up-again-but-is-inter-state-arbitration-overtaking-the-icj.

596 See generally M Indlekofer, International Arbitration and the Permanent Court of Arbitration (Kluwer, 2013).

597 Charles Qiong Wu, 'A Unified Forum? The New Arbitration Rules for Environmental Disputes Under the Permanent Court of Arbitration' (2002) 3 Chi J Int'l L 263.

598 The Structure of the Permanent Court of Arbitration at www.pca-cpa.org/showpage.asp?pag_id=1039.

599 Members of the Court – Panels of Arbitrators at www.pca-cpa.org/showpage.asp?pag_id=1041.

600 See, for example, Lise Johnson and Nathalie Bernasconi-Osterwalder, 'New UNCITRAL Arbitration Rules on Transparency: Application, Content and Next Steps' *Investment Treaty News* (18 September 2013).

601 See n 591, Vespa, 307–08.

602 In order to qualify for financial assistance, a state must (i) be a PCA Member State, (ii) have agreed to dispute settlement proceedings administered by the PCA, and (iii) be listed on the 'DAC List of Aid Recipients' prepared by the OECD. See Financial Assistance Fund at www.pca-cpa.org/showpage.asp?pag_id=1179.

603 See, for example, Art 41, 1907 Hague Convention at http://avalon.law.yale.edu/20th_century/pacific.asp. See also HCAs: www.pca-cpa.org/showpage.asp?pag_id=1280.

604 Including ICSID, the International Council for Commercial Arbitration, the Multilateral Investment Guarantee Agency, the American Arbitration Association, the Singapore International Arbitration Centre, the IACHR, the Organization of American States (OAS), the Australian Centre for International Commercial Arbitration, the Asian Patent Attorneys Association, the China International Economic and Trade Arbitration Commission, the Hong Kong International Arbitration Centre, and the Dubai International Arbitration Centre.

605 United Nations Conference on Trade and Development, *Dispute Settlement: Permanent Court of Arbitration*, United Nations (2003), UNCTAD/EDM/Misc.232/Add.26, 31.

606 See generally Anna Spain, 'Beyond Adjudication: Resolving International Resource Disputes in an Era of Climate Change' (2011) 30 Stan Envtl L J 343.

607 In addition to these forms of dispute settlement, in 2013, the PCA administered proceedings concerning natural fishing resources conducted by a Review Panel established under Article 17 and Annex II of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean. For more information, visit www.pca-cpa.org/showpage.asp?pag_id=1520.

608 See n 597, Wu, 266–267; see also n 327, Vespa, 298.

609 For example, following on from previous work undertaken under the auspices of the UNEP in 1998–1999, an Advisory Group convened by UNEP and the PCA met at the Peace Palace in The Hague on 2–3 November 2006 to consider recent developments, including the work of PCA, in the field of dispute avoidance and settlement concerning environmental issues. The working group issued a report dated 2–3 November 2006 at www.pca-cpa.org/showpage.asp?pag_id=1058. The PCA also engages in scholarly discussion on dispute resolution mechanisms and protection of the environment (see, eg, 'International Investments and the Protection of the Environment: The Role of Dispute Resolution Mechanisms' (May 2001) Peace Palace Paper Series Volume 2 at www.pca-cpa.org/showpage.asp?pag_id=1180.

610 See n 71, UNFCCC, Art 14.2(b).

611 See n 166, UNCLOS, Art 286.

612 The eleven UNCLOS cases are: *The Duzgit Integrity Arbitration* (*Malta v São Tomé and Principe*); *The Arctic Sunrise Arbitration* (*the Netherlands v the Russian Federation*); *The Atlanto-Scandian Herring Arbitration* (*Denmark in respect of the Faroe Islands v the European Union*); *Philippines v China; Mauritius v United Kingdom*; *Bangladesh v India* (the '*Bay of Bengal Maritime Boundary Arbitration*'); *Argentina v Ghana*, (the '*ARA Libertad Arbitration*'); *Barbados v Trinidad and Tobago*; *Guyana v Suriname*; *Malaysia v Singapore*; and *Ireland v United Kingdom* (the '*MOX Plant Case*').

613 PCA Model Arbitration Clauses for Use in Connection with the Permanent Court of Arbitration Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment at www.pca-cpa.org/showpage.asp?pag_id=1189.

614 *Ibid*.

615 Permanent Court of Arbitration Arbitration Rules 2012 at www.pca-cpa.org/showpage.asp?pag_id=1188.

616 *Ibid*.

617 For example, Swiss Chambers Arbitration Institution and the Hong Kong International Arbitration Centre do not publish any awards, and the American Arbitration Association Rules expressly prevent the disclosure of confidential information. The ICC publishes extracts or summaries of awards and procedural orders in its *Bulletin*, but the extracts do not identify the parties or arbitrators and redact facts that would tend to identify the parties. The PCA only identifies the parties and publishes awards or other information in proceedings under PCA auspices where the parties have so agreed. ICSID also only publishes awards with consent of the parties involved, but may publish excerpts of the legal reasoning in an award where a party does not wish to publish that award. Although the rules of the LCIA permit it to publish awards with consent of the parties, it has not done so in practice. For a summary of the standing practice of international tribunals on the publication of their awards, see *Report by New York City Bar Committee on International Commercial Disputes, Publication of International Arbitration Awards and Decisions* (February 2014) at www.nycbar.org/pdf/report/uploads/20072645-PublicationofInternationalArbitrationAwardsandDecisions.pdf. See, for example, Julian D M Lew, 'The Case for the Publication of Arbitration Awards' in Jan C Schultsz and Albert Jan van den Berg, *The Art of Arbitration* (Kluwer, 1982) 223–232 and Thomas E Carbonneau, 'Rendering Arbitral Awards with Reasons: The Elaboration of a Common Law of

International Transactions' (1985) 23 Colum J Transnat'l L 579. A more recent discussion on the issue can be found in Gary B Born and Ethan G Shenkman, 'Confidentiality and Transparency in Commercial and Investor-State International Arbitration' in Catherine A Rogers and Roger P Alford (eds), *The Future Of Investment Arbitration* (Oxford University Press, 2009) 5–42. Recently, some scholars have even proposed compelling publication of awards over party objection. See, for example, Cindy G Buys, 'The Tensions Between Confidentiality and Transparency in International Arbitration' (2003) 14 Am Rev Int'l Arb 121 (arguing for a presumption in favour of publication that can only be overcome by objection by both parties); Dora Marta Gruner, 'Accounting for the Public Interest in International Arbitration: The Need for Procedural and Structural Reform' (2003) 41 Colum J Transnat'l L 923, 960 (proposing establishment of an official international regulatory body to require and oversee award publication except in those cases involving exclusively 'issues of a private, consensual nature').

618 For a comprehensive study on the issue, see Emmanuel Gaillard and Yas Banifatemi, *Precedent in International Arbitration* (Juris, 2008). On the specific practice of the ICSID; Jeffery P Commission, 'Precedent in Investment Treaty Arbitration' (2007) 24(2) J Int'l Arb 129.

619 Rules of Procedure for Arbitration Proceedings, ICSID Convention, Regulations and Rules (10 April 2006) at https://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/partF.htm.

620 UNCITRAL Rules on Transparency in Treaty-based Investor State, Arts 3–6.

621 Douglas Thomson, 'UNCITRAL adopts transparency rules for investor-state cases' (16 July 2013) Global Arbitration Review at http://globalarbitrationreview.com/news/article/31747/uncitral-adopts-transparency-rules-investor-state-cases.

622 On the benefits of a system of precedent in international arbitration, see, for example, Tai-Heng Cheng, 'Precedent and Control in Investment Treaty Arbitration' (2006) 30(4) Fordam Int'l L J 1014; W Mark C Weidemaier, 'Toward a Theory of Precedent in Arbitration' (2009) 51 Wm Mary L Rev 1895.

623 See n 335 above, Riches and Bruce, 1.

624 See, generally, n 335, Hey (2000); *ibid*; see also n 327; Stephens, 58–59 and Vespa, 304. See also n 146, Birnie, Boyle and Redgwell, 255–257 ('In practice there seems no good reason why the present approach of locating environment-related cases within the existing system of international courts and tribunals should not continue to work, provided the system is used intelligently and appropriately.').

625 See n 335, Riches and Bruce, 3.

626 *Ibid*, 4.

627 *Ibid*, 3.

628 See n 335, Carroll.

629 *Ibid.*

630 See n 335, , Hoffman.

631 A/HRC/4/35, para 18, cited in A/HRC/25/53 at para 58.

632 See n 190 at para 61.

633 *Ibid.*

634 See n 92, 7A (2).

635 See n 204.

636 See OHCHR, *A Guide for Business: How to Develop a Human Rights Policy* (United Nations Global Compact Office and Office of the United Nations High Commissioner for Human Rights, 2011) at www.ohchr.org/Documents/Publications/DevelopHumanRightsPolicy_en.pdf.

637 *Ibid*, 24–25.

638 See, for example, Hitachi, *Respect for Human Rights* (2013) at www.hitachi.com/csr/society/respect ('In May 2013, we adopted the Hitachi Group Human Rights Policy to supplement the Hitachi Group Codes of Conduct. In this policy, we clarify our understanding of human rights to be, at a minimum, those outlined in the International Bill of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work.').

639 See n 636, OHCHR, 24.

640 Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, Protect, Respect, and Remedy: A Framework for Business and Human Rights, Human Rights Council, UN Doc A/HRC/8/5 (7 April 2008), 17 (by John Ruggie). For an example of a model due diligence policy, see, for example, Int'l Council on Mining & Metals, *Integrating Human Rights Due Diligence into Corporate Risk Management Processes* (March 2012) at www.icmm.com/document/3308.

641 See Dodd Ctr at U Conn, Roundtable Report: Implementing the UN Guiding Principles on Business and Human Rights, 20, at www.wilmerhale.com/uploadedFiles/WilmerHale_Shared_Content/Files/PDFs/Roundtable%20Report%20FINAL_to%20print.pdf ('The discussion during the Roundtable showed that, despite this general advice, many companies are still grappling with the issue of how best to track their responses to the actual and potential human rights impacts they identify through their due diligence processes.').

642 See n 640, Ruggie, 18; n 636, OHCHR, 24.

643 *Ibid*, Ruggie, 24–25. For an example, see Telenor Group, *Human Rights* at www.telenor.com/sustainability/human-rights ('We also believe that dialogue between governments, the industry, NGOs and others has great value when facing human rights challenges.').

644 Herbert Hirner, 'Greenhouse Gas Emissions–ISO 14067 to Enable Worldwide Comparability of Carbon Footprint Data' ISO (11 May 2012) at www.iso.org/iso/home/news_index/news_archive/news.htm?Refid=Ref1643.

645 *Ibid*.

646 National Greenhouse and Energy Reporting (NGER) Act 2007 (Cth) (Austl).

647 Canadian Environmental Protection Act of 1999, SC 1999, c 33 (Can). For example, see Canada's Renewable Fuels Regulations (SOR/2010-189), which aim to reduce GHG emissions by mandating an average five per cent renewable fuel content based on the gasoline volume. The Regulations are estimated to result in an incremental reduction of GHG emissions of about 1 MT CO2e per year and create a demand for renewable fuels in Canada. See also the Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations (SOR/2012-167), which set a stringent performance standard for new coal-fired electricity generation units and those that have reached the end of their useful life.

648 See Céline Kauffmann et al, 'Corporate Greenhouse Gas Emission Reporting: A Stocktaking of Government Schemes' (2012) OECD Working Papers on International Investment No 2012/1, at www.oecd.org/daf/investment/workingpapers.

649 European Commission, Proposal for a Directive amending Council Directives 78/660/EEC and 83/349/EEC as regards disclosure of non-financial and diversity information by certain large companies and groups, COM (2013); www.cdsb.net/news/337/european-parliament-votes-favor-non-financial-reporting-annual-reports; http://europa.eu/rapid/press-release_IP-13-330_en.htm.

650 Quoted companies refers to all UK incorporated companies listed on the main market of the London Stock Exchange, a European Economic Area market or whose shares are dealing on the New York Stock Exchange or NASDAQ. See Companies Act (2006), c 46, s 385 (UK).

651 See www.legislation.gov.uk/uksi/2013/1970/pdfs/uksi_20131970_en.pdf.

652 Swedish Ministry of Enterprise, Energy and Communications, Guidelines for External Reporting by State-owned Enterprises (11 December 2011) 3.

653 Organisation for Economic Co-operation and Development, OECD Guidelines for Multinational Enterprises (2011) 29.

654 See www.eurochambres.be/objects/3/Files/EUROCHAMBRES_Position_Paper_Disclosure_Non-Financial_Diversity_Information.pdf.

655 Companies Act (2006), c 46, s 414D (UK).

656 SEC, *Commission Guidance Regarding Disclosure Related to Climate Change*, 17 CFR Parts 211, 231 and 241 (8 February 2010).

657 See n 92, at 8.5.

658 See Food and Agriculture Organization of the UN, *Monitoring and Assessment of Greenhouse Gas Emissions and Mitigation Potential in Agriculture* (2013) at www.fao.org/climatechange/micca/ghg/en.

659 See FAO of the UN, *Statistics at FAO*, at www.fao.org/statistics/en/ ('FAO has a decentralized statistical system and statistical activities cover the areas of agriculture, forestry and fisheries, land and water resources and use, climate, environment, population, gender, nutrition, poverty, rural development, education and health as well as many others.').

660 See Committee on Methods for Estimating Greenhouse Gas Emissions, National Research Council, *Verifying Greenhouse Gas Emissions* (The National Academies Press, 2010) 22 ('The IPCC methodologies are intended to yield national GHG inventories that are transparent, complete, accurate, consistent over time, and comparable across countries.').

661 Oxfam, *Standing on the Sidelines* (20 May 2014) at www.oxfam.org/en/grow/research/standing-sidelines ('If together they were a single country, these 10 famous companies would be the 25th most [GHG] polluting country in the world').

662 See World Bank, *GHG net emissions/removals* at http://data.worldbank.org/indicator/EN.CLC.GHGR.MT.CE.

663 See n 640 above, Ruggie, para 3 ('The root cause of the business and human rights predicament today lies in the governance gaps created by globalization – between the scope and impact of economic forces and actors, and the capacity of societies to manage their adverse consequences.').

664 *Ibid*, paras 4, 9.

665 *Ibid*, para 23.

666 See Carbon Majors, *New Study Traces Two-Thirds of Industrial Emissions to Just 90 Institutions* (21 November 2013) at http://carbonmajors.org/carbon-majors-press-release ('Investor owned entities comprised 315 gigatonnes of carbon dioxide equivalent, while government-run industries, contributed 312 gigatonnes. State-owned companies produced 288 gigatonnes.').

667 See n 640, Ruggie, para 9 (discussing 'the diverse array of policy domains through which States may fulfill this duty [to protect human rights] with respect to business activities, including how to foster a corporate culture respectful of human rights at home and abroad').

668 See Transparency Int'l, *Global Corruption Report: Climate Change* (2011) 50, http://issuu.com/transparencyinternational/docs/global_corruption_report_climate_change_english?e=2496456/2568825.

669 US Foreign Corrupt Practices Act, 15 USC ss 78dd-1, et seq.

670 15 USCA s 78m.

671 See, for example, Jonathan Remy Nash, 'The Curious Legal Landscape of the Extraterritoriality of U.S. Environmental Laws' (2010) 50 Va J Int'l L 997, 998 ('Moreover, international environmental law is clear in at least one respect: sovereign states must not allow polluting activities that have adverse effects in other sovereign states.').

672 See generally Surya Deva, 'Acting Extraterritorially to Tame Multinational Corporations for Human Rights Violations: Who Should "Bell the Cat"?' (2004) 5 Melbourne J Int'l L 37.

673 Corporate Code of Conduct Act, HR 4596, 106th Cong, s 3(c)(5) (2000) (US); Corporate Code of Conduct Bill 2000 (Cth) s 4 (Aust).

674 Corporate Code of Conduct Act, HR 4596, 106th Cong, (2000) (US).

675 Corporate Code of Conduct Bill 2000 (Cth) s 7 (1) (Aust).

676 See n 672, 56–57.

677 See, for example, UNEP Finance Initiative, *PRI Annual Report 2013* (August 2013) 35 at www.unpri.org/publications; UNEP Finance Initiative, *PSI Principles for Sustainable Insurance* (June 2013) at www.unepfi.org/psi/category/publications/core_psi-documents.

678 See The Thun Group of Banks, UN Guiding Principles on Business and Human Rights (The Thun Group of Banks, Discussion Paper for Banks on Implications of Principles 16–21 October 2013).

679 The Equator Principles Association, *The Equator Principles III* (June 2013) 8, www.equator-principles.com.

680 Council Regulation 1233/2011/EC 2011 OJ (L 326) 45.

681 *Ibid* (emphasis added).

682 Public and Professional Interest Division's Training Course Programme, IBA at www.ibanet.org/Education_and_Internships/PPID_Training_Course_Programme.aspx.

683 Online CLE Programmes, IBA at http://westlegaledcenter.com/search/displaySearchResults.jsf?sc_cid=null.

684 LL.M in International Legal Practice, IBA at www.ibanet.org/Education_and_Internships/LLM/LLM_Home.aspx.

685 International Bar Association's Human Rights Institute, IBA at www.ibanet.org/IBAHRI.aspx.

686 Capacity building/technical assistance, IBA at www.ibanet.org/Human_Rights_Institute/About_the_HRI/HRI_Activities/Capacity_building.aspx; Training, IBA, Capacity building/technical assistance, IBA at www.ibanet.org/Human_Rights_Institute/About_the_HRI/HRI_Activities/Capacity_building.aspx.

687 UN OHCHR, *Universal Periodic Review* at www.ohchr.org/en/hrbodies/upr/pages/uprmain.aspx.

688 UN Human Rights Council, 5/1, Institution-building of the United Nations Human Rights Council, Annex cl 4(c) (18 June 2007) at www.ohchr.org/en/hrbodies/upr/pages/BackgroundDocuments.aspx. For example, the island nation of Tuvalu sought technical assistance in setting up its own human rights institution and in harmonising its national legislation with international human rights instruments. Jamaica's national report noted that it required technical assistance with respect to human rights-related training and education, as well as the collection of disaggregated data. See UNGA Nat'l Report Submitted in Accordance with Paragraph 5 of the Annex to Human Rights Council Resolution 16/21, Tuvalu, para 92, UN Doc A/HRC/WG.6/16/TUV/1 (25 January 2013); UNGA Nat'l Report Submitted in Accordance with Paragraph 15 (a) of the Annex to Human Rights Council Resolution 5/1, Jamaica, para 103, UN Doc A/HRC/WG.6/9/JAM/1 (20 August 2010).

689 UNGA Nat'l Report Submitted in Accordance with Paragraph 15 (a) of the Annex to Human Rights Council Resolution 5/1, Marshall Islands, para 52, UN Doc A/HRC/WG.6/9/MHL/1/Rev 1 (9 November 2010).

690 UN OHCHR, *Universal Periodic Review: Information and Guidelines for Relevant Stakeholders' Written Submissions* para 4 (3 October 2013) at www.ohchr.org/Documents/HRBodies/UPR/TechnicalGuideEN.pdf.

691 Center for International Environmental Law and Friedrich-Ebert-Stiftung, *Human Rights and Climate Change: Practical Steps for Implementation* (CIEL and Friedrich-Ebert-Stiftung, 25 February 2009) 22.

692 See n 687.

693 See n 190, 8.

694 *Claude Reyes and Others v Chile*, Case 12.108, IACHR, Judgment (19 September 2006), para 86.

695 International Law Commission, 'Commentary to Article 13 of the International Law Commission, Draft Articles on Prevention of Transboundary Harm from Hazardous Activities' (2001) YBk Int Law Com Vol II, part 2, 165.

696 n 149 above, UN Rio Declaration on Environment and Development. Principle 10 provides: 'Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.'

697 See n 574, Espoo Convention.

698 See n 489, Art 13 provides that: 'States concerned shall, by such means as are appropriate, provide the public likely to be affected by an activity within the scope of the present articles with relevant information relating to that activity, the risk involved and the harm which might result and ascertain their views.'

699 See n 694; *Sdružení Jihočeské Matky v Czech Republic* (decision on admissibility), App No 19101/03, 10 July 2006, Eur Ct HR (2006). See also Human Rights Committee, *General Comment No 34 – Article 19: Freedoms of opinion and expression,*12 September 2011, CCPR/C/GC/34 at para 18.

700 *Öneryildiz v Turkey*, see n 474, paras 62, 89.

701 *Giacomelli v Italy,* App No 59909/00, 2006-XII Eur Ct HR para 83; *Taskin and Others v Turkey,* App No 46117/99 Eur Ct HR 179, para 119*; Guerra and Others v Italy,* judgment of 19 February 1998, Reports 1998-I Eur Ct HR, at 228, para 60.

702 *Sara People v Suriname*, Inter-American Court of Human Rights, Judgment (28 November 2007, para 129; *Minority Rights Group (on behalf of Endorois Welfare Council)*, African Commission on Human and Peoples' Rights (2009), 289.

703 *Ibid*, *Minority Rights Group,* para 289.

704 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, 25 June 1998, 2161 UNTS 447 ('Aarhus Convention').

705 *Ibid*, Art 17 states that the Convention is open for signature by 'regional economic integration organizations' constituted by European sovereign state to the state of elements of the environment, such as air, water, soil and land, for example; any factor affecting or liable to affect the elements of the environment, and human health and safety in so far as they may be affected by elements of the environment.

706 'Environmental information' is broadly defined in Art 2(3) of the Convention, and relates to information pertaining to the state of elements of the environment, such as air, water, soil and land, for example; any factor affecting or liable to affect the elements of the environment, and human health and safety in so far as they may be affected by elements of the environment.

707 Annex I of the Aarhus Convention sets out a list of activities to which the right to participation enshrined in Art 6 applies.

708 See n 704, Aarhus Convention, Arts 7 and 8.

709 *Ibid*, Art 3.7.

710 E Dannenmaier, 'A European Commitment to Environmental Citizenship: Article 3.7 of the Aarhus Convention and Public Participation in International Forums' (2007) 18 Oxford Yearbook of International Environmental Law 32, 49.

711 See n 704, Art 16 (establishing an inter-state dispute settlement procedure which provides for submission of disputes which cannot be resolved through negotiation to the ICJ or a stipulated arbitration procedure).

712 See n 704, Art 15.

713 Decision I/7 of the First Meeting of the Parties, *Review of Compliance* (21–23 October 2002) ECE/MP.PP/2/Add.8.

714 See list of Communications from the Public published by the UNECE at www.unece.org/env/pp/pubcom.html.
For a summary of cases considered by the ACCC until 2011, see A Andrusevych, T Alge, C Konrad (eds), *Case Law of the Aarhus Convention Compliance Committee: 2004–2011* (2nd edn, RACSE, 2011) at www.unece.org/fileadmin/DAM/env/pp/Media/Publications/ACCC_Jurisprudence_Ecoforum_2011.pdf.

715 S Kravchenko, 'The Aarhus Convention and Innovations in Compliance with Multilateral Environmental Agreements' (2007) 18 Colorado Journal of International Environmental Law and Policy 5, 1.

716 Communication ACCC/C/2008/32 in Report of Thirty-second meeting of the Compliance Committee of the Aarhus Convention (11–14 April 2011) ECE/MP.PP/C.1/2011/4 at www.unece.org/fileadmin/DAM/env/pp/compliance/CC-32/ece.mp.pp.c.1.2011.4.add.1_as_submitted.pdf.

717 ClientEarth, an NGO, supported by a number of other individuals and NGOs, submitted a communication to the Commission alleging that this requirement violated the right to access justice protected by Art 9(2-5) of the Convention.

718 See n 716, para 87.

719 Prior to the adoption of the Treaty of Lisbon in 2009, Art 230, para 4, TEC required that private individuals demonstrate 'direct and *individual* concern' in order to petition the CJEU. As amended by the Treaty of Lisbon, private individuals must demonstrate that the regulatory act they wish to challenge is of 'direct concern' to them (Art 263, para 4, Treaty on Functioning of the European Union). The ACCC declined to make a finding on the compliance of the post-Lisbon regime with the Convention, as the CJEU had not, at the time of the ACCC decision, interpreted the amended rules on individual standing under the post-Treaty of Lisbon regime. *Ibid*, paras 86–87.

720 See n 716, para 97.

721 Aarhus Convention, n701 above, Art 19(3) provides that: 'Any other State, not referred to in paragraph 2 above, that is a Member of the United Nations may accede to the Convention upon approval by the Meeting of the Parties.'

722 Kofi Annan, 'Foreword' in *The Aarhus Convention – An Implementation Guide* (United Nations, ECE/CEP/72, 2000) v.

723 On 17 April 2013, ECLAC approved an action plan for 2014 toward the conclusion of a regional instrument implementing Principle 10 of the UN Rio Declaration on Environment and Development; see ECLAC Press Release, *Region's Countries Approve 2014 Action Plan to Strengthen Rights of Access in Environmental Matters,* (18 April 2013) at www.eclac.cl/cgi-bin/getProd.asp?xml=/prensa/noticias/comunicados/0/49670/P49670.xml&xsl=/prensa/tpl-i/p6f.xsl&base=/prensa/tpl-i/top-bottom.xsl.

724 UNEP, Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters, adopted by the Governing Council of the United Nations Environment Programme in decision SS.XI/5, part A, 26 February 2010.

725 See n 166 above, UNCLOS, Art 206 provides: 'When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in article 205.' See also *Ireland v United Kingdom* (the '*MOX Plant Case*'), Order, ITLOS Case No 10 (3 December 2001), which ordered the parties to exchange information concerning consequences.

726 *Pulp Mills on the River Uruguay (Argentina v Uruguay) Judgment,* ICJ Reports 2010, 14 at 83, para 204.

727 UNECE, *Protocol on SEA* (3 July 2013) at www.unece.org/env/eia/sea_protocol.html.

728 Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment OJ L 197/30 (21 July 2001).

729 ILA, Resolution 2/2014 Declaration of Legal Principles Relating to Climate Change, Washington DC, 7–11 April 2014, para 5.

730 L Tamiotti et al, *Trade and Climate Change, A report by the United Nations Environment Programme and the World Trade Organisation* (WTO, 2009) 88.

731 *Ibid*, 35.

732 Meeting of Ministers, *Decision on Trade and the Environment* (15 April 1994): www.wto.org/english/docs_e/legal_e/56-dtenv.pdf.

733 See generally Tracey Epps and Andrew Green, *Reconciling Trade and Climate: How the WTO Can Help Address Climate Change* (Edward Elgar, 2011) 255. The authors recommend assigning such a notification procedure to a specially constituted Climate Change Committee, modelled on the SPS and TBT Committees, and composed of members and supported with experts in climate change. The presence of climate change experts would ensure accuracy and efficiency and would enhance legitimacy.

734 WTO Secretariat, Existing Forms of Cooperation and Information Exchange Between UNEP/MEAS and the WTO (16 January 2007), TN/TE/S/2/Rev/2/ at 10.

735 Appellate Body Report, *US-Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, adopted 20 May 1996.

736 Vienna Convention on the Law of Treaties, Art 31(3)(c).

737 Panel Report, *EC – Measures Affecting the Approval and Marketing of Biotech Products,* DS291/P/R, DS292/P/R, DS293/P/R, circulated 16 September 2006, at 336, para 7.75. The panel held the Convention and the Protocol are not applicable because some parties to the dispute are not parties to these Agreements. The panel, however, did not take a stand on whether a multilateral WTO agreement should be interpreted in the light of other international agreements to which all parties to the dispute are parties but not all WTO Members are.

738 Appellate Body Report, *Japan – Measures Affecting the Importation of Apples,* WT/DS245/AB/R, adopted 10 December 2003, para 233 (noting that the Appellate Body has acknowledged the relevance of the precautionary principle in the context of the SPS Agreement in EC – Hormones).

739 WTO Ministerial, *Declaration on the TRIPS agreement and public health* WT/MIN(01)/DEC/2 (14 November 2001) at www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_trips_e.htm.
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741 Andrew Green, 'Trade Rules and Climate Change Subsidies' (2006) 5(3) World Trade Review 377, 401.
742 See Appellate Body Report, *Canada – Measures Relating to the Feed-in Tariff Program*, WT/DS426/AB/R, adopted 24 May 2013.
743 Robert Howse, *Climate Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis* (International Institute for Sustainable Development, May 2010) 21.
744 See European Commission, *Communication: Guidelines on State Aid for Environmental Protection 2014–2020* (9 April 2014).
745 Thomas Cottier and Donah Baracol-Pinhao, 'Environmental goods and services: the Environmental Area Initiative approach and climate change' in Cottier, et al (eds), *International Trade Regulation and the Mitigation of Climate Change* (Oxford University Press, 2009) 397.
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747 Jane Kelsey, *TPPA Environment Chapter & Chair's Commentary Posted by Wikileaks – Issues for NZ* (16 January 2014) at http://wikileaks.org/tppa-environment-chapter.html.
748 Japan-Switzerland Economic Partnership Agreement (19 February 2009).
749 Free Trade Agreement between the European Union and its Member States, of the one part, and the Republic of Korea, of the other part (6 October 2010).
750 Canada-Colombia Free Trade Agreement (DATE), Chapter Seventeen – Environment (2011).
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