Africa and the Middle East

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Egypt

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(A) Introduction

The Egyptian legal system

10.01 Egypt has a civil code system and there is no binding doctrine of precedent. However, judgments of higher courts are persuasive. The sources of Egypt's laws in order of priority are legislation, custom, the principles of Islamic Sharia, and equity.[1]

10.02 The Egyptian judicial system is divided into two main types of courts, the ordinary judiciary and the State Council judiciary. There are also several other specialised courts and judicial organs. The courts generally work in a three-tier system. In the ordinary judiciary, these are the Courts of First Instance, the Courts of Appeal and, for points of law but not of fact, the Court of Cassation. In the State Council, these are Administrative Courts, the Administrative Judiciary, and the Supreme Administrative Court. Historically, the courts in Egypt have been slow and – with the exception of the higher courts – not very sophisticated. Seeking redress through the courts could therefore be a lengthy process with uncertain outcomes.

10.03 Egypt does not recognise class actions. However, any person who can prove personal direct interest in a matter deliberated before a court of law may intervene in the case and join with either party. This applies in both public law and private law litigation.

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[1] Article 2(2) of the Civil Code.

The governmental stance on climate change

10.04 Egypt signed the United Nations Framework Convention on Climate Change ('FCCC') on 10 November 1994. It also signed the Kyoto Protocol, on 15 March 1999. Being a non-Annex I country, Egypt did not take any steps to issue specialised legislation on climate change. However, it does have various pieces of environmental legislation which in many cases overlap with climate change issues.

10.05 Despite being a non-Annex I country, Egypt took steps to address climate change on a policy level. It launched programmes aiming at capacity building and procurement of various studies for implementation of the FCCC.[2] However, despite the number of policies and studies, these are not being translated into legally binding regulations nor implemented on the ground so as to provide real action in combating climate change.

10.06 In terms of policies, Egypt prepared and submitted two communications under the FCCC, which triggered various useful studies and strategies relating to climate change. In terms of regulatory bodies, Egypt formed an inter-ministerial National Climate Change Committee in October 1997[3] and restructured it in 2007.[4]

10.07 In 2000, Egypt adopted a National Strategy for Solid Waste Management that aims to eliminate the uncontrolled accumulations of solid waste. Under this strategy, solid waste is treated as a natural resource. The strategy has been implemented but not with much success.[5]

10.08 The real progress made by Egypt is in the energy sector, where the country has taken concrete steps. This progress is largely motivated by the energy crisis in Egypt rather than concerns over climate change. However, such policies contribute to combating

[2] See www.eeaa.gov.eg.

[3] Article 1 of the Prime Minister's Decree no. 2883 (1997).

[4] See www.giswatch.org/country-report/2010-icts-and-environmental-sustainability/egypt.

[5] See www.ncbi.nlm.nih.gov/pubmed/19712653; http://pdf.usaid.gov/pdf_docs/PDACA202.pdf; and www.metap-solidwaste.org/fileadmin/documents/country_data/SWM_Egypt_A4.pdf.

climate change since the energy sector is Egypt's largest contributor to emissions.

10.09 Egypt also reorganised the Supreme Council for Energy in 2006 by the Decree of the Prime Minister no. 1395 for the year 2006. The Supreme Council for Energy developed the National Energy Efficiency Strategy and oversees its implementation.

10.10 A major player in the energy efficiency scheme is the New and Renewable Energy Authority ('NREA'), established in 1986 to develop and introduce renewable energy technologies to Egypt on a commercial scale. From 1995 to the present, the President allocated to NREA by Presidential Decree several pieces of government land for establishment of wind farms in the Zaafarana area in the West Suez Gulf;[6] in the Rowaysat area in the Matrouh Governorate;[7] and in Beni Suef, Menya, and Assiut;[8] as well as land for the establishment of a Solar Thermal Power Plant in the Kuraymat area in the Giza Governorate.[9] The NREA aims at covering 20 per cent of generated electricity by renewable energy by the year 2020.[10]

[6] Presidential Decree no. 400 for the year 1995, published in the Official Gazette on 28 December 1995 and, later, Presidential Decree no. 168 for the year 2009, published in the Official Gazette on 4 June 2009. This wind farm has been implemented in several stages in cooperation with Germany, Denmark, Spain and Japan. Most of it has been completed and operating since August 2010. See Annual Report of 2010 on www.nrea.gov.eg/arabic1.html for more information. Other areas in Zaafarana are currently in the last stages of implementation. They involve a 120 MW wind farm in cooperation with Denmark and Japan. Another area that will produce 200 MW is planned for implementation in Al Zayt Gulf in cooperation with Germany and the World Bank. See www.nrea.gov.eg/arabic1.html.

[7] Presidential Decree no. 399 (2006), Official Gazette, 30 November 2006.

[8] Presidential Decree no. 319 (2009), Official Gazette, 17 September 2009. The NREA is currently studying with Japan the establishment of a 200 MW wind farm in the third area allocated by this decree west of the Nile under the Assuit Governorate. The first phase is scheduled to be completed by December 2011 and the second phase in January 2013.

[9] Presidential Decree no. 212 (2003), Official Gazette, 21 August 2003. The station has been established with consultancy and funding from the Global Environmental Fund (GEF) and the World Bank and through consultancy and contracting contracts with Spanish, Japanese and Egyptian consultants. The President has also approved a 9.4 billion Japanese Yen loan from Japan International Cooperation Agency (JICA) to be used in this project, by Decree no. 69 for the year 2009. See www.nrea.gov.eg/english1.html for more information.

[10] See www.nrea.gov.eg/english1.html.

10.11 Fuel switching from liquid fuel oil to natural gas is also a major component of the Egyptian energy policy[11] and will help reduce GHG emissions.[12] Fuel switching is currently being applied in electricity generation, industry, residential sectors, and public and private transport.[13]

10.12 On 14 March 2005, the Minister of Environmental Affairs established the Designated National Authority of Clean Development Mechanism by Decree no. 42 for the year 2005. Egypt is deemed to be 'among the leading countries in Arab States region in terms of the number of registered CDM projects and a developed pipeline of prospective projects'.[14] These exceed twenty-five projects in different stages of validation. Nevertheless, this number is still deemed to be 'far below the country's overall potential for CDM projects in energy and industry sectors'.[15]

Industrial and natural resources (emissions sources and energy mix)

10.13 Egypt's Second National Communication submitted on 7 June 2010 under the FCCC (the 'Second Communication') provides that 'fossil fuels; petroleum products and natural gas represent the main sources for the primary energy … Renewable energy sources currently include hydropower, representing about 11 per cent of energy production in Egypt for 2006/07'.

10.14 In the fiscal year 2008–9, Egypt's reserves of oil and oil condensates were estimated to be about 4.4 billion barrels and its proven reserves of natural gas were about 77.2 trillion cubic feet.[16] In spite of this, experts believe that 'Egypt's share of these reserves, after its foreign partners take their share, may be fully depleted by the beginning of 2020'.[17]

[11] See www.moee.gov.eg/Arabic/fr-main.htm.
[12] See www.naturalgas.org/environment/naturalgas.asp.
[13] See www.moee.gov.eg/Arabic/fr-main.htm.
[14] UNDP Climate Change Risk Management Programme for Egypt www.undp.org.eg/Portals/0/Project%20Docs/Env_Pro%20Doc_Climate%20change%20Risk%20Management.pdf.
[15] *Ibid*.
[16] See www.egyptoil-gas.com/read_article_international.php?NID=1560.
[17] Hussein Abdallah, former First Undersecretary of the Ministry of Petroleum to *Al Masry Al Youm* Newspaper on 7 May 2010, available in English at www.almasryalyoum.com/en/news/petroleum-expert-egypt-oil-and-gas-may-dry-2020.

10.15 Egypt's National Greenhouse Gas Inventory reveals that 'estimated total GHG emissions in 2008 are about 288 $MtCO_2e$'.[18] The Second Communication provides that the energy sector (61%) is the primary contributor to emissions of GHGs in Egypt, followed by agriculture (16%), industrial processes (14%) and then the waste sector (9%). According to the Second Communication, Egypt's share in the total world GHG emissions in 2000 was 0.58%.

National climate change risks

10.16 Egypt identified the most vulnerable sectors to climate change as being (i) agriculture and food security, (ii) coastal zones, (iii) aqua-culture and fisheries, (iv) water resources, (v) human habitat and settlements, (vi) tourism, and (vii) human health.[19]

The Egyptian Constitution

10.17 The 1971 Egyptian Constitution[20] does not include explicit Articles dealing with climate change or the right to a healthy and safe environment. In 2007, Article 59 of the Constitution was amended to state: 'The protection of the environment is a national duty and the law shall regulate the necessary measures to preserve a healthy environment.'[21] This language does not give rise to an explicit duty on the State to preserve a healthy environment and is still relatively new and as yet to be interpreted by courts in legal proceedings. However, taking into consideration how other similar clauses have been interpreted, such as Article 33 (see below), one cannot rule out that the courts will deem this Article to provide such duty on the part of the State, its public bodies, as well as private persons.

[18] Second Communication, p. xix.

[19] See Second Communication; David Sterman, *Climate Change in Egypt: Rising Sea Level, Dwindling Water Supplies*, July 2009 at www.climate.org/topics/international-action/egypt.html; Shardul Agrawala *et al.*, *Development and Climate Change in Egypt: Focus on Coastal Resources and the Nile*; Produced for the OECD, 2004; and Mohammad Saber, *Environmental Consequences of Global Change in Egypt* (The International Geosphere-Biosphere Programme's Global Change Newsletter No. 70, December 2007), p. 16, at www.igbp.net/documents/NL_70–5.pdf.

[20] Amended on 22 May 1980; 26 May 2005; and 29 March 2007.

[21] Originally, this Article 59 related to the preservation of socialist gains. Until this amendment in 2007, the Constitution did not provide any clause in relation to the environment.

10.18 Constitutional provisions do not create on their own direct obligations on individuals, but merely an obligation on the State to issue laws that apply constitutional principles. However, some clauses were used in various private law and public law litigations in relation to standing. In these litigations, the court recognised the existence of direct personal interest by the claimant (as required by Law no. 13 for the year 1968 regarding Civil and Commercial Procedures (the 'CCP')) on the basis of some constitutional clauses giving rights to citizens. These litigations did not relate to climate change; however, there have been some relating to environmental issues to which an analogy might be made.

10.19 An example of this is the courts' interpretation of Article 33 of the Constitution. Article 33 states that 'Public property shall have its sanctity. Its protection and support shall be the duty of every citizen in accordance with the law.' Public property is defined by Article 30 of the Constitution[22] as 'the property of the State and of the public juristic persons'. This Article has been interpreted by courts as giving standing to citizens in litigation against public and private bodies involving harm to, or misuse of, public property.[23] In the environmental context, the Administrative Judiciary, in a preliminary judgment,[24] accepted standing of environmental NGOs based on Article 33 of the Constitution.[25] The case was raised by the Habi Center for Environmental Rights ('HCER'), an Egyptian NGO, against the Minister of Water Resources requesting the annulment of his decision to demolish a part of the River Nile to establish an artificial island, arguing harm to the water environment. The court stated that 'public property has its sanctity and its protection is a duty on every Egyptian. It is no doubt that one of the means of such protection is resorting to the judiciary to annul administrative decisions that

[22] Amended in 2007.

[23] Judgment in the cases nos. 30953 and 31314 for the year 56j, Supreme Administrative Court, issued on 14 September 2010.

[24] A preliminary judgment is a judgment that does not settle the merits of the dispute but which settles preliminary questions that are needed for the dispute to continue, such as issues of standing or delegation of an expert to deliver a technical report on one aspect of the dispute.

[25] Case no. 18948 for the year 56j, the Administrative Judiciary, Third Circuit.

affect these public monies'.[26] Accordingly, Article 33, and by analogy Article 59 after its amendment, will give standing in any climate change claim under public or private law, where there will be harm to public property or to the environment in general – such as cases involving a sea level rise causing coastal erosion, or increased salinity of water causing deterioration of drinking-water quality, or harm to fisheries.

10.20 In the context of striking down legislation, constitutional review in Egypt is a subsequent review of annulment. This means that conformity to the Constitution is checked in relation to issued legislation rather than a draft law, a policy, or an administrative decision; and it is only made after such legislation is approved and issued by Parliament. There are no precedents for unconstitutionality of a legislation based on environmental arguments, because, before 2007, there was no constitutional clause addressing the environment. However, it is expected that this amendment will give rise to constitutional litigation on environmental issues. It is doubtful that climate change constitutional litigation will follow in the absence of an explicit clause on climate change.

10.21 Constitutional review may only be exercised by the Supreme Constitutional Court in relation to an existing dispute between litigants in a lower court of law. Litigants may not raise initial cases directly to the court but have to obtain permission from the lower court which is reviewing the original dispute.

10.22 There is a requirement of direct personal interest. A constitutional claim is only acceptable if adjudication in the constitutional claim will have a direct effect on the claim in the original case. Litigants may not submit constitutional claims or defences 'for academic or ideological purposes; nor for the purposes of protecting idealist values or expressing personal opinion; nor for purposes of affirming the rule of law against violations of its substance that do not relate to the claimant; nor to express an opinion in a matter which did not cause [personal] harm to the claimant, even if it inspires general attention'.[27]

[26] The case is still pending before the court. A judgment has not been given yet on the merits of the case.

[27] Ezz El Din Al Danasory and Abdel Hameed Al Shawarby, *The Constitutional Lawsuit* (Alexandria: Monsha't Al Maaref Publishers, 2001), p. 45.

The 'Environmental Law'

10.23 Egypt does not have a legislation governing climate change and is not committed to reduce its GHG emissions under any international conventions. However, Egypt's principal environmental law, Law no. 4 for the year 1994 regarding the Environment (the 'Environmental Law'), provides some clauses which regulate maximum permitted emissions of individual establishments subject to the law. It does not regulate emissions on a national level. However, it states in Article 34 that 'the aggregate pollution resulting from all the establishments in one area must be within the limits determined by law'. Annex 5 of the Executive Regulation of the Environmental Law determined such limits; however, the Environmental Law did not provide a definition for the 'area' to be used in such determination. In practice, this rule has not been followed (see the discussion below of the Talkha Fertilizer Company case).

10.24 Establishments subject to the provisions of the Environmental Law are liable to ensure that emissions or leakages of air pollutants do not exceed the maximum levels permitted by laws and decrees in force and determined in the Executive Regulation.[28] Pollutants subject to the maximum levels regulated by the Executive Regulation include some of the GHGs such as sulfur dioxide, nitrogen oxides and carbon monoxide.[29] In addition, it is prohibited to use machines, engines or vehicles with exhaust emissions exceeding the limits set by the Executive Regulation of the Environmental law.[30] Sanctions for violations may range from administrative penalties (such as closure of the business or suspension of the violating activity) to criminal liability (that varies from fines up to a maximum of EGP 500,000 and imprisonment) or civil liability (removal of the impact of the violating activity or compensation to the administrative authority for the costs of removal).

10.25 The Environmental Law established the Egyptian Environmental Affairs Agency ('EEAA'), which is the primary agency responsible

[28] Article 35 of the Environmental Law.
[29] Annex 6 of the Executive Regulations of the Environmental Law.
[30] Article 36 of the Environmental Law.

for implementation of the Environmental Law.[31] It regulates all kinds of pollution and provides for environmental licensing requirements.

10.26 Under the Environmental Law, polluting industries (including the oil industry, companies operating in the electricity generating industry, industrial establishments, quarries and mines, and any other entity which may, in the opinion of the licensing authority, have an impact on the environment)[32] must conduct an environmental impact assessment ('EIA') and apply for an operating license from the licensing authority, which may not be issued except after consultation with the EEAA.[33] Such establishments are expected to keep a register of the impact of their activities on the environment.[34] The EEAA is authorised to follow up on entries in the register to ensure that they conform to the facts; to take samples as required; and to conduct appropriate tests to determine the impact of the establishment's activities on the environment and the extent of its compliance with the law.[35]

10.27 The Environmental Law does not provide for a duty to conduct consultations with NGOs and local communities. However, Article 19 delegated to the EEAA the power to determine the procedures and requirements of the EIA. The *Guide to Policies and Procedures Regarding the EIA* (the 'Guide') was indeed prepared by the EEAA and is constantly updated. It is not published in the Official Gazette but is deemed to be an executive regulation because it was issued based on an express delegation in the Environmental Law. The Guide provides for a consultation meeting with local communities and concerned NGOs as part of the EIA in relation to Type C establishments. In practice, such consultations are not uniformly held.

10.28 The legal authority of the Guide is not above controversy. It has not been proven beyond reasonable doubt that such Guide binds the EEAA itself to conform to its procedures. The consequences

[31] *Ibid*., Article 2.
[32] Article 11 of the Executive Regulation of the Environmental Law and Annex 2 of the Executive Regulation.
[33] Articles 19 and 23 of the Environmental Law.
[34] *Ibid*., Article 22. [35] *Ibid*.

of the EEAA choosing to remove the consultation requirement in its next update are also unclear; could NGOs prevent it from doing so? The legal authority of the Guide is currently under scrutiny in court.[36] The case relates to the Talkha Fertilizer factory. The Ministry of Environment originally objected to the project because, during the EIA, it was claimed that the level of emissions in the Talkha area were so high that even if emissions of the factory itself do not violate individual limits, the area will be harmed by an additional factory.[37] The factory was later granted a permit. HCER challenged the administrative decision in the State Council judiciary based on the failure of the EEAA to conduct proper consultations with the local communities. The case is still pending and the court will determine as part of its review whether the Guide is binding on the EEAA as well as the consequences of the failure to hold consultations.

10.29 Article 103 of the Environmental Law states that every citizen and NGO concerned with environmental protection shall have the right to report any violation of the Environmental Law. Furthermore, Article 65 of the Executive Regulation provides that every citizen and NGO concerned with environmental protection shall have the right to resort to the competent administrative or judicial agencies for the purpose of applying the provisions of the Environmental Law and its Executive Regulation. These Articles have been used in litigation under public law, private law and criminal law.

10.30 The majority of environmental cases are being brought under the Environmental Law, and are likely to continue being so. While no cases have been argued on the basis of climate change, there have been violations which caused air pollution and were of a type which contributed to climate change, that have been taken to court on the basis of air pollution regulations. These cases were mainly brought under the section dealing with air pollution in the Environmental Law. Claims brought under the Environmental Law include: (i) claims in the State Council judiciary against public bodies forcing them to act according to the Environmental Law; and (ii) claims under private and criminal

[36] Case no. 9218 for the year 64j, the Administrative Judiciary, Third Circuit.
[37] See www.hcer.org/node/232.

laws against private persons for violation of the rules of the Environmental Law.

10.31 An example of the first type of these claims is case no. 1898 for the year 57j before an administrative court. The case was raised by an NGO against the Minister of the Interior for his failure to issue an executive decree to implement emission limits of vehicles set by the Executive Regulation of the Environmental Law. The claim has been denied and is currently being appealed before the Supreme Administrative Court under case no. 4918 for the year 53j. There are more successful precedents in the context of environmental rights. In the verdict in cases nos. 7814 for the year 54j, 9090 for the year 54j, and 1771 for the year 55j (all issued on 2 May 2002 in the First Circuit of the Alexandria Administrative Judiciary), the standing of several environmental NGOs was accepted, based on Article 103 of the Environmental Law and Article 65 of the Executive Regulation. The case related to a decision by the Governor of Alexandria to allocate a part of Lake Mariout to an investor to demolish and build a structure thereupon. Fishermen, NGOs and other public figures challenged the decision and won.

10.32 The majority of claims against private persons under the Environmental Law are raised by the EEAA for violations of the Environmental Law. However, the courts accepted intervention by NGOs in such EEAA claims on the basis of Article 103 of the Environmental Law and Article 65 of its Executive Regulation. Examples are the criminal case no. 1575 for the year 2005 in Tebbin Criminal Court[38] and the criminal case no. 5329 for the year 2008 in Basatin Partial Court.[39]

10.33 To date, these litigations have succeeded in establishing standing in court and in forcing public and private persons to abide

[38] This was a criminal claim raised by EEAA against the National Cement Company in Helwan relating to violations of the Environmental Law. Several NGOs intervened in the case joining the claimant, EEAA. The court accepted the intervention, and these NGOs submitted a civil claim. The criminal case was later settled between EEAA and the company, and the civil claim was dismissed accordingly.

[39] The case is now registered under a new no. 3825 for the year 2009, Criminal First Instance Court of South Cairo. It relates to a criminal claim raised by EEAA for transport and possession of dangerous medical wastes. Here again, the court accepted the intervention of environmental NGOs. The case is still pending.

by the law, but have not succeeded in establishing a right to compensation. Nor had they attempted to do so. In these litigations, the claimants did not request compensation but merely cessation of the environmental violations. HCER are currently attempting to do so in a case concerning the violation by the Governor of Kafr El Sheikh of the Environmental Law in relation to refuse handling. Article 38 of the Executive Regulation of the Environmental Law prohibits open-air burning of solid waste. The waste collection points managed by the Kafr El Sheik Governorate systematically burn refuse in the open air. HCER raised the case no. 1 for the year 2005 Environmental in Kafr El Sheikh Court to establish the existence of a violation. The court appointed an expert to determine (i) whether garbage was being burnt, and (ii) who was harmed by this. It is important to note that even though burning of solid waste constitutes 9 per cent of Egypt's emissions, arguments in the case did not include any arguments on climate change but the claim was based on air pollution. The expert established the violation and determined the people affected to be those inhabiting the houses in the direction of the wind. The court is still reviewing the compensation claim and it still remains to be seen how the court will identify those harmed by the violation and quantify the harm.

The 'Natural Reserves Law'

10.34 Law no. 102 for the year 1983 regulating Natural Reserves ('NRL') prohibits any act, action or activity that may cause deterioration of the natural environment or that may cause air pollution of the natural reserves in any form.[40] It is also prohibited to exercise, without the prior approval of EEAA, any activity or conduct any experiments in the areas surrounding the natural reserves if such acts would have an impact on the environment of the natural reserve.[41] Sanctions vary from fines to imprisonment.[42] Moreover, the violator shall be liable for the removal or the repair expenses that are determined by EEAA and shall have equipment or tools used in the commission of the offence confiscated.[43]

[40] Article 2 of the NRL. [41] *Ibid*., Article 3.
[42] *Ibid*., Article 7. [43] *Ibid*., Article 7(3).

10.35 Article 5 of NRL grants environmental NGOs the right to resort to administrative and legal authorities to bring legal actions for the implementation of the provisions of the NRL.

10.36 This law may be used in climate change claims where natural reserves are being affected.

(B) Public law

Overview

10.37 This section addresses the process whereby decisions of public bodies may be reviewed by the courts. The legal principles discussed herein form part of Egyptian Administrative Law. Judicial review of decisions of public bodies that are deemed to be equivalent to is handled by the Supreme Constitutional Court under a different framework, discussed above.

10.38 Attempts to force the government to act or to stop it from acting in climate change matters should be brought in the State Council judiciary under public law. Claims to stop government action in the context of environmental issues have usually not been raised by industry, but by environmentalists trying to stop the government from violating environmental laws.

10.39 There are several types of administrative claims. The most important is the Annulment Case which relates to the cancellation of final administrative decisions. This is the type of case which has been used in environmental claims and which will likely be used in climate change litigation. Thus, we limit our review to this particular case.

10.40 Here again, there is not much significant litigation in relation to climate change, but there are some recent attempts in environmental rights. Most of these examples have been mentioned above in the section on the Environmental Law. In this section, we set out the general principles of public law claims which also apply to administrative claims against public bodies raised pursuant to the Environmental Law.

Justiciability

10.41 There are some categories of decisions and acts issued by public bodies that may not be subject to judicial review in the State

Council. These include: sovereign acts;[44] executive regulations issued pursuant to laws;[45] decisions issued by certain bodies having a judicial nature such as decisions of public prosecutors and police inspectors issued as part of a judicial process;[46] and circulars of public bodies that do not exceed powers given to such bodies by law.[47] The government's decision whether to regulate climate change is likely to be deemed a sovereign act which is not actionable in courts.

Standing

10.42 The claimant must establish a personal direct interest in the claim for the case to be allowed. However, the State Council judiciary has adopted a wide interpretation of the claimant's interest, based on the principle of legality, which has resulted in easier access to judicial process than in the ordinary courts. The court recognised a personal interest for electing citizens in relation to elections; candidates to a public office; property owners in relation to planning decisions; residents of a town and members in municipalities; as well as citizens in relation to decisions affecting the interest, health or future of all citizens.[48]

10.43 A climate change claim raised by any citizen would be accepted by the State Council judiciary as having sufficient personal direct interest.

Existence of an administrative decision

10.44 There must be an administrative decision. An administrative decision is defined as 'the declaration by the administration of its will, binding to others on the basis of its authority laid down by laws and regulations, with the purpose of creating a specific legal status, provided that it is possible, lawful and motivated by the pursuit of public interest'.[49]

[44] Article 11 of Law no. 47 for the year 1972 concerning the State Council (the 'State Council Law').

[45] Dr Fathy Fikry, *A Brief on the Annulment Case According to the Court Rulings*, enlarged edition (Cairo: People Printing Company, 2009), p. 37.

[46] *Ibid*., p. 73. [47] *Ibid*., p. 108. [48] *Ibid*., p. 170.

[49] Case no. 1042 for the year 9j, Supreme Administrative Court, issued on 12 February 1966.

10.45 The failure of the administrative authority to take a decision which it must take is considered a negative decision that is actionable.[50] The law must require the administration to take such a decision. On this basis, the Administrative Judiciary refused a claim relating to the annulment of the negative decision of the administration refraining from transferring all factories outside residential areas. The court stated that laws and regulations, including the Environmental Law, do not oblige the administration to do so.[51] Negative decisions form the majority of decisions in public interest litigation and would also be the relevant type of decisions in the climate change context.

10.46 Two characteristics of a decision that may be annulled are relevant in this context. First, the decision must be issued by a public law person (including public universities and professional syndicates). Some private law persons are treated like public law persons if their activities are deemed to relate to a public utility, such as private universities. Accordingly, a case similar to the UK precedent *Dimmock*[52] could be brought up under Egyptian law even if against a private university. Second, the decision must be final and not subject to any ratification by a higher authority. Preparatory procedures by public bodies such as recommendations, policy studies and investigations are not deemed to be administrative decisions subject to annulment.[53] Pursuant to this characteristic, the results of public consultations of the EIA will not be deemed a final decision that may be challenged.

10.47 The Annulment Case must be raised within sixty days from the date of knowledge of the administrative decision, by way of notice or publication in the Official Gazette or administrative circulars or by way of actual knowledge. This time limit does not apply in relation to negative decisions or decisions with continuing consequences.

[50] Article 10 of the State Council Law; and Dr Fathy Fikry, n. 45 above, p. 224.
[51] Case no. 32975 for the year 61j, Administrative Judiciary, First Circuit, issued on 24 November 2009.
[52] [2007] EWHC 2288 (Admin); See Ch. 17, para. 17.16.
[53] Dr Fathy Fikry, n. 45 above, p. 104.

Grounds for judicial review

10.48 Pursuant to Article 10(14) of the State Council Law and judicial precedents, there are four categories of reasons based on which an administrative decision could be challenged. These are (i) incompetence; (ii) procedural and formal defects; (iii) unlawfulness; and (iv) abuse of power.

10.49 The second and third of these grounds have been used in the context of environmental rights. For example, failure of the administrative authority to hold consultations in relation to an EIA before issuing a permit will be deemed a procedural defect, even if the results of such consultations do not bind the administrative authority.[54] Failure of the administrative authority to abide by the Environmental Law will fall under the category of unlawfulness of a decision.

(C) Private law

Overview

10.50 This section covers the legal principles governing a climate liability claim raised by one private person against another private person. It deals with claims raised by persons harmed by climate change against persons accused of causing climate change, usually industrial establishments.

10.51 There have been no attempts to take climate change claims to court under private law. However, there have been some attempts to raise environmental claims relating to pollution and other environmental issues. These may be taken as guidance to determine the appropriate legal basis for climate change claims under private law, although it may be more difficult to prove causation and harm in climate change related proceedings than in a case involving environmental violations.

10.52 Tortious liability is governed by Articles 163–178 of the Civil Code. Generally, tort liability under Egyptian law is based on fault. However, there are instances where compensation will be awarded on a 'non-fault' basis.

[54] See Dr Fathy Fikry, n. 45 above, p. 277 for similar analysis.

Liability on a fault basis

10.53 According to Article 163, any person who commits a fault which causes damage to another person shall be liable for damages. Examples of claims which would fall under this category include claims raised by private individuals or NGOs or members of local communities against industrial projects that fail to abide by legal regulations of GHGs, or possibly against farmers for burning rice hay, causing health issues to surrounding individuals.

10.54 The claimant has to establish fault. Fault means 'a breach of a legal obligation to observe due care towards others, by deviating from the behaviour of the reasonable man'.[55] The law does not require that the act constituting the fault violates a statutory text. In fact, scholars specifically state that 'an employer is not relieved from his negligence because he has satisfied all the requirements imposed by administrative authorities, if it is found that such requirements are not enough to protect third parties; and that such employer failed to take other precautions called for by the necessity of protecting people. Requirements imposed by laws and regulations are minimum thresholds for necessary precaution'.[56] In addition, in other contexts, courts have declared that 'The grant of permission for the establishment and operation of a factory does not amount to a cause beyond the claimant's control which relieves the claimant from its responsibility for causing harm to others.'[57]

10.55 Despite the above, defendants may still argue that current Egyptian laws and regulations regarding the environment may be deemed as a ceiling to the environmental rights that could be claimed in court. If the Environmental Law regulates maximum emission levels of certain gases, and if the respondent did not exceed such limits, it would be difficult for the claimant to establish fault or a deviation from the conduct of the reasonable man. This is because the assumption is that the limits determined by law

[55] Abdel Razaq El Sanhoury, *Al Wasit in the Civil Code, Sources of Obligation*, Pt II, Vol. II (Dar Al Nahda Publishers, 1981), p. 1094.

[56] Ezz El Din Al Danasory and Abd El Hameed Al Shawarby, *Civil Liability in the Light of Jurisprudence and the Judiciary*, Vol. I (Alexandria: Monsha't Al Maaref Publishers, 2004), p. 77.

[57] Cassation Case no. 622 for the year 44j, issued on 22 June 1977.

are limits within which emissions are not harmful. This assumption is reinforced by the language of the preamble to Annex 6 of the Executive Regulation of the Environmental Law determining the maximum levels of emissions. The preamble states that the gases covered by the Annex will 'result in damage to public health or to animals or plants or materials or properties, or may interfere with humans' daily life, and would thus be deemed air pollution *if* the emissions from such pollutants result in concentrates that exceed the maximum levels permitted in outer air'.

10.56 The question is more difficult in relation to GHGs, on which the Environmental Law is silent. Here again, there is still ground to say that because the subject of emissions is regulated by the Environmental Law, gases left unspecified are intended not to be prohibited by the legislator. This argument is reinforced by the fact that the FCCC and Kyoto Protocol have not prevented non-Annex I countries from continuing to emit GHGs; and hence an argument could be made that these conventions authorised such emission. These questions have yet to be taken to court.

Liability on a non-fault basis

10.57 Article 178 of the Civil Code stipulates that 'anyone who guards things, guarding of which requires special care … is responsible for the damage caused by such things, unless he proves that damage has occurred as a result of an alien reason to which he did not contribute'.

10.58 The liability of the 'guardian of things' is a strict liability under which a person is deemed liable for damage that has occurred although no fault could be attributed to his side. For this purpose, a 'guardian' need not be the owner, the possessor or the beneficiary of the 'thing', but is the person with actual independent control over the thing.[58] Here the fault is assumed. In order to avoid liability, the defendant must prove a foreign cause. In some cases, owners of factories were deemed as guardians of the equipment of the factory and liable for compensation for harm caused by such equipment regardless of fault or legal compliance.[59]

[58] El Sanhoury, n. 55 above, p. 1524 ff.
[59] Cassation Case no. 622 for the year 44j, n. 57 above.

Definition of damage/harm

10.59 The difficulty in climate change claims arises from the nature of harm caused by climate change. For one thing, the harm does not materialise immediately but in the long term. The more difficult issue is scalability. While in a pollution case it is easy for local communities to establish that the effect of the pollution materialises in their local community and thus prove harm, in climate change cases the harm is dispersed on a global level and it is difficult to prove that the defendant is primarily responsible for the long-term harm that is caused by many contributors around the world. A civil claim will not be accepted by the court unless the claimant proves actual harm.

10.60 Egyptian law does not recognise the concept of 'material increase in risk' or a similar concept as an appropriate measure or criterion for damage. There is a requirement that the damage be actual and not anticipated. This means that the harm must have actually been realised or will definitely be realised in the future.[60] Accordingly, future harm is only actionable if the claimant can establish that it will occur beyond any doubt.

10.61 The claimant must also be the person actually harmed by fault of the respondent. The claimant is 'the harmed, every harmed, and no one but the harmed'.[61] This imposes a great difficulty in the context of climate change litigation because of the time lag between the fault and the harm. For example, under Egyptian law, if scientific tests prove that water pollution will lead to an increase in the rate of kidney failure, this does not give grounds to every person who drinks from this polluted water to raise a claim based on the threat to his/her health. Only persons who actually suffer kidney failure and who can establish causation between the polluted water and their illness will be awarded damages.

10.62 Egyptian law recognises the concept of assumed damage, but only in limited cases. For example in relation to interest, the law provides that interest will be awarded for failure to pay on time without the need to establish harm.[62] The assumption of damage in relation to interest is an exception to the general rule which

[60] El Sanhoury, n. 55 above, p. 1201.
[61] *Ibid*., p. 1277. [62] Article 228 of the Civil Code.

provides that damage must be actual. In the context of climate change, a similar test must establish an assumption of damage. Otherwise, if the general principles of tort apply on climate change claims, civil liability will be impossible to establish. If actual damage cannot be proved by the claimant, the court will refuse to award damages to the claimant. Legislative intervention in this context is imperative.

10.63 If the fault causes harm to many persons, each individual will have the right to raise an independent claim for the specific harm he/she suffered.[63] This is regardless of whether each harm was independently caused directly by the fault or whether the harms were caused serially (meaning that the fault caused harm to X and the latter's harm caused another harm to Y). If the fault causes harm to a group of persons who do not constitute a legal personality, for example immigrants inhabiting a specific location, each individual may not represent the others in a claim.

Causation

10.64 Generally, in fault based liability, the claimant proves fault and damage only. If the respondent wants to establish lack of causation, he/she has to establish the existence of a cause beyond his/her control (pursuant to Article 165 of the Civil Code) which alone resulted in the harm (by proving *force majeure* or the claimant's fault or the fault of a third party); or establish that his/her fault is not the 'effective' cause of the harm.

10.65 If the fault is committed by several persons, we must distinguish between the case where the fault is the same or similar by all the respondents; and where only one fault is effective.

10.66 Article 169 of the Civil Code provides for a rule in case the fault is equally or similarly committed by several persons. It states that 'When several persons are responsible for an injury, they are jointly and severally responsible to make reparation for the injury. The liability will be shared equally between them, unless the judge fixes their individual share in the damages due.' Accordingly, if they are deemed jointly liable, the claimant may

[63] El Sanhoury, n. 55 above, p. 1284.

request 100 per cent of the damage from any of them and the respondent will have a right of recourse against the others. In order for multiple wrongdoers to be deemed jointly liable, three conditions must be fulfilled: (i) each one must have committed a fault; (ii) each fault must have caused the harm; and (iii) the harm caused by each fault must be the same harm.[64] The third of these conditions will be difficult to establish if we apply the general principles governing damage in tort liability (see below). For this condition to be satisfied in the context of climate change, the harm for all persons needs to be a threat to health or land or safety, but not the different physical or fiscal harm specific to each claimant.

10.67 On the other hand, jurisprudence and the judiciary accept the theory of the 'effective cause'. Accordingly, in the climate change context, a factory causing huge amounts of emissions could be deemed as an effective cause of climate change; but not an owner of a vehicle.

Available remedies

10.68 Damages are the primary means of compensation in tort liability. The person at fault is liable for both foreseeable and non-foreseeable direct losses. Indirect losses are not compensated for, even if they were foreseeable. A loss of profits is not always deemed an indirect loss under Egyptian law. If a claimant proves that his loss of profit is a direct consequence of harm, such claimant will be awarded compensation for such loss. A loss is deemed direct if it is a natural consequence of the fault which the tortfeasor could not have avoided by exerting reasonable effort.[65]

10.69 The judge may order specific performance if the claimant requests this. In such case he/she may 'as compensation, order a return to the original state or order the execution of a specific act relating to the unlawful act'.[66] Examples of this include removal of the equipment or activity causing climate change or ordering the publication in newspapers of the criminal verdict against a party in cases of defamation as a compensation for moral damage.

[64] *Ibid*., p. 1290. [65] Article 221 of the Civil Code.
[66] Article 171(2) of the Civil Code.

(D) Other law

Criminal law

10.70 Criminal sanctions are used under public law and private law and have been referred to where relevant in the above sections. However, we provide here a section on possible claims against environmental activists for slander and defamation.

10.71 In general, activists, including lawyers and advocacy groups, face huge practical and legal hurdles in carrying out their work, including access to information, dealing with public authorities, and navigating the court system. However, due to recent legal developments, activists may also face legal liability for their activism.

10.72 Trust Chemical Industries ('TCI'), a chemicals company manufacturing caustic soda, chlorine and hydrogen and located in Port Said,[67] sued in 2008 a blogger and an ex-employee for publishing photographs allegedly showing that the company had dumped hazardous materials in Lake Manzala. The blogger also reported harsh working conditions in the factory. TCI sued for defamation and the court fined the blogger and required him to pay damages to TCI.[68] Reports state, however, that the blogger tried to obtain an order for closure of the factory through the courts and lost.[69] The blogger raised this latter case in an ordinary court (rather than the State Council judiciary) and lost for lack of jurisdiction. The blogger did not pursue the case. Lower court verdicts are not published; accordingly, it is difficult to understand the reasoning of the court. There are many specific circumstances in this case that might have informed the court's decision. It is, however, the first verdict of this type and may influence future litigation in this regard.

Public trust – does Egyptian law recognise this doctrine?

10.73 The Egyptian legal system does not recognise the concept of trusts of private property as known in the common law system.

[67] See www.sanmargroup.com/Chemicals/TCI/TCI-main.htm.
[68] See http://en.rsf.org/egypt-tamer-mabrouk-is-the-first-blogger-26–05–2009,33140.
[69] *Ibid*.

However, recent interpretation of constitutional clauses may lead to the establishment of a quasi public trust concept in relation to public property. Courts are beginning to recognise that Article 30 of the Constitution, as amended in 2007 (which states that 'Public property is the property of the people and it is represented in the property of the State and of the public legal persons'), read in conjunction with Article 33 discussed above, gives right to a similar doctrine. The Supreme Administrative Court recently stated that:

> [these Articles] mean that public property is owned in common by the people with all its individuals. This gives every citizen and member of this people a right in this property. In fact, [such citizen] has a duty to defend such right in accordance with the law, by following the procedures, licenses and tools determined by the law to guarantee such protection, including resorting to court to issue a judicial verdict that is deemed to be the exequatur by which such protection is realised.[70]

This argument is likely to be used even more in future cases on environmental issues, especially with the addition of a constitutional clause in 2007 making the protection of the environment a national duty.

(E) Practicalities

Enforcement

10.74 The enforcement methods provided by the CCP include seizure of property (movable or immovable) and of cash. Separate proceedings must be filed for enforcement of a judgment. Egypt is a signatory to the New York Convention ('NYC'), and therefore a valid arbitral award is enforceable without retrial of the merits if it fulfils the conditions of the NYC and the Law of Arbitration in Civil and Commercial Matters no. 27 of 1994.

10.75 Egyptian courts will not recognise a judgment of any foreign court unless there is reciprocal recognition of judgments of Egyptian courts, or if there is a treaty between the two countries. Egypt concluded treaties for reciprocal recognition of awards with a very few countries, including Italy and some Arab countries.

[70] Cases nos. 30953 and 31314 for the year 56j, n. 23 above.

10.76 Designated[71] employees of the EEAA, and its branches in the governorates, shall have the capacity of judicial officers vested with the power to effect seizures in order to prove the commission of crimes in violation of the provisions of the Environmental Law or the decrees issued in implementation thereof.[72] These employees shall have the right to enter establishments; to carry out a periodic follow-up on the environmental registers of establishments; and to take the necessary samples and conduct appropriate tests to verify the establishment's impact on the environment.[73]

Public interest litigation

10.77 Public-interest litigation is very prevalent in Egypt, most evidently in relation to Islamic public order and political rights. Individuals – mostly lawyers – and NGOs lead the efforts in such litigation. However, the majority of public-interest issues are fought outside courts by civil society through public demonstrations. For example, in relation to the Canadian company E-Agrium's fertilisers factory in Ras Al-Barr, Damietta, local society and NGOs won through public demonstrations, preventing the plant from being constructed.[74] Although a case has been raised by the local residents,[75] the dispute was resolved by the government before the issuance of a verdict, under pressure from public opinion.[76]

Litigation costs

10.78 Theoretically, the unsuccessful party pays the cost of the claim including attorney's fees.[77] In practice, each party covers its litigation costs. The actual amounts ordered by the courts are symbolic and represent but a fraction of the actual costs.

[71] By a decree of the Minister of Justice in agreement with the Minister of Environmental Affairs.
[72] Article 102 of the Environmental Law.
[73] *Ibid*., Article 5; and Article 18 of the Executive Regulation.
[74] See http://weekly.ahram.org.eg/2008/902/eg9.htm for information on the dispute.
[75] Case no. 55826 for the year 62j, before the Administrative Judiciary, First Circuit, issued on 29 December 2009.
[76] See www.merip.org/mero/mero102109.html.
[77] Article 184(1) of the CCP.

Obtaining information

10.79 There is no explicit national legislation that regulates the right to access information. By contrast, there are several laws that limit the access to information of the State relating to the higher policies of the State or to national security.[78]

10.80 The Environmental Law does not provide for a right for the public to obtain information. It only provides for an obligation on the EEAA to publish regular reports on the environmental indicators.[79] The EEAA regularly does so.[80]

10.81 Egypt is a signatory to the International Convention on Civil and Political Rights (the 'CCPR'), which provides, in Article 19, for the right to access information subject to restrictions in the law. It is doubtful that this Article will give rise to a right to information in a court claim. In a case relating to consumer rights,[81] the court referred to the CCPR, but based its verdict on an express right to information in the Consumer Protection Law no. 67 of 2006 rather than the CCPR. A similar provision does not exist under the Environmental Law.

10.82 In the course of litigation, the claimant has the right to oblige his/her opponent to submit any document which will affect the claim if there is any law that requires the submission of such documents to any administrative authority upon its request. The Environmental Law gives the EEAA the right to access the records and information related to the effect of the institution's activities on the environment (such records are obligatory under the Environmental Law), and hence the claimant will have the right to require assigning an expert to examine the necessary records and information. Moreover, a claimant or the

[78] Such as Law no. 121 of 1975 regarding the Preservation of Official Documents of the State and Regulating their Publishing, and the Presidential Decree no. 472 of 1979 regarding the System for the Preservation of Official Documents of the State and Regulating their Publishing and Use. These laws deem such information to be confidential for a period that may not exceed fifty years, after which access may be given through the National Archives according to its rules.

[79] Article 5 of the Environmental Law.

[80] See www.eeaa.gov.eg/arabic/main/achivements.asp.

[81] Case no. 8450 for the year 44j, the Administrative Judiciary, Economic and Investment Circuit, issued on 17 February 2001.

court can call for witnesses to give testimony but they must be willing to attend. There is no way to oblige witnesses to attend against their will.

10.83 Outside the course of litigation, a request to establish the status of the case may be requested from the court. Based on such request, the court assigns an expert to examine the case and submit a report to the court.

Sovereign immunity

10.84 There is no explicit legislation in relation to State sovereign immunity. Egyptian public bodies do not enjoy sovereign immunity from civil proceedings. Any party has the right to bring a legal action against public bodies and has the right to enforce any final judicial verdict issued by an Egyptian competent court or an arbitration panel against them.

10.85 In some cases, public bodies refuse to enforce a judgment. In this case, the litigator raises a criminal claim against the officer in question pursuant to Article 123 of the Egyptian Penal Code no. 58 of 1937. Threatened by imprisonment, the public officer implements the judicial verdict.

10.86 As a general principle, the assets of the Egyptian government are divided into public assets and private assets. Public assets are any fixtures or movables, owned by the government or public bodies, and allotted for public interest, such as water or electricity utilities. Public assets cannot be attached and are immune from seizure. In theory, private assets may be attached. In practice, they may be difficult to locate.

(F) Conclusion

10.87 Because there is no legislation on climate change, climate change litigation is scarce in Egypt. The few litigations that have been raised were dressed in arguments relating to air pollution and environmental rights and not climate change. Claims under public law have higher success rates because they usually only relate to annulment of an administrative decision. Claims

involving compensation, whether brought under public or private law, will likely fail because of the requirements of actionable damage under Egyptian law. Without legislative intervention in the context of climate change, success would, in our opinion, be impossible.

11

Israel

ISSACHAR ROSEN-ZVI

(A) Introduction

The Israeli legal system

11.01 Israel is a representative democracy with a parliamentary system. The Prime Minister serves as head of government and the Knesset serves as Israel's legislative body. The President is the head of State, but this role is mostly symbolic.

11.02 The Israeli legal system has its roots in the British Mandate on Palestine. The British, who ruled Palestine between 1917 and 1948, replaced many of the legal rules and institutions that were in place during the Ottoman era, infusing the legal system with significant common law elements.[1] This common law system was carried over into Israeli statehood and continues to evolve through new laws and doctrines, many of which have been imported from foreign legal regimes. The major source of influence, originally England, is now the United States.

The governmental stance on climate change

11.03 Israel ratified the FCCC in May 1996 and the Kyoto Protocol in March 2004. However, despite its being a developed country and a large per-capita greenhouse gas ('GHG') emitter,[2] Israel was classified as a non-Annex I country, probably due to its insignificant

[1] Assaf Likhovski, *Law and Identity in Mandate Palestine* (Chapel Hill: The University of North Carolina Press, 2006), p. 23.

[2] US Department of Energy, Carbon Dioxide Information Analysis Center (CDIAC), 'Carbon Dioxide Emissions (CO_2), Metric Tons of CO_2 Per Capita'. According to this survey, in 2007 Israel was located at the thirty-fifth place in terms of per capita emissions. Available at http://data.un.org/Data.aspx?d=MDG&f=seriesRowID%3A751.

contribution to overall universal GHG emissions.[3] As a result, Israel is currently not bound to reduce GHG emissions or to otherwise take measures to combat climate change under the Kyoto Protocol. Nonetheless, in the past few years the Israeli government has passed several decisions designed to combat climate change and prepare Israel for a post-Kyoto agreement, which would most likely require Israel to reduce GHG emissions.

11.04 Major government decisions on climate change include: the August 2008 decision to establish a five-year (2008–12) investment programme for renewable energy;[4] the September 2008 decision to increase energy efficiency, with the aim of bringing about 20 per cent savings in anticipated electricity consumption by 2020;[5] the January 2009 decision that established targets and mechanisms for the promotion of renewable energy, with the aim of generating 10 per cent of Israel's electricity from renewable sources by 2020;[6] and the June 2009 decision to establish a directors-general committee to prepare a climate change policy to formulate an adaptation and mitigation plan.[7]

11.05 At the 2009 Copenhagen Summit, Israel's President, Mr Shimon Peres, announced that 'Israel will make best efforts to reduce its CO_2 emissions by 20 per cent in 2020 compared to a business as usual scenario'.[8] This mitigation goal was later endorsed by the Minister of Environmental Protection in a letter to the secretariat of the FCCC.[9] Following the Copenhagen Summit, in March 2010 the government established an inter-ministerial committee to formulate a national action plan ('NAP') for the reduction of GHG emissions in accordance with the declared targets.[10] In November 2010, the government adopted the NAP formulated by the inter-ministerial committee.[11] The NAP sets the emission

[3] M. Yanai, J. Koch and U. Dayan, 'Trends in CO_2 Emissions in Israel – an International Perspective', *Climatic Change*, 101 (2010), 555–63, at 557 (Israel's contribution to global emissions is less than 0.5 per cent).
[4] Government Decision No. 3954 (21 August 2008).
[5] Government Decision No. 4095 (18 September 2008).
[6] Government Decision No. 4450 (29 January 2009).
[7] Government Decision No. 474 (25 June 2009).
[8] Ministry of Environmental Protection, 'Climate Change: High on Israel's Agenda', *Israel Environment Bulletin* (September 2010), 29.
[9] *Ibid.* [10] Government Decision No. 1504 (14 March 2010).
[11] Government Decision No. 2508 (28 November 2010).

reduction target at 13 $MtCO_2e$ below BAU scenario for 2020. It also allocates 2.2 billion NIS in the years 2011–20 for its implementation, with 539 million NIS of this sum allocated in the years 2011–12.

Clean Air Act 2008

11.06 In 2008, the Knesset passed the Clean Air Act ('CAA'), which entered into force on 1 January 2011. The CAA was designed primarily to 'improve air quality as well as to prevent and reduce air pollution'.[12] However, it defines 'pollutant' as, inter alia, 'a material whose presence in the air causes or may cause … climate or weather change', and it defines 'air pollution' as 'the presence of a pollutant in the air'.[13] Thus the CAA serves also as a regulatory tool to combat climate change.[14]

11.07 The CAA prohibits any 'person' (including corporate entities) from causing 'strong or unreasonable air pollution'.[15] For pollutants listed in Annex I, the Act requires the Minister of Environmental Protection ('the Minister') to establish 'ambiance standards', a deviation from which would be considered 'strong or unreasonable air pollution'. Unfortunately, many GHGs, such as CO_2, HCFCs and methane, are not listed in Annex I. Nonetheless, since the CAA defines those GHGs as 'pollutant[s]', the Minister has to make a determination (either through an ordinance or otherwise) as to what levels of their presence in the air is considered 'strong or unreasonable air pollution'.

11.08 The CAA further requires the government to approve, within one year of the day the Act enters into force (i.e., 1 January 2012), a perennial NAP for the advancement of the Act's goals, which would include national and regional targets for the reduction of air pollution as well as methods and mechanisms for achieving these targets.[16] The CAA also requires local governments to

[12] CAA, para. 1. [13] *Ibid*., para. 2.

[14] Ministry of Environmental Protection, 'Coping with Climate Change in Israel', *Special Issue: UN Copenhagen Climate Change Conference* (December 2009), p. 8. For an excellent and comprehensive analysis of climate-related requirements in the CAA, see David Schorr, 'Has the Reduction of Greenhouse Gas Emissions Law already been Enacted?', *Hukim – Journal on Legislation*, 3 (2011), 241 (Hebrew).

[15] CAA, para. 3. [16] *Ibid*., para. 5.

take measures to prevent and reduce air pollution created in their jurisdiction.[17] Since 'air pollution' results, inter alia, from the emission of GHGs into the atmosphere, both the NAP and the actions taken by local governments would have to include GHG reduction.

11.09 The nucleus of the CAA deals with the regulation of 'stationary emission sources' ('SES') defined as 'any facility … that emits pollutants into the air or that cause[s] or may cause pollutants to be emitted into the air'.[18] The Act divides such sources into two categories: heavily polluting SESs, including the energy, chemicals, metal production and processing, and mineral industries, which are prohibited from operating without an emission permit; and the rest of the SESs, which need only a business license. For the first category, the CAA delineates an extensive permitting process, which includes an application with wide disclosure requirements, environmental impact statements, and public participation.[19] The Act also instructs that the decision whether or not to issue a permit should be based on its compatibility with the NAP and its impact on the ability to realise the NAP's goals.[20]

11.10 The CAA also regulates 'mobile emission sources', which include the transportation sector, which is responsible for more than 20 per cent of total GHG emissions. The Act instructs the Minister to adopt ordinances that would prevent and reduce air pollution (which includes GHG emissions, as discussed above) from mobile emission sources, taking into account the standards adopted in other developed countries and the relevant EU Directives.[21] Thus, in setting the standards for Israel, the Minister must take into account the standards recently adopted by both the EU and the USA for regulating CO_2 emissions from light-duty vehicles.[22]

[17] *Ibid*., para. 9. [18] *Ibid*., para. 2.
[19] *Ibid*., paras. 17–34. [20] *Ibid*., para. 20(b)(4).
[21] *Ibid*. paras. 35–8.
[22] Regulation (EC) No. 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO_2 emissions from light-duty vehicles. Available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0001:0015:EN:PDF; US EPA, *Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards* (7 May 2010).

Industrial and natural resources (emissions sources and energy mix)

11.11 Israel is a developed country. Based on the nominal gross domestic product, its economy was in 2008 the forty-first largest in the world. In 2010 Israel joined the OECD. The major industrial sectors include metal products, electronic and biomedical equipment, gas and oil refinement, chemicals, water and transport equipment. Israel is rather poor in natural resources and it therefore depends on imports of petroleum, coal, food, uncut diamonds and production inputs. Recently, however, Israel has discovered large gas reserves off its coast.

11.12 In 2008, electricity generation was responsible for more than 54 per cent of total GHG emissions in Israel.[23] Almost all electricity generation in Israel is coal-, fuel oil- or gas-fired. Coal is the main source (around 60 per cent) for electricity generation. Since 2005 there has been a move towards replacing fuel oil with natural gas. One characteristic of the Israeli electricity sector is rapid expansion in demand for electricity. It is expected that demand for electricity will double by 2030.[24]

11.13 The following details the main sources of GHG emissions in Israel as of 2005: energy consumption by domestic, commercial and public premises: 34%; industry (mainly chemical, cement, gas and oil refinement): 30%; transportation: 18%;[25] waste disposal: 8.5%; and agriculture: less than 3%. It is expected that in a BAU scenario, and in the absence of mitigation action, Israel's GHG emissions would double from 71 $MtCO_2e$ in 2005 to 142 $MtCO_2e$ in 2030. This rapid growth is primarily due to Israel's high growth in population and GDP per capita.[26]

[23] Danny Rabinowitch and Carmit Lubanov, 'Climate Justice in Israel', *The Association of Environmental Justice in Israel – Position Paper no. 1* (2010), p. 5.

[24] McKinsey & Company, *Greenhouse Gas Abatement Potential in Israel: Israel's GHG Abatement Cost Curve* (2009), p. 37 ('McKinsey Report').

[25] In 2008 transportation accounted for more than 20 per cent of total GHG emissions. *See* Rabinowitch and Lubanov, n. 23 above, p. 8.

[26] McKinsey Report (see n. 24 above).

National climate change risks

11.14 Israel is vulnerable to many climate change related problems due to its diversity of geographic features relative to its small size. As a coastal State on the eastern shore of the Mediterranean Sea, and with its Coastal Plain hosting 70 per cent of its population, Israel may be adversely affected by sea level rise. It is estimated that a rise of one metre in sea level would cause a loss of between 50 and 100 metres of coastal areas and the destruction of the coastal cliffs and many archaeological heritage sites.[27]

11.15 Climate change is also likely to have a detrimental effect on Israel's hydrology. According to scientific studies, climate change would decrease significantly the level of precipitation in Israel's southern area, moving the desert lines northwards (already, one-half of Israel's territory is desert). Reduction in overall precipitation combined with increased rainfall intensity could increase soil erosion, surface runoff and salinisation and would lead to accelerated desertification. This desertification would have detrimental effects on Mediterranean ecosystems, biodiversity, agriculture and water supply, which could fall to 60 per cent of current levels by 2100. Furthermore, sea-level rise may salinate the Coastal Aquifer, one of Israel's main water sources. Further depletion and contamination of water resources in the region, which already suffers from an acute water shortage, could potentially worsen the geo-political conflict in the Middle East.[28]

11.16 Delayed rainfall, increased evaporation and greater frequency and intensity of heatwaves lead to lower soil moisture, which increases the risk, as well as the frequency and intensity, of

[27] P. Alpert, 'The Effects of Climatic Changes on the Availability of Water Resources in Israel' in T. Watanabe (ed.), *Proceedings of the Kick-off Workshop for the Research Project on the Impact of Climate Change on Agricultural Production System in Arid Areas* (ICCAP, 2002), pp. 8–13. Decrease of precipitation would also affect the northern part of the country thus increasing the water problem. See R. Samuels, A. Rimmer, A. Hartmann, S. Krichak and P. Alpert, 'Climate Change Impacts on Jordan River Flow: Downscaling Application from a Regional Climate Model', *Journal of Hydrometeorology*, 11(4) (2010), 860–79.

[28] An analogy could be found in a recent UNEP report arguing that the massacre in Darfur was a result of an ongoing struggle over the natural resources that are vanishing due to climate change.

woodland fires. In December 2010 Israel suffered the worst woodland fire in its history. This fire caused the destruction of more than 50 km^2 of forested area (5 million trees) in the Carmel Forest, the deaths of 44 people and the evacuation of 17,000 from their homes. Climate change is likely to increase the frequency of such fires.

11.17 Climate change may also increase the risk of vector-borne diseases. The degradation of the water resources would likely cause water-related epidemics such as malaria, cholera, dysentery, West-Nile virus and Giardia.[29]

(B) Public law

Overview

11.18 Climate change litigation would likely be brought mostly under administrative law. One reason is the many grounds for judicial review of administrative decisions. Another reason is the many hurdles that would confront litigants under private law.

11.19 This section addresses the process whereby decisions of public authorities may be reviewed by the courts. The legal principles form part of Israeli administrative law, and judicial review cases are generally brought in either the Administrative Court or the High Court of Justice ('HCJ').

Justiciability and standing

11.20 Threshold barriers to litigation, the most important of which are justiciability and standing, and which inhibit actions against public authorities in other common law jurisdictions (such as the United States, England and Canada), do not exist in Israel. Since the 1980s the scope of the justiciability doctrine – the limits upon legal issues over which a court can exercise its judicial authority – was narrowed by the Supreme Court to such an extent that almost any matter, including the signing of peace treaties, is considered justiciable.[30] Clearly, administrative decisions and

[29] Ministry of Environmental Protection, 'Vulnerability and Adaptation to Climate Change', *Israel Environment Bulletin*, 24 (2001).

[30] HC 910/86, *Ressler* v. *Minister of Defence*, 42(2) PD 441 (1988).

actions with regards to climate change would be considered justiciable.[31]

11.21 Similarly, the Supreme Court nullified the standing requirement with regard to petitions of a public nature, which include petitions against environmental harms. While in other jurisdictions petitioners must demonstrate sufficient connection to and harm from the action challenged in order to have standing, in Israel a petitioner merely must demonstrate that the public at large (or part thereof) will likely be harmed by the administrative decision or action.[32] Since climate change has a harmful impact on the public at large, any 'public petitioner' would have standing.

General grounds for judicial review

11.22 Administrative decisions and actions that raise issues relating to climate change can be challenged on many grounds. These grounds fall under three categories: competency, procedural impropriety, and unreasonableness.

Competency

11.23 Competency is the authority of an administrative body to deal with and make pronouncements on certain matters. An important doctrine that the Court inferred from the bestowal of competency upon an administrative body is the lasting obligation of such a body to consider whether to exercise its authority.[33] Administrative bodies are not allowed to leave their authority untouched, but are obligated to use the discretion vested in them and decide whether the circumstances require them to exercise their authority.[34] In the climate change context, a litigant could use this doctrine to challenge the inaction of an appropriate administrative body with respect to implementing regulations concerning climate change.

[31] Yoav Dotan, *Administrative Guidance* (Nevo Press, 1996), pp. 178–85.

[32] HC 6492/08 *SAL Educational Projects Association* v. *Commander of IDF Forces in the West Bank* (Delivered on 14 January 2010).

[33] HC 297/82 *Berger* v. *Minister of Interior*, 37(3) PD 29 (1983).

[34] Daphne Barak-Erez, *Administrative Law*, 2 vols. (Israeli Bar Publishing, 2010), Vol. I, p. 201.

Procedural impropriety

11.24 Courts can intervene in administrative decisions or actions whenever the administrative bodies fail to apply the required procedures. The procedural obligations are either prescribed by the HCJ in its rulings or mandated by legislation dealing with specific issues; Israel has no general Administrative Procedure Act. The basic procedural steps required by the court are to collect all relevant information, to conduct serious deliberation (which includes considering and evaluating different alternatives), and lastly to reach a reasoned decision which is subject to judicial review.[35]

11.25 Administrative bodies are also required under the Freedom of Information Act 1998 to disclose information to the public upon request, and when environmental matters are concerned, the law obliges the authorities to make the information public on a dedicated website, even in the absence of a request.[36]

Unreasonableness

11.26 Courts have discretion to intervene in decisions of administrative bodies if and when they find that such decisions are unreasonable. The unreasonableness doctrine is premised on the obligation of an administrative body to take into account matters that a statute requires the body to consider either expressly or by implication from the purpose of the statute; the obligation can also be implied from the general purposes of the legal system.[37] Moreover, even when the administrative decision-maker took into account all relevant matters, the court can still set aside a decision for failing to attribute the proper weight to a certain consideration. Although generally the weight to be attributed to relevant matters is within the discretion of the authorised administrative bodies, this discretion is subject to a ruling by the court that the weight given to one or more of the relevant considerations radically exceeds the proper weight that should be attributed to it.[38] In the climate change context the unreasonableness

[35] *Berger*, n. 33 above.
[36] Freedom of Information Act, 1998, para. 6A.
[37] HC 6163/92 *Eisenberg* v. *Minister of Building and Housing*, 47(2) PD 229 (1993) (Implied general obligation); HC 5016/96 *Horev* v. *Minister of Transportation*, 51(4) PD 1 (1997).
[38] Barak-Erez, n. 34 above, Vol. II, p. 723.

doctrine can be exercised whenever an administrative body fails to take into consideration or to give enough weight to the impact of a certain decision or action on the increase of GHG emissions levels.

Specific grounds for judicial review

Clean Air Act

11.27 As discussed above, the Israeli CAA imposes on the Minister numerous duties, among them: (i) to make determinations as to the maximum authorised levels of GHGs emitted into the atmosphere; (ii) to approve a NAP that includes, inter alia, methods and mechanisms for the reduction of GHG levels; (iii) to take into account the impacts of climate change in issuing permits or business licenses to 'stationary emission sources'; and (iv) to regulate 'mobile emission sources' in a way that reduces air pollution (including GHG emissions). Local governments are also required to reduce the levels of GHG emitted in their jurisdiction. Any failure by these administrative bodies to comply with the duties owed under the CAA could be challenged in court under each of the legal grounds discussed above.

Government decisions

11.28 The Israeli government has issued several governmental decisions (each a 'GD') that tackle directly or have bearing on climate change (see paras. 11.04 and 11.05 above). GDs are executive orders. The normative status of such decisions can vary based on the legal authority upon which they are given, their content, and their level of specificity. If the legal authority to decide on the matter at hand is given not to the government but to another administrative body, then a GD would be considered a recommendation lacking any authoritative power. If, on the other hand, the government has the legal competence in the matter at hand, then a GD can have the status of either mandatory regulation or administrative guidance, depending on its content and level of specificity.[39] The more general the content of a GD is, the more likely it would be considered an administrative guidance;

[39] Dotan, n. 31 above, p. 106.

likewise, the more specific and operative a GD is, the more likely it would be considered a mandatory regulation.

11.29 Since the GDs that deal with climate change, either directly or indirectly, are issued under the residual competence of the government, and since their content is quite concrete and operative, specifying targets, timetables and in some cases even budgetary sources, it is reasonable to assume that they would be interpreted by the courts as mandatory regulation. In such a case, the government would be bound by the commitments it undertook in these GDs. It is noteworthy that thus far courts have been quite reluctant to enforce GDs on the government (probably due to political considerations), though such enforcement is not without precedence.[40]

Planning law

11.30 The Planning and Construction Act, 1965 mandates, in certain circumstances specified in the Act itself as well as in the regulations issued under it, the preparation of an Environmental Impact Assessment ('EIA') and submission of it to the planning committee. The committee is required to take the EIA's findings into consideration when deciding whether to approve the plan, to refuse approval or to make amendments to it.[41] One circumstance in which an EIA is required is when the execution of the plan is bound to have 'a significant impact on the environment'.[42]

11.31 In a recent decision, the Supreme Court bolstered the status of EIAs.[43] Planning committees have discretion in deciding whether to require an EIA and what should be included in it. The Court held, however, that the committees' discretion is constrained by the general administrative law doctrines, including unreasonableness, especially due to the potentially detrimental and irreversible impact of planning decisions on the environment and on human health and quality of life. Thus, the larger the planned project is and the more harmful its projected effects are, the more

[40] HC 8397/06 *Eduardo* v. *The Minister of Defence* (delivered on 29 May 2007).

[41] Planning and Construction Act, paras. 76C(4), 119C; Planning and Construction Regulation (Environmental Impact Assessments) 2003 ('EIA Regulation').

[42] EIA Regulation, para. 2.

[43] HC 9409/05 *Adam Teva Vadin* v. *National Planning Committee for National Infrastructures* (delivered on 24 October 2010).

unreasonable it would be not to require an EIA that reviews alternatives to the proposed plan, including the 'zero alternative', namely, the possibility of not executing the plan at all. It is possible, therefore, that a proposed plan which is projected to have a substantial impact on GHG emissions would be considered as having 'a significant impact on the environment' and thus would require the submission of an EIA that considers different alternatives to the proposed plan including the 'zero alternative'. Having said that, it should be noted that the case law to date deals only with impacts on the 'environment' which are either local or national in scope, and it is thus unclear whether the courts would be willing to extend the interpretation of the 'environment' in the statute to the global environment.

11.32 The CAA makes this implicit obligation more explicit. An 'impact on the environment' which requires the submission of an EIA is defined in the EIA Regulation as including the 'abating or reducing [of] existing environmental nuisances'.[44] The definition of 'environmental nuisance' refers, inter alia, to the definition of 'air pollution' in the Abatement of Environmental Nuisances (Civil Action) Act 1992, which in turn refers to the definition of 'air pollution' in the CAA.[45] Moreover, the CAA mandates that in the framework of permitting SESs (including power plants, large industrial plants, refineries and refuse-disposal sites), the EIA must include a chapter on the impact of the proposed SES on 'air pollution'.[46] Since 'air pollution', as defined in the CAA, includes the emitting of GHGs into the atmosphere, the law explicitly requires planning institutions to demand the submission of an EIA whenever a proposed plan is projected to have an impact on climate change, and to take its findings into consideration when deciding whether to approve a plan or issue a permit.

Examples in practice

11.33 Very few attempts have been made so far to challenge administrative bodies for failing to take into account the impact of their

[44] EIA Regulation, para. 1.
[45] CAA, para. 88 (amending the Abatement of Environmental Nuisances (Civil Action) Act, para. 1).
[46] CAA, paras. 23 and 18.

decisions on climate change. None has succeeded. One such attempt is the case *Adam Teva Vadin* v. *Government of Israel*.[47] The case, filed prior to the CAA coming into force, deals with a decision by the National Planning Committee for National Infrastructures to proceed with the planning of two new coal-fired power plants. The petitioners argued that the planning should not proceed without performing a full review and acquiring the relevant data with regard to the following: (i) the projected impact on the public health both generally and in the area; (ii) the projected levels of GHG emissions from the power plant and their implication on Israel's capability in the future to meet its potential obligations under the FCCC to reduce GHG emissions; and (iii) the alternatives to coal-fired power plants, which could equally serve the energy needs of Israel.

11.34 The petition is based on several legal grounds. The first is that the decision is unreasonable. The petitioners argued that the planning committee failed to consider or give enough weight to the fact that the power plant, if approved, would increase Israel's CO_2 emissions by more than 10 per cent. This result would obstruct Israel's probable future commitment to reduce its GHG emissions under a successor protocol to the Kyoto Protocol and would conflict with the mandate in the September 2008 GD for an increase in energy efficiency. The second is that the decision was founded on improper factual grounds thus breaching procedural obligations. One of the relevant uncollected facts is the external costs of additional GHG emissions into the atmosphere. The third ground is that the EIA was improperly executed for failing both to consider the increase in GHG emissions and to review less harmful alternatives to the two coal-fired power plants.

11.35 The Court did not reject the petition but recommended that it be withdrawn until the planning committee issued its final decision regarding the proposed plan. The petitioners accepted the Court's recommendation and withdrew their petition.

11.36 Another case that challenges an administrative body's decision due to its impact on climate change is *Adam Teva Vadin* v.

[47] HC 5811/08 *Adam Teva Vadin* v. *Government of Israel* (delivered on 17 July 2008).

Minister for National Infrastructures.[48] The petition deals with a decision by the Minister for National Infrastructures to license an oil shales project in the Adolam region, an area of high environmental sensitivity. One of the legal grounds on which the petition is based is that the administrative decision contradicts the government's declared position as reflected in both the GDs that promote renewable energy and increase energy efficiency, and the President's declaration at the Copenhagen Summit. The case is still pending.

Constitutional law

11.37 Israel has no formal constitution. Its constitutional building-blocks are made of Basic Laws. In the early 1990s, the Knesset enacted two basic laws – Basic Law: Human Dignity and Liberty; and Basic Law: Freedom of Occupation. These basic laws protect fundamental human rights, including the right to life, bodily integrity and dignity, the right to property and the freedom of occupation. In 1992, the Supreme Court declared that these basic laws marked the starting point of a 'Constitutional Revolution', elevating these laws to a constitutional level and bestowing on courts the power of judicial review.[49] The Supreme Court read into the Basic Laws several cardinal human rights that were not expressly included – the right to equality, freedom of speech and freedom of religion – by seeing them as directly derived from the right to dignity.

11.38 Despite this expansive interpretation, the Supreme Court has thus far refused to recognise the existence of a constitutional right to adequate environment, limiting any constitutional claim with regard to the environment to instances in which a person's health or life are clearly endangered.[50] Since the Court refused to recognise the existence of a constitutional right to decent environment, it is unlikely that it would strike down

[48] *Adam Teva Vadin* v. *Minister for National Infrastructures* (petition for an order nisi) (on file with the author).

[49] Guy E. Carmi, 'A Constitutional Court in the Absence of a Formal Constitution? On the Ramifications of Appointing the Israeli Supreme Court as the Only Tribunal for Judicial Review', *Connecticut Journal of International Law*, 21 (2005), 67–91.

[50] HC 4128/02 *Adam Teva Vadin* v. *Prime Minister of Israel*, 58(3) PD 503 (2004).

legislation that is likely to have a negative impact on climate change.

(C) Private law

Overview

11.39 This section addresses the different private law causes of action that one private legal person can bring against another to seek remedies for damages resulting from climate change. No private law claim that is based on allegations of actual or anticipated damages from climate change has been filed in Israel to date. Due to the many difficulties a plaintiff would face in establishing liability, it is not anticipated that such a claim would be filed in the near future.

11.40 The traditional causes of action which are likely to be employed in the climate change context, if and when its impact becomes more severe, are in nuisance, breach of statutory duty and negligence. These torts are found in the Tort Ordinance, 1968, which is a codification of the common law torts introduced by the British into the law of Mandate Palestine in 1947. It is, therefore, unsurprising that Israeli tort law was very much influenced by English tort law. New causes of action were created by the CAA, which also broadened the scope of existing causes of actions under the Abatement of Environmental Nuisances (Civil Action) Act and the Class Action Act.

Nuisance

11.41 Nuisance doctrine is divided into private and public nuisance. Private nuisance occurs when one legal person behaves or conducts its business in a manner that unduly interferes with the reasonable use or enjoyment of land by another person.[51] For the purpose of climate change related claims, private nuisance is less significant as it deals with the interference of one person with another person's enjoyment of his/her land and it is therefore too narrow in scope and would probably not be construed as encompassing GHG emissions, which by themselves are not harmful to adjacent

[51] Tort Ordinance, para. 44.

land. Moreover, so far as 'air pollution' (including GHG emissions) is concerned, the tort of private nuisance became immaterial with the enactment of the Abatement of Nuisances Act, and later the Abatement of Environmental Nuisances (Civil Action) Act, which deal specifically with 'strong or unreasonable air pollution', as recently amended and redefined by the CAA. Public nuisance, on the other hand, is more relevant for our purposes.

Public nuisance

11.42 Public nuisance is an unlawful act or omission the effect of which is to endanger the life, safety, health, property or comfort of the public, or to obstruct the public in the exercise of a right common to all subjects.[52] Very few actions in public nuisance have ever been brought in Israel.

11.43 One significant procedural limitation in applying this tort is that generally only the Attorney General can bring a claim in public nuisance. A private Party can bring an action only if he/she suffered particular damage above that suffered by the public at large, which in the climate change context could be very difficult. Moreover, the private Party must also show that the alleged nuisance endangers the public or obstructs the public's exercise of its rights in some way.[53] It is therefore very likely that any action in public nuisance brought in the climate change context would be brought by the State and that the targets of such suits would be large industrial GHG emitters.[54]

Breach of statutory duty

11.44 Breach of statutory duty – also called 'negligence per se' – contains the following elements: (i) the defendant breached a duty imposed by a statute; (ii) the statute is intended to protect the particular plaintiff, the class to which the plaintiff belongs

[52] *Ibid*., para. 42.
[53] Daniel Fish, *Environmental Law in Israel* (Mishpatim Publishing, 2000), pp. 82–5.
[54] In the USA such actions in public nuisance have been brought by states and local governments against electric power companies and large automobile manufacturers. See *Connecticut* v. *American Electric Power*, 406 F Supp 2d 265 (SDNY, 2005); *People of the State of California* v. *General Motors* (NDcal, 17 September 2007).

or the public as a whole; (iii) the plaintiff suffered a damage as a result of the breach; (iv) the damage was the kind of damage that the statute was intended to prevent; and (v) the statute does not indicate that the legislature did not intend the statutory breach to give rise to a civil action.[55] The Supreme Court has broadened the scope of the tort in practice by interpreting many statutes as giving rise to civil claims.[56]

11.45 Liability for breach of statutory duties for climate change related damages may arise under the CAA. The Act makes any violation of its provisions an actionable tort.[57] Thus, the CAA clearly indicates that it was intended to protect the interests not only of the State but also of individuals. If an individual suffers climate change related damages (discussed below) as a result of a violation of the CAA by either the State or private Parties (i.e., industries regulated under the statute), a reasonable interpretation would be that such damages are of the type the statute was intended to prevent. Since, as mentioned, the statute explicitly makes any violation of its provisions a tort, defendants could not plausibly argue that the legislature did not intend the breach of the statute to give rise to a civil action. Therefore, all the elements of the tort would be satisfied; however, to establish liability the plaintiff would also have to prove 'damages', 'foreseeability' and 'causation' as under the tort of negligence (discussed below).

Negligence

11.46 In order for a plaintiff P to establish liability against defendant D for negligence, P must prove the following: (i) D owed P a 'duty of care' (both notional and concrete), which required D to adhere to a certain standard of conduct; (ii) D breached that duty of care; (iii) P suffered 'damages'; (iv) those damages were 'caused' by D's breach of his/her duty; and (v) the damages suffered by P were 'foreseeable'.[58] Negligence doctrine is very complex and contains many intricacies.[59] The discussion here will focus only on issues

[55] Tort Ordinance, para. 63.
[56] Ariel Porat, 'Tort Law' in A. Shapira and K. C. Dewitt-Arar (eds.), *Introduction to the Law of Israel* (Kluwer, 1995), p. 135.
[57] CAA, para. 70. [58] Tort Ordinance, para. 35.
[59] Porat, n. 56 above, pp. 128–35.

that are important or raise particular difficulties in the climate change context.

Who may be sued?

11.47 The most likely defendants in Israel are (i) large producers of fossil fuels and gas (such as oil refineries and natural gas companies) and (ii) heavy users of fossil fuels, fuel oil, coal and gas that cause GHG emissions, including large industries and power generators. Even though many other corporations and all individuals emit GHGs into the atmosphere, they are not potential defendants because the *de minimis* doctrine protects them from liability.[60]

11.48 Unlike other common law countries, in Israel the Supreme Court has found public authorities liable in negligence, both in the exercise of executive or operational powers and in the exercise of policymaking authority. In one case, the Court held the State liable in negligence for not repairing highways and ordered it to pay damages to people injured while using such highways.[61] In another case, it imposed liability on a municipality for the improper weighing of policy considerations with regard to the allocation of its scarce resources.[62] Recently, the Court held Mekorot, Israel's public water company, liable in negligence due to over-salination of the water it supplied, which caused damages to a flower grower.[63] Thus, it is likely that the courts would be willing to hold public bodies liable in negligence for climate change related damages occurring due to failure to execute their administrative powers or even for improper policymaking.

Duty of care and foreseeability

11.49 When examining liability in negligence the first step is to determine whether there was a duty of care between the particular D and the particular P with regard to the actions which were actually taken and in relation to the damage which was actually suffered by P. The scope of the duty of care is limited to foreseeable damages only. This could prove to be a difficult element to

[60] Tort Ordinance, para.4.
[61] CA 144/60 *State of Israel* v. *Hauati*, 16 PD 209 (1962).
[62] CA 73/86 *Sternberg* v. *City of Bnei Brak*, 43(3) PD 343 (1989).
[63] CA 10078/03 *Shatil* v. *Mekorot* (delivered on 19 March 2007).

establish in the climate change context. Foreseeability is both factual and normative. The factual question is whether D *could* have foreseen that the action it carried out is of the type of actions that may result in the type of damages suffered by P. The normative question is whether D *should* have foreseen that the action it carried out is of the type of actions that may result in the type of damages suffered by P.[64] In other words, the question is what damages are reasonably foreseeable as a result of D's actions and which plaintiffs are within the zone of foreseeable risk to such damages. Moreover, in Israel there is a specific statutory defence for damage occurring due to an irregular natural cause that a reasonable person could not have foreseen, and the results of which could not have been prevented through reasonable care.[65]

11.50 In the climate change context, questions would arise as to what are the foreseeable risks of climate change and whether they are sufficiently established scientifically. Another relevant inquiry would be about when the adverse effects of the activities that increased GHG emissions became sufficiently well known so as to establish liability. It is noteworthy that when bodily injuries are involved, P is required to establish only that the *type* of damages he suffered as a result of D's actions are reasonably foreseeable, but not that the extent of the damages was foreseeable. It is unclear whether this ruling also applies to property damages.

What damages are compensable?

11.51 The damages that may be caused by climate change are diverse, including destruction of shores and buildings as a result of sea level rise, loss of life and property as a result of extreme weather events such as floods and fires, loss of fertile agricultural land as a result of enhanced desertification, and death as well as health problems resulting from climate change related diseases.

11.52 Israeli courts readily afford a remedy not only for physical damages, namely bodily injuries and injuries to property, but also for pure economic damage that results from P's negligence.[66] Pure economic damage is a financial loss suffered by P as a result of

[64] Porat, n. 56 above, pp. 128–35.
[65] Tort Ordinance, para. 64(1).
[66] HP 106/54 *Weinstein* v. *Kadima*, 8 PD 1317 (1954).

the negligent action of D, absent any damage to P's body or property. Thus, it would be easier to bring an action in negligence for climate change related damages in Israel than in other common law countries which are more reluctant to compensate for pure economic loss. For example, a hotel chain that suffers from a sharp rise in vegetable prices as a result of climate change related floods that ruined all the vegetables in the fields would be able to bring a claim for compensation in negligence against large GHG emitters.

Causation

11.53 A difficult hurdle posed before any claim in negligence arising in the climate change context is establishing causation. The Israeli law of causation is based on the *sine qua non* test – causation between D's action and damage to P is established if the damage to P would not have occurred in the absence of D's action. Nevertheless, for cases in which the *sine qua non* test fails systematically, such as damages that could have been effected by more than one cause, the Court applied other tests that are more favourable to injured Parties, such as the 'material cause' or 'sufficient cause' tests. Generally, the Israeli Supreme Court tends to look for ways, sometimes very creatively, to compensate injured Parties when they believe such compensation is merited.[67]

11.54 A second issue in the climate change context would be the apportionment of liability for damages among the myriad of emitters that are globally diffused. The Israeli Supreme Court has addressed a similar situation in which several tortfeasors acted separately, each of them caused a substantial portion of the damage, but it was impossible to determine what portion each of the tortfeasors caused; in this case the Court held each of the tortfeasors liable.[68] When the damage suffered by P was bodily injury the Court held each tortfeasor liable for the full damage, whereas when property damages were involved the Court demonstrated willingness to apportion liability among the tortfeasors.[69] In the climate change context, it would be, of course, impossible to hold each tortfeasor liable to the full damage of each of the multitude of

[67] Porat, n. 56 above, p. 146.
[68] FH 15/88 *Melech* v. *Kornheuser*, 44(2) PD 89 (1990).
[69] CA 304/68 *Genosar* v. *Dhabra*, 23(1) PD 366 (1969).

injured Parties; a court would probably apportion liability based on some criteria, the most likely of which is market share.[70]

11.55 Another problem would be to distinguish tortious from non-tortious damages. While it is clear that D's conduct (emitting GHGs) creates risks to a large number of people, and in some cases those risks materialise and cause damages, each P would not be able to prove by the preponderance of the evidence that the damages he/she suffered occurred as a result of D's negligent conduct (such as climate change related extreme weather events) rather than as a result of natural events (such as non-climate change related extreme weather events) which would have happened regardless of D's conduct. Since this problem recurs for each and every P, it would be impossible to establish causation and to hold tortfeasors liable for their negligent conduct.

(1) Woodland fires are an example of this problem. Some fires occur naturally, and in many such cases nobody can or should be held liable for the fire-related damages. Other fires happen as a result of climate change.[71] Delayed rainfall and increased evaporation increase the frequency and intensity of woodland fires; in these situations, P would argue that D should be held liable for the fire-related damages that were caused as a result of D's negligent conduct (emitting GHGs). However, D would argue that the specific fire that injured P occurred naturally and would have occurred regardless of D's negligent conduct; thus no causation was established and no liability can be imposed on D. This argument could be raised by each D and for every fire event; therefore, no tortfeasor would ever be held liable for its negligent conduct.

(2) In a recent decision, the Israeli Supreme Court came up with an innovative solution to this problem, though in an *obiter dictum*. In *Carmel Hospital* v. *Malul*,[72] the Court ruled that in situations where a tortfeasor creates recurring risks to a large group of people and where there is a

[70] For market share liability (MSL) in the USA, see *Sindell* v. *Abbott Laboratories*, 26 Cal 3d 588 (1980). For an indication that the Israeli Supreme Court is inclining to adopt MSL, see DNA 4693/05 *Carmel Hospital* v. *Malul* (delivered 29 August 2010).

[71] Thomas W. Swetnam, 'Fire History and Climate Change in Giant Sequoia Groves', *Science*, 262 (1993), 885–9.

[72] *Carmel Hospital* v. *Malul* (see n. 70 above).

systemic bias that prevents plaintiffs from proving in the preponderance of the evidence that *in their case* the risk materialised and caused them damage, then in all the cases a different rule of 'statistical-based compensation' would apply. This rule specifies that the tortfeasor would be held liable only for the damages that, based on statistical evidence, result from its negligent conduct. The Court specifically mentioned environmental pollution cases as falling under this category.

New civil causes of action

Clean Air Act

11.56 First, the CAA makes any unlawful actions or omissions under it an actionable tort and applies the Tort Ordinance to them.[73] Second, an Annex to the Abatement of Environmental Nuisances (Civil Action) Act 1992 specifies a list of NGOs that are responsible for environmental protection ('environmental NGOs'). The CAA instructs that various governmental bodies and the environmental NGOs can bring a civil action under the CAA, provided that if the cause of action is an injury suffered by a person, that person consented to the suit.[74] Third, when the tortfeasor is a corporation, the CAA imposes liability for the corporation's actions and omissions on any active functionary and high-level employee, unless they can prove that the tortious act or omission has been done without their knowledge and that they took all reasonable measures to prevent it.[75]

11.57 Since the CAA imposes many obligations on corporations, both procedural and substantive, any unlawful act or omission relating to climate change that ends up causing a damage is actionable. An expansive interpretation of the statute would also allow a private Party to file for an injunction, even if no injury has taken place as a result of an unlawful act or omission under the CAA. The ability to obtain an injunction is subject to the restrictions on the ability to issue an injunction specified in the Tort Ordinance.[76]

[73] CAA, para. 70. [74] *Ibid*., para. 71.
[75] *Ibid*., para. 72. [76] *Ibid*., para. 74.

Abatement of Environmental Nuisances (Civil Action) Act

11.58 The Abatement of Environmental Nuisances (Civil Action) Act allows any person who was injured or may be injured by an 'environmental nuisance' (or an environmental NGO acting in the interest of such a person) to petition the court for an injunction to abate the nuisance, to repair any damage and to restore the environment to its status quo ante.[77] The definition of 'environmental nuisance' contains, inter alia, 'air pollution' and refers to the definition in the Abatement of Nuisances Act, 1961.[78] In the past, the definition of 'air pollution' in the Abatement of Nuisances Act referred to 'any strong or unreasonable air pollution, including pollution by smoke, gases, fumes, dust and the like'.[79] The CAA amended the definition of 'air pollution' in the Abatement of Nuisances Act to incorporate the definition of this term in the CAA, which as discussed above, refers to any 'material whose presence in the air causes or may cause … climate or weather change'.[80] The result is that the Abatement of Environmental Nuisances (Civil Action) Act can now be used by any person who is injured by climate change related practices.

11.59 A weakness of the Abatement of Environmental Nuisances (Civil Action) Act is that the remedies that can be sought under it are restricted to injunctions. Thus, this statute does not provide a relief for any damages suffered as a result of an 'environmental nuisance'. However, the Class Action Act, 2006 provides a remedy. Under this Act, a class action can be brought against an 'injurer' in relation to an 'environmental nuisance'. For the definition of both these terms, the Act refers to the Abatement of Environmental Nuisances (Civil Action) Act.[81] Since the definition of 'environmental nuisance' includes climate change related injuries, such nuisances are actionable under the Class Action Act. It is noteworthy that the State can be sued under the Class Action Act as a direct 'injurer', but it cannot be sued for failing to supervise, regulate or enforce legal obligations on private injurers.[82]

[77] Abatement of Environmental Nuisances (Civil Action) Act, para. 2.
[78] *Ibid*., para. 1. [79] Abatement of Nuisances Act, 1961, para. 4.
[80] CAA, para. 2. [81] Class Action Act, Annex II, para. 6.
[82] Class Action Act, para. 3(a).

Statute of Limitation

11.60 Limitation law mandates that an action in tort must be brought within seven years of the accrual of the cause of action, which is, in most cases, the time of the occurrence of the damages happening. If the tort is a continuous one, the cause of action accrues as long as the tort continues. When latent damages are involved, the cause of action is deferred to the day when the plaintiff found out about it, but no more than ten years from the accrual of the cause of action.[83]

(D) Conclusion

11.61 Climate change litigation in Israel is in its infancy. A handful of cases raising climate change related claims have been brought before the courts, and the few that were brought are all in public law. It is, however, quite likely that with the intensification of climate change related damages and as the impacts become more severe, we shall see more and more such claims in both public and private law, particularly if no significant international agreement is reached. This chapter provided some grounds for climate change related claims in Israel.

[83] Tort Ordinance, para. 89.

12

Kenya

PATRICIA KAMERI-MBOTE AND COLLINS ODOTE

(A) Introduction

The Kenyan legal system

12.01 The Republic of Kenya is a constitutional democracy whose primary sources of law are enumerated in Section 3 of the Judicature Act[1] and the Constitution promulgated in August 2010 following a referendum. As a former British colony, Kenya's legal system has drawn heavily on the English and Indian legal systems. Under the Judicature Act, the sources of Kenyan law are: (i) the Constitution; (ii) Acts of Parliament including subsidiary legislation; (iii) specific Acts of the Parliament of the United Kingdom; (iv) English statutes of general application in force in England on 12 August 1897; (v) the substance of common law and doctrines of equity; and (vi) African customary law. The common law, doctrines of equity and statutes of general application are applicable in 'so far only as the circumstances of Kenya and its inhabitants permit and subject to such qualifications as those circumstances may render necessary'. African customary law is applicable in 'civil cases in which one or more of the parties is subject to it or affected by it, so far as it is applicable and is not repugnant to justice and morality or inconsistent with any written law'.

12.02 The Constitution is 'the supreme law of the Republic'.[2] It recognises 'the general rules of international law'[3] as well as 'any treaty

The authors gratefully acknowledge the research assistance of Wilson Kamande.

[1] Chapter 8, Laws of Kenya, available at National Council for Law Reporting, www.kenyalaw.org.

[2] Article 2(1), *Constitution of Kenya* (2010) (Republic of Kenya, *Constitution of Kenya*, Government Printer, August 2010, available at National Council for Law Reporting, www.kenyalaw.org).

[3] *Ibid*., Article 2(5).

or convention ratified by Kenya' as forming part of the law of Kenya.[4] 'Any law, including customary law, that is inconsistent with the Constitution is void to the extent of the inconsistency, and any act or omission in contravention of the Constitution is invalid.'[5]

12.03 The Constitution provides for two categories of courts: superior courts and subordinate courts. The superior courts consist of the Supreme Court, the Court of Appeal, the High Court and other courts established pursuant to the Constitution with the status of the High Court.[6] Subordinate courts include the Magistrates courts, the Kadhis' courts, the Courts Martial and other courts or local tribunals as may be established by an Act of Parliament.[7] The Constitution has mandated the establishment of a land and environment court with the status of the High Court to hear and determine disputes relating to '… the environment and the use and occupation of, and title to, land'.[8] Currently, there is a land and environment division of the High Court which was established in 2007.

Government stance on climate change

12.04 Kenya signed the FCCC in 1992, ratified it in 1994 and ratified the Kyoto Protocol in February 2005. Kenya is a non-Annex I country and is as such not legally bound to reduce its greenhouse gas ('GHG') emissions under the Kyoto Protocol. However, Kenya has placed high national importance on issues of climate change; for example, the draft National Environment Policy 2008 addresses climate change.[9] The draft policy recognises climate change as a cross-cutting theme involving many ministries within the government and touching on all aspects of the country's socio-economic fabric. To give climate change a higher profile at the national level and to help in addressing climate-related issues in respect to relevant ministries, a

[4] *Ibid*., Article 2(6). [5] *Ibid*., Article 2(4).
[6] *Ibid*., Article 162(1) and (2).
[7] *Ibid*., Article 169(1). [8] *Ibid*., Article 162(2).
[9] Government of Kenya, Ministry of Environment, *Draft National Environment Policy* (2008), p. 44 (on file with the author).

coordination unit was established in the Prime Minister's office in 2009.[10]

National Climate Change Response Strategy

12.05 In April 2010, the government published the National Climate Change Response Strategy ('NCCRS'), which was developed by the Ministry of Environment and Mineral Resources to address the increasing impacts of climate change in the country and to take advantage of any arising opportunities, for example from carbon trade and transition to a green economy. The strategy proposes 'climate smart' development and climate change 'proof' solutions necessary for the attainment of Vision 2030 goals.[11] The NCCRS is expected to be operationalised within an integrated framework anchored on the FCCC and complementary to the United Nations Convention to Combat Desertification and the Convention on Biological Diversity.[12]

Draft Climate Change Bill 2010

12.06 The draft Climate Change Bill 2010 is the first proposed legislation that aligns with the objectives of the National Climate Change Response Strategy of providing a framework for nationwide actions for mitigating and adapting to changing climate, for development under the changing climate and for combating the impacts of climate change in various sectors of the economy.[13]

12.07 The draft Bill proposes far-reaching recommendations on mitigation and adaptation, governance of climate change programmes, technologies to be adopted, public participation and dissemination of information to the public. The Bill would require the government to prepare and publish a public engagement strategy setting out the steps it intends to take to inform

[10] See P. Kameri-Mbote and R. Okello-Orlale, *Environment Sector Gender Analysis: Successes, Challenges, Opportunities and Necessary Interventions* (report prepared for DANIDA (2009). On file with the author).

[11] Government of Kenya, *National Climate Change Response Strategy* (April 2010), p. 17. See www.environment.go.ke/images/final%20complete%20nccrs%202010.pdf. Government of Kenya, *Vision 2030* (2008), spells out Kenya's development aspirations in the next twenty years and specifically seeks to transform the country from a developing to a medium-income economy by the year 2030. It has political, economic and social pillars which have been broken down into goals and objectives for the attainment of the Vision.

[12] NCCRS (see n. 11 above). [13] Draft Climate Change Bill, 2010, Section 3.

the public about climate change programmes specified in the Bill and also to encourage the public to contribute to the achievement of the objectives of those programmes.[14] The Bill would also mandate the formulation, implementation, publication and regular update of national climate change programmes in relation to: adaptation and mitigation; education and awareness, including integration in the school curriculum; assessment of vulnerability and climate change threats; capacity building in strategic climate change sectors; and research, development and technology transfer.[15]

12.08 The Bill also proposes the establishment of a National Clean Energy Development Mechanism Authority as envisaged under the Kyoto Protocol.[16] The proposed Authority would include representatives from the Ministries of Environment, Foreign Affairs, Finance, Planning, Energy, Agriculture, Trade and Industry, and Tourism. It would have regulatory functions,[17] capacity building functions,[18] and technology transfer functions.[19]

12.09 Under the Bill, public bodies would be required to exercise their functions in delivering climate change programmes in the most sustainable way possible.[20] The government would have the power to impose duties on public bodies relating to climate change.[21]

Industrial and natural resources (emissions sources and energy mix)

12.10 Kenya is classified as a developing country with, in 2010, a real GDP growth rate of 4.5%, a population growth rate of 2.6% and a per capita GDP growth rate of 0.9%.[22] Kenya has a complex

[14] *Ibid*., Section 4(1)(a) and (b).
[15] *Ibid*., Section 8. [16] *Ibid*., Section 24(1).
[17] *Ibid*., Section 25(1). [18] *Ibid*., Section 25(2)(a)–(c).
[19] *Ibid*. Section 25 promotes transfer of environmentally safe and sound technology which furthers the objective of sustainable development taking into account local knowledge and circumstances; and encourages the trading or banking of CERs earned from CDM projects as marketable commodity.
[20] *Ibid*., Section 31(1). [21] *Ibid*., Section 31(2).
[22] Kenya National Bureau of Statistics/World Bank (2009).

climate, with wide variations across the country and strong seasonality. Temperatures vary widely between the coastal strip, the arid and semi-arid lands and the temperate highland plateau. Only 17% of the land is arable. Most of Kenya's 39 million people live in the fertile and high-potential agricultural areas, and about 20% of the country's population and 50% of its livestock are in the arid and semi-arid areas.

12.11 Kenya's natural endowments are limited. It lacks major exploitable mineral resources. Kenya's natural flora and fauna are among the country's most valuable assets.[23] The national economy draws heavily on climate-sensitive sectors: agriculture and nature-based tourism.[24] Individual livelihoods are also largely based on climate-sensitive activities such as agriculture and livestock rearing.

12.12 Land use change accounts for the greatest source of emissions. As reliance on biomass and hydroelectric power sources is reduced, Kenya's developing economy will demand more from alternative energy sources, which may result in increased emissions.[25] Thus, GHG emissions in Kenya could double by 2030.[26]

National climate change risks

12.13 Kenya already experiences extreme weather events such as periodic floods and droughts. Recent major droughts occurred in 1998–2000, 2004–05 and 2009. Major floods occurred in 1997–8 and 2006. All of the climate model scenarios show increases in mean annual temperature in future years; the mid-range emission scenario shows a rise of almost 1° C by 2030 and around 1.5° C by 2050. However, the range across all the models is considerably wider, with projections from 1 to 3.5°C by the 2050s.[27] These changes are likely to impact agricultural production and pasture productivity.

[23] NCCRS (see n. 11 above), p. 30. [24] *Ibid*., p. 8.
[25] *Ibid*., p. 39. [26] NCCRS (see n. 11 above).
[27] Stockholm Environment Institute, *Economics of Climate Change in Kenya* (Project Report, 2009, hereinafter 'SEI Project Report').

12.14 Kenya's coastline has diverse flora and fauna. The coral reefs – which buffer the coastline against waves – mangrove forests and other marine resources as well as low-lying tourist facilities are at risk from the predicted sea level rise, which may lead to submergence of parts of the Kenyan coast.[28] Kenya is a water-scarce country with uneven water distribution. Climate change effects on precipitation are likely to alter the availability of water. Further, climate change will have substantial effects on forest cover in Kenya, which had decreased to less than 2 per cent by 2005. This has implications for water availability as water catchment areas are destroyed.

12.15 Climate change will also negatively impact Kenya's key economic sectors: agriculture, tourism, livestock, horticulture, fisheries and forestry. In 2006, agriculture directly contributed 26% to Kenya's GDP and a further 27% through other sectors; tourism and fisheries contributed 10% and 0.5% respectively.[29] Wildlife deaths have been reported and fisheries are likely to be affected by rising temperatures. The production of major cash crops such as tea has also declined. Aggregate models indicate that additional net economic costs (on top of existing climate variability) could be equivalent to a loss of almost 3% of GDP each year by 2030.[30] An initial fiscal estimate of Kenya's immediate needs for addressing current climate conditions as well as for preparing for future climate change is $500 million annually, starting from 2012.[31]

12.16 Climate change will affect food security as floods and droughts lead to the loss of productive assets. Famine cycles have shortened from every twenty years in 1964 to yearly in 2009 due to extreme climatic variations. There are also indirect contributions through destruction of physical and social infrastructure such as roads and bridges during storm events.[32] This affects the transportation of food across the country.

[28] NCCRS (see n. 11 above), p. 32. [29] *Ibid*., p. 34.
[30] SEI Project Report (see n. 27 above). [31] *Ibid*.
[32] NCCRS (see n. 11 above), p. 38. See SEI Project Report (n. 27 above) and IGAD, *Climate Change and Human Development in Africa: Assessing the Risks and Vulnerability of Climate Change in Kenya* (Malawi and Ethiopia Human Development Report 2007/2008). Occasional Paper, Human Development Report Office, IGAD Climate Prediction and Applications Centre (ICPAC).

(B) Public law

Overview

12.17 Judicial review is a process of control over public bodies by which a court reviews the legality of a public body's actions. The purpose of judicial review was expressed in *R* v. *Secretary of State for Transport ex p. LB Richmond*[33] as ensuring that government is conducted within the law. A court exercises judicial review by examining whether the decision has been made in accordance with the law. That is, the scope of judicial review is not the merits of the decision but rather the decision-making process followed by the public body in reaching the decision.[34] Thus, judicial review can ensure that an individual is given fair treatment by the authority to which he/she has been subjected.

12.18 Through judicial review, a court could quash a decision (*certiorari*), stop unlawful action (prohibition), require the performance of a public duty (*mandamus*), declare the legal position of the litigants (declaration), order monetary compensation and maintain the status quo (a stay).[35] Judicial review is used to challenge public bodies exercising regulatory functions for failure to act or for taking an improper action (e.g. one outside the jurisdiction of the public body). This is a possible avenue for climate change litigation under the draft Climate Change Bill with respect to the proposed duties of public bodies to: (i) undertake programmes for adaptation and mitigation; (ii) report on progress towards implementation of programmes; (iii) prepare a land-use strategy; (iv) promote energy efficiency; and (v) prepare and implement waste prevention and management plans.[36]

12.19 The legal regime for judicial review proceedings in Kenya is the Law Reform Act[37] and Order 53 of the Civil Procedure Rules, 2010.[38] Section 8(2) of the Law Reform Act empowers the High

[33] No. 3 [1995] Env. LR 409.
[34] *Supreme Court Practice*, 1997, vol. 53/1–14/6.
[35] Albert Mumma, 'The Continuing Role of Common Law in Sustainable Development' in C. O. Okidi *et al.*, *Environmental Governance in Kenya: Implementing the Framework Law* (Nairobi: East African Educational Publishers, 2008), pp. 90–109, at p. 92.
[36] Part III of the Draft Climate Change Bill (see n. 13 above).
[37] Chapter 26 of the Laws of Kenya (see n. 1 above), sections 8–10.
[38] Chapter 21 of the Laws of Kenya (see n. 1 above).

Court to make an order of *mandamus*, prohibition or *certiorari* in any case in which the High Court in England is empowered to do so by virtue of section 7 of the Administration of Justice (Miscellaneous Provisions) Act, 1938 of the United Kingdom. The procedure for judicial review is provided by Order 53 of the Civil Procedure Rules. It requires that the applicant seek leave of the court before filing the application. Leave is only granted if the court considers that the applicant has 'sufficient interest' (or *locus standi*) in the matter in issue. Judicial review could be a tool for litigating climate change cases when a public body has made a decision that has negative impacts on the environment and is either outside the ambit of the powers of the body or is made without regard to procedural requirements. Thus if, for example, a public body is required to regulate the use of efficient energy options, one could challenge the manner in which that power is exercised.

Justiciability and standing

12.20 Justiciability refers to the amenability of a matter for judicial determination. It requires that an actual and substantial controversy be present before a decision can be rendered.[39] Any litigation, including climate change related, must satisfy the justiciability test; thus, not every complaint will be accepted for judicial determination. Under the traditional test for justiciability, a complainant must demonstrate that the defendant's actions caused harm resulting in personal or proprietary damage to the complainant. Further, the complainant must demonstrate that this damage was specific to her/him and greater than that suffered by the public. Most climate change actions would not be able to sustain this test and thus would be non-justiciable.

12.21 Many environmental cases in Kenya in which plaintiffs brought actions on behalf of the general public have been lost due to the courts holding that the plaintiffs lacked *locus standi*. This restrictive view of *locus standi* is best demonstrated by the Kenyan case of *Wangari* v. *Kenya Times Media Trust*.[40] However,

[39] *Metropolitan Life Ins. Co.* v. *Kinsman*, 747 NW 2d 653.

[40] HCCC No. 5403 of 1989 reported in 1 KLR (E&L) 164–74 where the renowned Kenyan Nobel Laureate, Professor Wangari Maathai, brought a suit in her capacity as coordinator

the requirement for 'sufficient interest' has been simplified by the enactment of the 2010 Constitution and Environmental Management and Co-ordination Act ('EMCA').[41] Article 70 of the Constitution and Section 3 of EMCA grant every person in Kenya the *locus standi* to sue in any environment-related matter. Courts in Kenya have in recent years also upheld the rights of individuals to bring cases to courts without having to demonstrate personal injury and loss.[42] It follows, therefore, that the most important justiciability issues for climate change litigation are determining the impact of the action complained about and demonstrating causation.

Grounds for judicial review

12.22 Section 8(2) of the Law Reform Act limits the High Court of Kenya to issue the writs of *mandamus*, prohibition, or *certiorari* only in the circumstances that the High Court in England is empowered to issue such writs. In England, the various grounds for judicial review that have developed over time are best expressed in the court's decision in *Council for Civil Service Unions* v. *Minister for the Civil Service*: the only grounds for judicial review are illegality, irrationality and procedural impropriety.[43] However, within these broad established categories, many more specific grounds for judicial review have evolved.

Ultra vires

12.23 Public bodies may only act within the powers that they have been given by law. Those powers are often specified in legislation. A

of the Green Belt movement seeking to restrain the defendants from constructing a multi-storey building in a public recreation area known as Uhuru Park situated in the centre of Nairobi City, the capital of Kenya. However, the case was struck out on the basis that Wangari Maathai lacked *locus standi*.

[41] Act no. 8 of 1999.

[42] See, e.g., *Samson Ole Reya* v. *Attorney General*, 1 KLR (E&L), 2006, 761–70. The plaintiffs brought a suit against the government arguing that the decision to introduce a weed, known as *prosopis Juliflora*, in 1983 to their area ostensibly to curb desertification had interfered with their right to a clean environment due to the invasive nature of the weed. Amongst the objections raised to the suit by the defendants was that the applicants lacked *locus standi*. However the court rejected this objection, holding that with the enactment of EMCA, an action could only be dismissed if it was shown that it was frivolous, vexatious or an abuse of the court process.

[43] [1985] AC 374.

public body is not allowed to act without authority or beyond those powers. Engaging in such conduct is termed 'ultra vires' and can either be substantive or procedural. Procedural ultra vires occurs when a public body fails to follow required procedure while substantive ultra vires occurs when a public body exercises power beyond its limits. In *Anisminic Ltd* v. *Foreign Compensation Commission*, the court held that public bodies would be ultra vires if they attempted to decide a case that was outside their area of control or if they made errors of law in their decision-making process.[44] In *Re Racal Communications*, the court held that *any* 'error of law' is a ground for review as an illegality; that is, there is no need to prove that the error was ultra vires.[45] Numerous cases have been decided by the Kenyan courts dealing with the issue of acting ultra vires. In *Mohammed Zafar Niaz Chaudry & Waheed* v. *The Permanent Secretary Ministry of Education*, the applicants as officials of the Islamia Madrasa Society challenged the decisions of the Permanent Secretary of the Ministry of Education to cancel the licence for a school run by the applicants and then to issue another licence which changed the nature and size of the population of the school.[46] The court granted the orders sought by the applicants on the grounds that the actions of the Permanent Secretary were ultra vires: only the Minister for Education could exercise such powers unless he had expressly delegated the powers through a gazette notice, which in this case he had not.

Exercising a power for the wrong purpose

12.24 Where an authority or public body is given power for a certain purpose, it is not expected to act outside the purpose. The purpose might be explicit or implicit. In either case, the authority is not allowed to exercise a power for some other purpose than the one for which it was granted.

Principles of natural justice

12.25 The principles of natural justice are also described as 'procedural fairness'. They apply at first glance to all administrative

[44] [1968] APP LR 12/17. [45] [1980] APP LR 07/03.
[46] High Court at Nairobi, Misc. App. No. 76 of 2006.

decision-making situations. However, they only bind administrative bodies where a judgment is being made that may have the effect of interfering with an interest of the individual. They do not apply when general policy, for example, is being determined.[47]

12.26 There are two key components to natural justice: fair hearing and bias rules. The fair hearing rule is derived from the maxim *audi alteram partem* (hear the other side). All those affected by the decision should be given a chance to state their case and be heard and thus no party should be condemned unheard. The bias rule requires impartiality on the part of the decision-maker. The test is whether a fair-minded observer might reasonably apprehend that the decision-maker might not bring an impartial mind to the resolution of the question. The principle has been upheld in the majority of the judicial review cases in Kenya. In the 1997 case of *Mirugi Kariuki* v. *Attorney General*, the court quashed the decision of the Attorney General to deny the applicant the right to be represented by a Queen's Counsel in a case where he had been charged with treason.[48] The Attorney General made this decision summarily without hearing the applicant. The court held that this action should have been arrived at only after hearing the applicant in accordance with the rules of natural justice. This position was upheld in *Obed Nthiwa* v. *Commissioner of Cooperative Development* where the court quashed the decision of the Commissioner to suspend the applicant as a member of the central management committee of a cooperative society without giving him an opportunity to be heard.[49] The court held that the action was ultra vires and against the rules of natural justice.

Fettering discretion

12.27 Where a public body is vested with discretion to make a certain decision or act in a certain way, it is supposed to exercise the discretion within the law. The public body should not fetter that discretion by, for example, adopting an overly rigid policy or set

[47] Fiona L. McKenzie, *Grounds of Review, The Law Handbook*, available at www.lawhandbook.org.au/handbook/ch21s02s06.php.

[48] Civ. App. No. 70 of 1997.

[49] Misc. App. No. 462 of 2006 reported in eKLR [2007].

of guidance or by agreeing to act in accordance with the decision of another public body.[50]

12.28 There have been no climate litigation matters brought before Kenyan courts. The new Constitution and the amended Civil Procedure Rules dictate an overriding objective regarding litigation: the determination of disputes without undue delay and without undue regard to technicalities and formalities of procedure. Courts are bound to give effect to this overriding objective in interpreting the legislative provisions, and parties and their advocates are obliged to assist the court in furthering this objective. The court is expected to take the following factors into account in furthering the overriding objective: (i) the just determination of proceedings; (ii) the efficient disposal of the business of the court; (iii) the efficient use of available judicial and administrative resources; (iv) the timely disposal of the proceedings at a cost affordable to the parties; and (v) the use of suitable/appropriate technology. This provides a good context for climate change actions that may be brought to Kenyan courts in the future.

Public interest litigation

12.29 Litigation is a useful tool for vindicating rights and resolving disputes between parties. While traditional litigation largely focuses on disputes between two private entities based on personal or proprietary damage, the nature of environmental issues is such that they are not readily amenable to private litigation. Because environmental rights are more easily characterised as public rights than as private rights, the concept of public interest litigation has emerged as an avenue for protecting environmental rights. Through public interest litigation, public-spirited individuals can bring suits to enforce rights and provide relief to wide sections of society.

12.30 In Kenya, the concept of public interest litigation is relatively new.[51] Neither citizens nor courts have embraced the concept.

[50] For a discussion of the exercise of discretion in the Kenyan context, see P. L. O. Lumumba, *An Outline of Judicial Review in Kenya* (University of Nairobi, 1999), pp. 58–83.

[51] M. O. Makoloo, B. O. Ochieng and C. O. Oloo, *Public Interest Environmental Litigation: Prospects and Challenges* (Nairobi: ILEG, 2007), p. 60.

The legal framework has also been largely unsupportive to public interest litigation due to restrictive laws on *locus standi*. However the new Constitution provides a legal framework supportive of public interest litigation through its relaxation of the rules of *locus standi*: it gives everyone the right to bring an action on violation of environmental rights without proof of loss or damage.[52] The pervasive nature of climate change and the effects it has on wider sections of society make it a particularly promising area for the use of public interest litigation to ensure relief to victims of climate change.

Constitutional and framework environmental law

12.31 The recognition and guarantee of human rights within a country's legal system provide a basis for protecting the environment and ensuring a clean and healthy environment. While many constitutions do not expressly mention climate change or address climate change related issues,[53] the discourse of rights generally and the right to life in particular has developed worldwide to an extent that many courts now appreciate that the provisions on the right to life in a country's constitution can be used to deal with environmental degradation.[54]

12.32 On 4 August 2010, Kenyans held a referendum and voted for a new Constitution which has heralded a new dawn in the

[52] *Constitution of Kenya*, 2010, n. 2 above.

[53] See D. Badrinarayana, 'India's Constitutional Challenge: A less Visible Climate Change Catastrophe' in B. J. Richardson *et al*. (eds.), *Climate Law and Developing Countries: Legal and Policy Challenges for the World Economy* (Edward Elgar, 2009), pp.63–83, discussing using the Constitution in India to litigate climate change issues despite there being no mention of climate change in the Indian Constitution.

[54] For a discussion of cases in Asia and Latin America see generally B. J. Preston, 'The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific', *Asia Pacific Journal of Environmental Law*, 9 (2), (3) (2005), 109–211. See also D. Tackacs, 'The Public Trust Doctrine, Environmental Human Rights, and the Future of Private Property', *New York University Environmental Law Journal*, 16 (2008), 711. In the East African context the constitutional provisions on right to life have also been interpreted to include right to a clean and healthy environment. For a discussion of these cases see P. Kameri-Mbote and C. Odote, 'Courts as Champions of Sustainable Development: Lessons From East Africa', *Sustainable Development Law and Policy*, 10(1) (2009), 31 available at www.wcl.american.edu/org/sustainabledevelopment/documents/SDLP_09Fall.pdf?rd=1.

country's governance framework.[55] The new Constitution has made great strides forward in the environmental field including, for the first time in the country's history, the right – in the Bill of Rights – to a clean and healthy environment.[56] This is a marked improvement from the position under the old Constitution, which did not even mention the word environment in its provisions.[57] The new Constitution recognises the importance of environmental management to the country's governance, pointing out in its Preamble that the environment is the country's heritage and as such the people of Kenya are 'determined to sustain it for the benefit of future generations'.[58] Additionally, the Constitution puts sustainable development at the centre of all governance processes and decisions in the country by identifying it as a national value and principle of governance.[59]

12.33 The constitutional fundamental human right to a clean and healthy environment expressly includes the right to 'have the environment protected for the benefit of the present and future generations'[60] and to 'have obligations relating to the environment fulfilled'.[61] The government is required to:

> (a) ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure equitable sharing of accruing benefits; (b) work to achieve and maintain a tree cover of at least ten per cent of land area of Kenya; (c) protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities; (d) encourage public participation in the management, protection and conservation of the environment; (e) protect genetic resources and biological diversity; (f) establish systems of environmental impact assessment, environmental audit and monitoring of the environment; (g) eliminate processes and activities that are likely to endanger the environment;

[55] *Constitution of Kenya*, 2010 (see n. 2 above).
[56] *Ibid*., Section 42.
[57] See generally J. B. Ojwang., 'The Constitutional Basis for Environmental Management' in C. Juma and J. B. Ojwang (eds.), *In Land We Trust: Environment, Private Property and Constitutional Change* (Nairobi and London: Initiative Publishers and Zed Books, 1996), pp.39–60. See also C. O. Okidi, 'Concept, Structure and Function of Environmental Law' in C. O. Okidi *et al.* (eds.), *Environmental Governance in Kenya: Implementing the Framework Law* (Nairobi: East African Educational Publishers, 2008), pp. 3–60, at p. 18.
[58] See *Constitution of Kenya*, 2010, n. 2 above, at Preamble.
[59] *Ibid*., Section 10. [60] *Ibid*., Section e 42(a). [61] *Ibid*., Section 42(b).

and (h) utilise the environment and natural resources for the benefit of the people of Kenya.[62]

12.34 The right to sue in environmental matters is constitutionally guaranteed. Article 70(1) categorically provides:

> If a person alleges that a right to a clean and healthy environment recognised and protected under Article 42 has been, is being or is likely to be, denied, violated, infringed or threatened, the person may apply to a court for redress in addition to any other legal remedies that are available in respect to the same matter.

Article 70(2) empowers a court to 'make any order, or give any directions it considers appropriate'. Furthermore, the Constitution restates, albeit in different words, the provisions of EMCA that 'an applicant does not have to demonstrate that any person has incurred loss or suffered injury'.[63]

12.35 These constitutional provisions are supported by the framework environmental law, the EMCA,[64] which, in addition to recognising in almost similar terms to the Constitution the right to a clean and healthy environment,[65] provides principles of environmental law to govern public bodies in making decisions on the management of the environment and to govern courts in their consideration of environmental cases. These principles, based on internationally agreed general principles of environmental law, include the following: (i) the principle of public participation in development of policies, plans and processes for the management of the environment; (ii) the cultural and social principles traditionally applied by any community in Kenya for the management of the environment and natural resources in so far as the same are relevant and are not repugnant to justice and morality or inconsistent with any written law; (iii) the principle of international cooperation in the management of environmental resources shared by two or more countries; (iv) the principle of inter-generational equity; (v) the polluter pays principles; and (vi) the precautionary principle.[66]

[62] *Ibid*., Section 69(1). [63] *Ibid*., Section 70(3).
[64] See EMCA, n. 42 above. [65] *Ibid*., Section 3(1).
[66] *Ibid*., Section 3(5). See also A. Angwenyi, 'An Overview of the Environmental Management and Coordination Act' in C. O. Okidi *et al.* (eds.), *Environmental Governance in Kenya: Implementing the Framework Law* (Nairobi: East African Educational Publishers, 2008), pp. 142–82.

12.36 The result of these constitutional and legislative stipulations is a basis for citizen action and demand for the legal protection of those environmental rights. Even before the adoption of the new Constitution, the Kenyan judiciary had already ruled that citizens in Kenya had a right to a clean and healthy environment. In the landmark case of *Peter K. Waweru* v. *Republic*,[67] twenty-three property owners in Kiserian, a small town in Kenya, had been charged under the country's Public Health Act[68] with the twin offences of discharging raw sewage into a public water source and the environment and failing to comply with a statutory notice from a public health authority. The applicants filed a constitutional reference arguing that the charge violated their constitutional rights because the authorities improperly discriminated against them by charging only them with unlawful conduct in which all land-owners in the town had engaged. The court agreed with the applicants and discharged them. The court then discussed the implications of their action for sustainable development and for environmental management. It held that the actions were against the right of the residents of the areas to a clean and healthy environment.[69] Thus although the criminal charges against them were unconstitutional for being discriminatory, the original acts complained about were injurious to the environment. Consequently the court ordered remedial action to be taken by government agencies to ensure that the offending action ceased.

12.37 The *Waweru* case has provided a sound jurisprudential basis for the Kenyan courts in addressing environmental cases. Judges have pointed out that the right to life can be threatened by many things. It is thus arguable that a court could consider that climate change threatens the right to life and the right to a clean environment. Such an argument, however, will require that evidence clearly establish that climate change related activities can be demonstrated as having impacts on the environment. A plaintiff could refer to the huge body of literature demonstrating that climate change is real and is negatively impacting societies.[70]

[67] 1 KLR (E&L) 677–700.

[68] Chapter 242 of the Laws of Kenya (see n. 1 above).

[69] See n. 36 above, p. 687.

[70] Jennifer Kilinski, 'International Climate Change Liability: A Myth or Reality?', *Journal of Transnational Law and Policy*, 18(2) (2009), 378–418, at 378. See also the assessment

12.38 The precautionary principle is useful in situations where there is a lack of full scientific certainty by nevertheless allowing for the establishment of liability and thus for remedial action. The principle acts by reversing the rules on the burden of proof. The principle was used successfully in the Pakistan case of *Shehla Zia* v. *Wapda*.[71] In Kenya, the precautionary principle has been applied in *Sam Odera and Others* v. *The National Environmental Management Authority and EM Communications*, a challenge to NEMA's issuance of an environmental impact assessment licence to a company that wanted to set up a telecommunications mast in a residential area.[72] The case demonstrates the country's recognition of the precautionary principle as a useful basis for determining the appropriate outcome in an environmental case and could be invoked as precedent in climate change litigation in Kenyan courts. In addition to referencing the *Odera* case, a plaintiff litigating a climate change related claim could refer to the inclusion of the precautionary principle within the FCCC.

(C) Private law

12.39 Private law actions can be brought by private persons against other private persons for private injuries.[73] The causes of action in private law are trespass, nuisance, the Rule in *Rylands* v. *Fletcher* and negligence. The remedies for their redress are an award of damages, injunction and declaratory judgments.[74]

Trespass

12.40 As developed under the common law, trespass is related to invasion or unlawful intrusion that interferes with one's person or property. Its more common use in modern times relates to land. This makes it relevant to climate change actions in a country like Kenya where land-based actions are a big factor in climate

report for the 4th Inter-Governmental Panel on Climate Change ('IPCC'), 2007, available at www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf. See also the US case of *Massachusetts* v. *Environmental Protection Agency* 549 US (2007).

[71] PLD 1994 SC 693.

[72] High Court, Misc. Civ. App. No. 400 of 2006.

[73] *Gouriet* v. *Union of Post Office Workers* [1978] AC 435.

[74] Mumma (see n. 35 above).

change.[75] An action in trespass can be brought either by the owner of the land or any lawful occupier of the land against anyone who interferes with the right of ownership or possession. The interference is required to be direct and physical and not an indirect interference. Trespass thus seeks to protect the right of an occupier to enjoy his/her land without unjustifiable interference.[76]

Nuisance

12.41 Nuisance was traditionally the most common cause of action asserted at common law. Nuisance is defined as the interference with the use and enjoyment of land belonging to another. The interference requirement limits the availability of the cause of action to owners and occupiers of land. There are two types of nuisance: private nuisance and public nuisance.

12.42 Private nuisance is defined as a continuous, unlawful and indirect interference with the use or enjoyment of land, or some right over or in connection with it. To succeed in an action for private nuisance, the claimant must prove that there was a continuous interference over a period of time with his/her use or enjoyment of land. The claimant must also prove that the defendant's conduct was unreasonable, thereby making it unlawful. The applicable rule is *sic utere tuo ut alienum non laedas* ('so use your own property as not to injure your neighbour's'). In determining the reasonableness of the interference, a court will consider various factors, such as locality, sensitivity of the claimant and the utility of the defendant's conduct. The claimant must further prove damage: either physical damage to the land or property upon it or otherwise injury to the claimant's health that prevents him/her enjoying the use of the land.

12.43 Public nuisance is the interference with the public's reasonable comfort and convenience.[77] It is primarily a crime, prosecuted by the Attorney General. It is only actionable as a tort if the claimant has suffered damage over and above other members of the public.

[75] See generally NCCRS (n. 11 above), and Draft Climate Change Bill, 2010 (n. 13 above).
[76] Mumma (see n. 35 above). [77] UNEP Compendium, p xi.

Rule in Rylands *v.* Fletcher

12.44 This rule comes from the eponymous English case.[78] It creates a 'strict liability' cause of action where the claimant does not have to prove negligence in order to succeed.[79] The rule states: 'Where a person for his own purposes brings and keeps on land in his occupation anything likely to do mischief if it escapes, he must keep it at his peril, and if he fails to do so, he is liable for all damage which is a natural consequence of the escape.'

Foreseeability

12.45 Foreseeability is a prerequisite of liability under the rule in *Rylands* v. *Fletcher* and under negligence. This is the ability to see or know in advance, hence the reasonable anticipation that harm or injury is a likely result of acts or omissions.[80]

Negligence

12.46 Negligence is a cause of action that arises from the breach of a duty of care. The development of the law of negligence has been built on the foundation of identification of circumstances which give rise to a duty of care. Negligence has, from the past, been held to mean a failure to do something which a reasonable man would have done in the circumstances, or the doing of something that such a person would not have done in the circumstances.[81]

12.47 The common law only recognises a remedy for negligence where the defendant owed a duty of care to the plaintiff.[82] In order to succeed in a negligence claim, the plaintiff must prove that the defendant owed her/him a duty of care, that the defendant breached this duty, and that the breach resulted in the claimant suffering injuries/damage.[83]

[78] *Rylands* v. *Fletcher* (1868) LR 3 HL 330.
[79] For further discussions regarding this rule, see Ch. 17.
[80] *Cambridge Water Co* v. *Eastern Counties Leather plc* [1994] 2 WLR 53 (HL) at 101.
[81] *Blyth* v. *Birmingham Waterworks Co* (1856) 11 Ex at 784.
[82] *Thomas* v. *Quartermaine* (1887) 18 QBD 694.
[83] *Caparo Industries* v. *Dickman* [1990] 1 All ER 568.

Causation

12.48 Causation is an important ingredient in proving negligence. The plaintiff must demonstrate the link between the breach of duty and the resultant damage. For liability to arise, the plaintiff must show that the defendant's particular acts or omissions were the cause of the loss or damage sustained.[84] This has been problematic in environmental causes of action generally in Kenya and the same is likely to be the case for climate change.

12.49 The common law causes of action continue to have relevance in environmental management in Kenya by providing a basis for giving effect to various environmental rights and principles.[85] This is likely to be the case for climate change actions. Kenyan litigants have a possibility of litigating climate change cases under nuisance and negligence. However, such actions would have to grapple with the issue of causation to sustain an action.

(D) Other laws

Criminal law

12.50 Climate change litigation, like other environmental litigation, is likely to be complex and indeterminate.[86] Criminal sanctions may be an option where civil and administrative law fail to adequately deter or remedy violations.[87]

12.51 Kenyan law provides for criminal sanctions to enforce environmental laws. EMCA specifies a general penalty of imprisonment up to eighteen months, a fine of up to 350,000 Kenya shillings (about USD 4,216[88]) or both for violation of the Act or any regulation made under the Act.[89] It also provides for liability of corporations. Furthermore, Section 145 imputes liability on the part of the directors and officers of a corporation. This imposition of liability is intended to motivate directors and officers to establish

[84] *Ibid*. [85] Mumma (see n. 35 above).
[86] Patricia Kameri-Mbote, 'The Use of Criminal Law in Enforcing Environmental Law' in C. O. Okidi (ed.), *Environmental Governance in Kenya: Implementing the Framework Law* (Nairobi: East African Educational Publishers, 2008), pp. 110–25.
[87] *Ibid*., at p. 113.
[88] Using the prevailing exchange rate of 1 USD to 83 Kenya Shillings.
[89] Section 144, EMCA (see n. 41 above).

corporate mechanisms for environmental compliance, and thus to avoid passing the cost of non-compliance to consumers or the general public. Under the draft Climate Change Bill, contravention of the provisions of the Bill would be an offence punishable on conviction through imprisonment for a term not exceeding five years or a fine not exceeding one million Kenya shillings (about USD 12,048[90]) or both.[91]

Public trust

12.52 The Kenyan judiciary has considered the idea of the public trust doctrine in the context of forestry. In *Republic* v. *Minister for Environment and Natural Resources*, the applicants sought to get the court's view on the applicability of the public trust doctrine with regard to forests. Within a context where forest cover in the country had gone down to a paltry 2 per cent and amid concerns over allocations of forest land to private actors allied to the government, there was a huge public outcry.[92] They sought writs of *certiorari* to quash the relevant government notice and prohibit the government from dealing with the forest areas in a manner detrimental to Kenya's environmental health.[93] The court granted the orders, thereby stopping the government from proceeding with the exercise until such time as the issue was fully heard and determined. Similarly in *Waweru* v. *The Republic*, the court held that the Government and its agencies are under a public trust to manage land resources, forests, wetlands and waterways in a way that maintains a proper balance between the economic benefits of development and the need for a clean environment.[94] The concept was also quoted with approval by the court in *John Peter Mureithi and Two Others* v. *Attorney General and Four Others*, a matter relating to land allegedly grabbed from a clan which had held it as trust land.[95] The court recognised the application of the

[90] See n. 88 above. [91] Section 39, EMCA (see n. 41 above).

[92] The concerns about the forest cover in Kenya and the impact that its loss has on future generations have resulted in the inclusion of a specific provision in the Constitution requiring the State to 'work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya'. Section 69(1)(b), *Constitution of Kenya*, 2010 (see n. 2 above).

[93] High Court of Kenya, Misc. Civ. App. No. 421 of 2002.

[94] *Ibid*.

[95] Misc. Civ. App. No. 158 of 2005, reported in eKLR [2006].

public trust doctrine with respect to both trust land and public land stating that the doctrine 'had deep roots in African communities and is certainly not inherited from the Romans'.

12.53 The public trust concept has therefore been used to ensure protection of the environment, especially as regards critical ecosystems like forests and wetlands. The doctrine can be used to regulate the interest of property rightholders for the benefit of environmental conservation. In addition, the State as the public trustee over land is also under a duty to ensure that the land is not used in a manner that exacerbates climate change.

12.54 In appropriate cases, a suit can be brought against the State under the public trust doctrine. Most activities that lead to the destruction of critical ecosystems such as forests and wetlands are sanctioned by government institutions. They may be allowed after environmental impact assessments have been carried out and the National Environment Management Authority has granted a licence allowing the project proponents to proceed. The argument to be advanced in this case is that the State failed in its duty of preventing activities that result in climate change from being undertaken on a wetland, or preventing the destruction of a forest.

Regional framework

12.55 Kenya is a member of the East African Community and also of the African Union. Thus positions adopted within these fora and their legal stipulations influence Kenya's position and practice on climate change generally and climate liability specifically. In preparation for the Copenhagen Summit in December 2009, African ministers and heads of States held numerous meetings and adopted common positions on climate change issues. At the end of a meeting of the African Ministers on the Environment (AMCEN) in Nairobi from 25 to 29 May 2009, the Ministers adopted the Nairobi Declaration on the African Process for combating climate change.[96] The Declaration decried the conclusions of the 4th Inter-governmental Panel on Climate Change,

[96] Available at www.unep.org/roa/Amcen/Amcen_Events/3rd_ss/Docs/nairobi-Decration-2009.pdf.

especially regarding the social, economic and environmental consequences and impacts of climate change, pointing out that while Africa contributed the least to global climate change, its people were bearing the brunt of the consequences.[97]

12.56 In essence, the Declaration called for the developed countries to bear liability for causing climate change. This position has been the main African position in international negotiations on climate change and represents Africa's attitude towards climate change liability. The position also holds that the developed countries should provide funds to enable Africa to adapt to and mitigate the effects of climate change. The East African Community also adopted a position before Copenhagen[98] and has been active in discussing climate change issues amongst the five partner States.

(E) Conclusion

12.57 Climate change is having serious negative effects on Kenya. Addressing its impacts requires the concerted efforts of many stakeholders and the use of numerous approaches and tools. Law can be used to force public institutions to act to avert climate change. It can also be used to hold those who engage in activities resulting in or aggravating climate change responsible through private actions or criminal indictments. However, determining liability for climate change is fraught with numerous hurdles.

12.58 Critical to successful litigation is the question of causation. The legal and policy framework in Kenya has only recently started to appreciate and respond to climate change issues. It does not expressly address the question of liability for climate change. However, there are several traditional legal avenues that could be creatively applied to sustain climate change related actions and prove liability successfully in courts. What will be required is innovation, reform and adoption of a multifaceted approach to the question of addressing the effects of climate change.

[97] *Ibid*.
[98] Available at www.eac.int/environment/index.php?option=com_docman.

13

South Africa

JAN GLAZEWSKI AND DEBBIE COLLIER

(A) Introduction

13.01 There are four main climate-determining factors in South Africa: the northward moving cold Benguela current along its western coast which originates in Antarctic waters; the southern flowing warm Agulhas current on the eastern seaboard originating in the tropics; the high central plateau known as the Highveld; and the resultant varying atmospheric conditions during winter and summer. The authorities predict that 'by mid-century the South African coast will warm by around 1–2°C, and the interior by around 2–3°C. After 2050, warming is projected to reach around 3–4°C along the coast, and 6–7 °C in the interior'.[1] These types of temperature changes will place a massive strain on an already water-stressed nation currently dealing with problems of poverty and unemployment, poor service delivery and low levels of education. These problems notwithstanding, the South African legal system itself appears well oriented to address the legal issues that are likely to arise with the onslaught of climate change.

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[1] Department of Environmental Affairs, *National Climate Change Response Green Paper 2010*, GN 1083 of 2010, *Government Gazette* No. 33801, 25 November 2010, p. 7.

13.02 In April 1994 South Africa removed over 300 years of racially based government authority by adopting a democratic constitution. In doing so it transformed from a system of parliamentary sovereignty to a constitutional democracy underpinned by a progressive Bill of Rights contained in Chapter 2 of the Constitution which is now the supreme law.[2] The Bill of Rights contains, amongst other things, an environmental right.[3] Notwithstanding these developments, the historic Roman-Dutch legal system, a mixed legal system reflecting aspects of both the European civil law and the English common law traditions, was retained.[4] This system, supplemented by a growing body of statute law, is to a large extent still intact today, provided that where there is conflict with the Constitution, the offending law must give way.[5]

13.03 South Africa is a party to the UNFCCC, Kyoto Protocol and numerous other international environmental conventions and accepts the conclusions of the IPCC in its 4th Assessment Report on the warming of the climate system, that 'it is very likely that the increase in anthropogenic greenhouse gas concentrations is responsible for much of this warming trend since the mid twentieth century'.[6] South Africa has played a leading role in the various Conferences of the Parties (COPs) in maintaining the African countries' agenda, but it is also closely aligned to the other BASIC countries (Brazil, India and China) in climate change negotiations. The country will host the COP XVII in Durban in December 2011.

[2] Section 2 of the Constitution of the Republic of South Africa Act 108 of 1996.

[3] Section 24 of the Constitution (see (B) Public law below).

[4] The civil law component derives from Dutch occupation of the Cape of Good Hope, from around 1652, which resulted in the introduction of Roman-Dutch law to the Cape; and the common law component from the subsequent defeat of the Dutch settlers by the British. On the South African legal system and its history and development generally, see Lourens Marthinus Du Plessis, *An Introduction to Law*, 3rd edn (Kenwyn, SA: Juta, 1999); H. R. Hahlo and Ellison Kahn, *The South African Legal System and its Background* (Cape Town: Juta, 1968); and *The Union of South Africa: the Development of its Laws and Constitution* (Cape Town: Juta, 1960); Basil Edwards, *Introduction to South African Law and Legal Theory*, 2nd edn (Durban: Butterworths, 1995); and Reinhard Zimmermann and Daniel Visser, *Southern Cross: Civil Law and Common Law in South Africa* (Cape Town: Juta, 1996).

[5] Section 2 of the Constitution.

[6] Department of Environmental Affairs, *National Climate Change Response Green Paper 2010*, p. 6.

(B) Public law

The constitutional framework

13.04 The Bill of Rights chapter of the Constitution includes an environmental right in the following terms:

'[e]veryone has the right–

(a) to an environment that is not harmful to their health or well-being; and

(b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that–

(i) prevent pollution and ecological degradation;

(ii) promote conservation; and

(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.[7]

Subsection (iii) refers to 'sustainable development and use of natural resources while promoting justifiable economic and social development'. This is particularly apposite as the gap between rich and poor remains one of the underlying challenges facing the new government. A recent OECD survey reports that South Africa's Gini coefficient, an internationally accepted measure of inequality, increased from 0.66 to 0.7 between the advent of democracy in 1993 and 2008.[8] It also found that while total income poverty in South Africa has decreased slightly, it persists at acute levels in certain racial groups.[9]

13.05 The environmental right has been embraced by the judiciary in a number of cases. In *BP Southern Africa (Pty) Ltd* v. *MEC for Agriculture, Conservation and Land Affairs*[10] the Court stated that '[b]y elevating the environment to a fundamental justiciable

[7] Section 24 of the Constitution.

[8] Leibbrandt, Woolard, Finn and Argent, 'Trends in South African Income Distribution and Poverty since the Fall of Apartheid', *OECD Social, Employment and Migration Working Papers No. 101* (Directorate for Employment, Labour and Social Affairs, 20 January 2010), p. 10.

[9] Leibbrandt *et al*., 'Trends in SA Income Distribution', p. 4. The report distinguishes 'income poverty', a measure of income from non-monetary benefits such as access to water.

[10] 2004 (5) SA 124 (W).

human right, South Africa has irreversibly embarked on a road, which will lead to the goal of attaining a protected environment by an integrated approach, which takes into consideration, *inter alia*, socio-economic concerns and principles'.[11] In the same vein the Constitutional Court has affirmed that the concept of sustainable development is part of South African law, stating that:

> NEMA, which was enacted to give effect to section 24 of the Constitution, embraces the concept of sustainable development. Sustainable development is defined to mean 'the integration of social, economic and environmental factors into planning, implementation and decision-making for the benefit of present and future generations'. This broad definition of sustainable development incorporates two of the internationally recognised elements of the concept of sustainable development, namely, the principle of integration of environmental protection and socio-economic development, and the principle of inter-generational equity.[12]

13.06 The State, in its response to climate change, is therefore obliged to consider the environmental right, including the notion of sustainable development, and this opens the door to litigation in the context of climate change.

National Environmental Management Act ('NEMA')

13.07 NEMA[13] is the flagship statute of the Department of Environmental Affairs and came into force in January 1999.[14] It is a framework Act and includes both private law and public law provisions for the protection of the environment.

13.08 NEMA is underpinned by the notion of sustainable development and a set of national environmental management principles which apply to all organs of State. Sustainable development is defined as 'the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations'.[15]

[11] At 144D, as cited in J. Glazewski, *Environmental Law in South Africa*, 2nd edn (Durban: Lexis Nexis, 2005), p. 15.

[12] *Fuel Retailers Association of Southern Africa* v. *Director-General: Environmental Management, Department of Agriculture, Conservation and Environment Mpumalanga Province and Others* 2007 (6) SA 4 (CC) at para. [59] (original footnotes omitted).

[13] Act 107 of 1998. [14] Glazewski, *Environmental Law in SA*, p. 137.

[15] Section 1.

The national environmental management principles include the preventive principle,[16] the polluter pays principle[17] and the precautionary principle,[18] which are particularly relevant to climate change and are likely to be invoked in climate change litigation.

13.09 The environmental right along with NEMA promote the State's responsibility to consider not only ecological factors in environmental decisions, but also the socio-economic factors as contained in Chapter 2 of the Constitution.[19] NEMA also provides guidelines for administrators when making administrative decisions[20] and provides for the formulation of environmental implementation plans and environmental management plans by certain national government departments and provinces.[21] These would be expected to include climate change considerations.

The duty of care requirement

13.10 NEMA also elaborates the common law principles of delict, central to this chapter and discussed in (C) Private law below, by introducing a statutory duty of care requirement which echoes that of the English law of tort discussed in Chapter 17. Section 28 places a duty of care on every person who causes, may cause or has caused significant pollution or degradation of the environment to take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or in the event that such harm is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.[22]

13.11 The issue of the retrospective application of section 28 is an important one, as much damage is due to historical practices. In *Bareki NO and Another* v. *Gencor Ltd and Others*[23] it was held that section 28 does not have retrospective application. This hurdle to liability was however subsequently removed by section 12 of the National Environmental Laws Amendment Act[24] which now explicitly provides for the retrospective application of section 28.

[16] See sections 2(4)(*a*)(ii); 2(4)(*a*)(iii); and 2(4)(*a*)(viii).
[17] See section 2(4)(p). [18] See section 2(4)(*a*)(vii).
[19] Glazewski, *Environmental Law in SA*, p. 138.
[20] *Ibid*., p. 139. [21] *Ibid*., p. 143.
[22] Section 28(1). [23] 2006 (1) SA 432 (T).
[24] Act 14 of 2009.

13.12 Section 28 is a general provision, and the duty it imposes could apply to both State and private persons. The section imposes a special statutory duty of care, the standard being the duty to take 'reasonable measures'. If the necessary steps are not taken, the Director General or provincial head may direct such persons to take certain measures, including assessing and evaluating the impact of specific activities, and then report back.[25] Furthermore, the Minister of Environmental Affairs may recover costs expended by the State when taking reasonable measures to remedy the situation[26] in the event of a failure to comply with a directive.

13.13 Section 28 enhances the possibility of successful climate change litigation. In a private law dispute (see (C) Private law below), section 28 is likely to assist a plaintiff to persuade the court of the wrongfulness of the defendant's conduct, which is an important hurdle that the plaintiff must overcome in establishing liability in the context of climate change litigation.

Administrative law

13.14 With the advent of a Bill of Rights, South Africa took the opportunity to codify its vast body of administrative law principles in section 33, which states that:

> everyone has the right to administrative action that is lawful, reasonable and procedurally fair. Everyone whose rights have been adversely affected by administrative action has the right to be given written reasons.

13.15 Section 33 goes on to enjoin the necessary legislation to give effect to the right which resulted in the enactment of the Promotion of Administrative Justice Act[27] ('PAJA') in 2000. The PAJA is now the primary pathway to judicial review of administrative action in South Africa,[28] although certain administrative action may be reviewable under a particular statute where a provision enables it.

[25] Section 28(4). [26] Section 28(7). [27] Act 3 of 2000.
[28] C. Hoexter, *Administrative Law in South Africa* (Cape Town: Juta & Co, 2000), p. 114.

Access to information

13.16 The Promotion of Access to Information Act[29] ('PAIA') gives effect to section 32 of the Constitution which states that 'everyone has the right of access to any information held by the State; and any information that is held by another person and that is required for the exercise or protection of any rights'. In *Trustees, Biowatch Trust* v. *The Registrar: Genetic Resources*[30] (although PAIA was not yet operative) the court, within the framework of the constitutional right to information, held that citizens are entitled to information regarding genetically modified organism ('GMO') related activities including information relating to (existing and pending) GMO permits, risk assessment and compliance with public participation requirements. This right of access to information is affirmed by the provisions in PAIA. Some information, such as trade secrets, need not be disclosed.[31]

13.17 This is fortified by section 31 of NEMA, titled 'Access to environmental information and the protection of whistle-blowers', which explicitly provides that no person may be dismissed or disciplined or otherwise prejudiced or be found liable for disclosing any information if, at the time of disclosure, the person acted in good faith and reasonably believed that the disclosure revealed evidence of an environmental risk. In order to be protected, the disclosure must comply with the procedure set out in section 31.

13.18 The right to obtain information and the protection of 'whistleblowers' by PAIA and NEMA affords a potential plaintiff in climate change litigation an opportunity to obtain documents that may assist the plaintiff to establish a claim based on climate change, and provides protection (from dismissal or other disciplinary action) to persons who disclose such information.

[29] Act 2 of 2000.

[30] (TPD) 2005 (4) SA 111 (T). Although largely successful in obtaining the information sought, the Biowatch Trust was saddled with the award of a costs order against them, which they successfully appealed in *Biowatch Trust* v. *Registrar, Genetic Resources and Others* 2009 (6) SA 232 (CC) (see (F) Practicalities below).

[31] For the limits on the duty to disclose see for example *Transnet and Another* v. *SA Metal Machinery Company* 2006 (6) SA 285 (SCA).

Planning for GHG-intensive and energy-related activities

13.19 South Africa has an extensive set of planning laws at national, provincial and local spheres of government that directly or indirectly have, or potentially have, an impact on climate change considerations. At national level these include: the Local Government: Municipal Systems Act,[32] which among other things provides for Integrated Development Plans ('IDPs') that can potentially incorporate climate change considerations; and the relatively recent Energy Act,[33] which among other things aims to 'ensure effective planning for energy supply, transportation and consumption; and [to] contribute to sustainable development of South Africa's economy'.[34] Chapter 5 of NEMA read with extensive regulations made under it provides for environmental assessment,[35] which in theory should take into account greenhouse gas emissions in considering development proposals. South Africa also has electricity generation and nuclear-related legislation in place at national level.[36] The government has recently released a report entitled *Integrated Resource Plan for Electricity: 2010 to 2030* which among other things sets out the future energy mix between various sources including nuclear, renewable energy and coal-based sources.[37]

Atmospheric pollution

13.20 The Preamble to the National Environmental Management: Air Quality Act[38] acknowledges that 'atmospheric emissions of ozone-depleting substances, greenhouse gases and other substances have deleterious effects on the environment both locally and globally'. Among the objectives of the Act is to 'give effect to section 24(b) of the Constitution [the environmental right quoted above] in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people'.[39]

[32] Act 32 of 2000. [33] Act 34 of 2008. [34] Section 2(k), (l).
[35] R543 to R 547, *Government Gazette* No. 33306, 18 June 2010.
[36] Electricity Act 41 of 1987; Nuclear Energy Act 46 of 1999; and National Nuclear Energy Regulator Act 47 of 1999.
[37] Final Report dated 25 March 2011.
[38] Act 39 of 2004. [39] Section 2(b).

13.21 The Act requires the establishment of a national framework 'for achieving the objects of this Act' within two years of this section taking effect.[40] A National Framework for Air Quality Management was tabled during September 2007 and refers to greenhouse gases and climate change amongst other things.[41] No person may conduct certain listed activities without an atmospheric emission licence,[42] and various conditions can be laid down in this regard including the requirement that the holder of the licence must specify any greenhouse gas emissions that may be generated.[43]

13.22 Several cases[44] illustrate the application of the constitutional right to an environment that is not harmful in the context of air pollution. Although not directly concerned with liability for climate change, these decisions may assist the plaintiff to establish liability in climate change litigation.

Liability in the event of a disaster

13.23 The Disaster Management Act[45] seeks to prevent and reduce the risk of disasters (such as those caused by extreme weather phenomena), and carefully carves out the responsibilities of national, provincial and local government in the management of disasters. These responsibilities include the establishment of disaster management centres. The Act however expressly indemnifies the designated Minister, the national, provincial or municipal disaster management centres or their employees or other persons exercising a duty in terms of the Act from liability for anything done in good faith in terms of the Act.[46]

13.24 Section 30 of NEMA also provides for the control of an emergency incident, described as an unexpected sudden occurrence,

[40] Section 7(1).
[41] GN 1138, *Government Gazette* No. 30284, 11 September 2007, para. 2.4.1.
[42] Section 22. [43] Section 43(1)(l).
[44] See for example *Minister of Health and Welfare* v. *Woodcarb (Pty) Ltd and Another* 1996 (3) SA 155 (N); *Hichange Investments (Pty) Ltd* v. *Cape Produce Company (Pty) Ltd t/a Pelts Produce* 2004 (2) SA 393 (ECD); *Tergniet and Toekoms Action Group and Others* v. *Outeniqua Kreosootpale (Pty) Ltd and Others* (23 January 2009) Case No. 10083/2008 (CPD); and *Nature's Choice Properties (Alrode) (Pty) Ltd* v. *Ekurhuleni Municipality* 2010 (3) SA 581 (SCA).
[45] Act 57 of 2002. [46] Section 61.

such as a major emission, and prescribes certain duties which, if not performed by the responsible person, will amount to an offence that may result in a fine or imprisonment on conviction.

13.25 In addition, the National Water Act[47] imposes specific obligations on the town planning authorities to indicate floodlines in township layout plans. The Act provides that no person may establish a township unless the layout plan shows, to the satisfaction of the local authority, the line indicating the maximum level likely to be reached by floodwaters on average once in every one hundred years.[48] It is predicted that plaintiffs will rely on these statutory obligations in bringing actions for property damage such as coastal properties affected by rising sea levels as a result of climate change.

Enforcement mechanisms

13.26 The legislature has crafted an elaborate legal framework to encourage compliance and ultimately enforce environmental laws. Key innovations include the 2003 NEMA amendments which enabled the appointment of environmental management inspectors ('EMIs') (known locally as the 'Green Scorpions'), whose task it is to monitor and enforce compliance with South Africa's environmental laws. EMIs have been granted extensive powers to inspect and seize, to investigate certain activities and to enforce the law through the use of compliance orders.[49] EMIs are likely to play an important role in the near future in 'policing' activities that, in contravention of the law, may ultimately contribute to climate change.

13.27 Although a clear improvement on the prior framework, the current regime is criticised for being 'fragmented': it is said that 'environmental compliance and enforcement mechanisms remain scattered across many different laws, which are in turn administered by an array of national, provincial and local authorities'.[50] As a result 'duplication, confusion, bureaucracy

[47] Act 36 of 1998. [48] Section 144. See also section 145.
[49] See section 31B–L.
[50] A. Paterson and L. Kotzé (eds.), *Environmental Compliance and Enforcement in South Africa: Legal Perspectives* (Cape Town: Juta, 2009), p. 371.

and inaction continue to frustrate effective … environmental compliance and enforcement in South Africa'.[51] The current challenge is to harness the opportunities of the extended platforms for enhancing compliance and enforcement and to address the identified weaknesses.

13.28 In line with the constitutionally embedded principles of cooperative government,[52] in the event of a dispute or disagreement between different bodies of government concerning the exercise of a public function that may significantly affect the environment, NEMA provides for any Minister, Member of the (provincial) Executive Council ('MEC') or Municipal Council to refer such a dispute to conciliation. In addition, provision is made for such a dispute to be arbitrated or for an investigation to be instituted.

13.29 The opportunities for a private party, including a civil society organisation, to seek redress from the State for the State's failure to comply with environmental law is much assisted by the provisions of the Constitution and NEMA on the issue of standing to sue (see para. 13.36 below). This opens up possibilities to halt activity that is harmful to the environment or to seek remediation for environmental damage from the State.

13.30 Short of litigation (which may take the form of a common law action or an application to compel an authority to perform a statutory duty), NEMA expressly provides that 'anyone may request the Minister, a MEC or Municipal Council to appoint a facilitator to call and conduct meetings of interested and affected parties with the purpose of reaching agreement to refer a difference or disagreement to conciliation in terms of this Act …'.[53] This provides an innovative mechanism for interested parties to seek the resolution of disputes about environmental damage and climate change without having to resort to litigation.

13.31 The State enforcement of environmental laws is achieved through both traditional command-and-control mechanisms, such as criminal and administrative sanctions,[54] and alternative

[51] *Ibid*. [52] Chapter 3 of the Constitution.
[53] Section 17(2), NEMA.
[54] See Kidd, 'Chapter 10 – Criminal Measures' in Paterson and Kotzé, *Environmental Compliance and Enforcement in SA*; and Winstanley, 'Chapter 9 – Administrative Measures', *Ibid*.

measures that encourage and reward compliance, such as voluntary compliance and incentive based measures.[55]

13.32 Various criminal sanctions are provided for in the legislative framework for the protection of the environment, including innovative sanctions such as compensation orders, forfeiture, remediation and the revoking of licences.[56] However, establishing criminal liability presents substantial challenges (both in terms of resources and in terms of law, such as the higher burden of proof in criminal cases) and it would seem that, in principle, criminal law mechanisms are intended to be invoked only as a measure of last resort.

13.33 It should also be noted that a private person may institute and conduct a private prosecution in respect of 'any breach or threatened breach of any duty, other than a public duty resting on an organ of state … where that duty is concerned with the protection of the environment and the breach of that duty is an offence'.[57]

13.34 Numerous administrative measures may serve as effective, and less expensive, alternatives to the imposition of criminal sanctions. These include measures such as directives, abatement and compliance notices, and the withdrawal of licences or permits.[58] In addition, NEMA makes provision for administrative penalties where an application is made for rectification in the case of the unlawful commencement of a listed activity without the required authorisation.[59]

13.35 In summary, enforcement in South Africa falls largely upon the traditional command-and-control approaches, although the recent past has seen efforts to complement these with the so-called voluntary compliance measures, such as self-regulation codes,[60] and with incentive-based measures, such as tax benefits

[55] See Lehmann, 'Chapter 11 – Voluntary Compliance Measures' and Paterson, 'Chapter 12 – Incentive-based Measures', *Ibid*.
[56] Section 34, NEMA.
[57] Section 33(1), NEMA.
[58] See Winstanley, 'Chapter 9 – Administrative Measures' in Paterson and Kotzé, *Environmental Compliance and Enforcement in SA*.
[59] Section 24G(2A), NEMA.
[60] See Lehmann, 'Chapter 11 – Voluntary Compliance Measures' in Paterson and Kotzé, *Environmental Compliance and Enforcement in SA*.

and subsidies.[61] The availability of such measures may inform the manner in which a complainant in a climate change dispute seeks redress.

Standing to sue

13.36 Prior to the enactment of the Constitution, a considerable obstacle encountered by persons wishing to enforce and implement environmental laws was the requirement of legal standing to sue.[62] The Constitution has relaxed the standing requirement and now allows concerned citizens or non-governmental agencies to bring actions when the environment is harmed or potentially threatened.[63] This is done by way of section 38 of the Bill of Rights, which confers standing on persons listed in the section to litigate (including the pursuit of class actions)[64] when a right in the Bill of Rights has been infringed or threatened.[65] Plaintiffs may use this provision to enforce their environmental rights.[66] In addition, Part 3 of Chapter 7 of NEMA also includes a provision relating to standing to enforce environmental laws.[67] These

[61] See Paterson, 'Chapter 12 – Incentive-based Measures', *Ibid*.

[62] Glazewski, *Environmental Law in SA*, p. 120.

[63] On the role played by NGOs in environmental law litigation generally, see for example *Earthlife Africa (Cape Town)* v. *Director-General, Department of Environmental Affairs and Tourism and Another* 2005 (3) SA 156 (C) and *Biowatch Trust* v. *Registrar, Genetic Resources and Others* 2009 (6) SA 232 (CC).

[64] On class actions generally see *Permanent Secretary, Department of Welfare, Eastern Cape, and Another* v. *Ngxuza and Others* 2001 (4) SA 1184 (SCA).

[65] Section 38 states that '[t]he persons who may approach a court are–
(a) anyone acting in their own interest;
(b) anyone acting on behalf of another person who cannot act in their own name;
(c) anyone acting as a member of, or in the interest of, a group or class of persons;
(d) anyone acting in the public interest; and
(e) an association acting in the interest of its members'.

[66] See for example the discussion on standing to sue in *Wildlife Society of Southern Africa* v. *Minister of Environmental Affairs and Tourism* 1996 (3) SA 1095 (Tk) and in *Minister of Health and Welfare* v. *Woodcarb (Pty) Ltd* 1996 (3) SA 155 (N), although decided under the Interim Constitution.

[67] Section 32 of the NEMA provides that:
'(1) Any person or group of persons may seek appropriate relief in respect of any breach or threatened breach of any provision of this Act … or of any provision of a specific environmental management Act, or of any other statutory provision concerned with the protection of the environment or the use of natural resources–
(a) in that person's or group of person's [sic] own interest;
(b) in the interest of, or on behalf of, a person who is, for practical reasons, unable to institute such proceedings;

sections empower the State to act on behalf of citizens to enforce their rights when their environmental rights are infringed or threatened, and NGOs to initiate litigation or to join in the plaintiff's action as *amici* (friends of the court) in matters in which they have an interest.[68]

13.37 The increasing concern with the environmental and health effects of decades-long mining activity has resulted in, amongst other things, the formation of environmental public interest law groups such as the Centre for Environmental Rights established during 2010.[69]

Public law remedies

13.38 NEMA, along with the specialised suite of environmental statutes, contains various remedies for those in contravention of their provisions. On conviction of a listed offence, NEMA empowers the court to order an award of damages, compensation or a fine and to order that remedial measures be undertaken.[70] In addition, provision is made for the cancellation of permits[71] and the forfeiture of items[72] on conviction of an offence. Provision is also made for liability of an employer in respect of the conduct of its employees[73] and for the liability of a director where the director has failed to take reasonable steps to prevent the commission of an offence.[74]

13.39 An interesting innovation introduced in 2003 provides for a court to order that a sum of money, up to a quarter of a fine imposed by the court, 'be paid to the person whose evidence led to the conviction or who assisted in bringing the offender to justice'.[75] This provides an incentive for 'bounty hunting' of offenders who unlawfully damage the environment.

(c) in the interest of or on behalf of a group or class of persons whose interests are affected;
(d) in the public interest; and
(e) in the interest of protecting the environment.'

[68] See Feris, Chapter 6 'Environmental Rights and *Locus Standi*' in Paterson and Kotzé, *Environmental Compliance and Enforcement in SA* (see n. 50 above), pp. 148–50.

[69] See www.cer.org.za, accessed on 2 March 2010.

[70] Section 34(3). [71] Section 34C. [72] Section 34D.

[73] Section 34(5). [74] Section 34(7). [75] Section 34B.

(C) Private law

13.40 At the heart of issues around liability for climate change is the South African law of delict,[76] which 'is primarily concerned with the circumstances in which one person can claim compensation from another for harm that has been suffered'.[77] The genealogy of the South African law of delict 'stretches from the Twelve Tables in Roman Law to the Bill of Rights in our Constitution'.[78]

13.41 While in certain jurisdictions (e.g. the English legal system) a number of separate delicts (or torts) are recognised, the approach in South Africa is one of general principles or requirements that determine delictual liability.

13.42 The starting point is that: '*damage (harm) rests where it falls*, that is, each person must bear the damage he suffers (*res perit domino*)'.[79] In order to hold somebody else liable for damage in the law of delict the aggrieved party must prove the five elements of a delict, namely: an act or omission; wrongfulness; fault; causation; and harm (loss).

(1) Act or omission (conduct)

13.43 'In order to constitute a delict, one person … must have caused damage or harm to another person … by means of an *act* or *conduct*.'[80] Generally this requires a positive act or an omission (the failure to act).

13.44 Where the conduct is an omission, which is likely to be the case in many instances of damage caused by a failure to act on climate

[76] Referred to as the Law of Tort in English common law systems (see (C) Private law in Ch. 17). This section draws on a report titled *The Law of Delict and Climate Change: Legal Implications for the City Council of Cape Town* (February 2011), by Collier and Glazewski.

[77] Loubser and Midgley (eds.), *The Law of Delict in South Africa* (Oxford University Press, 2009), p. 4.

[78] *Ibid*. The pillars of the law of delict have been described as the *actio legis Aquiliae* (an action of patrimonial damage to person or property), the *actio iniuriarum* (an action for *solatium* for injury to personality), and the action for pain and suffering (for impairment of bodily or physical-mental integrity). Neethling and Potgieter, *Neethling, Potgieter, Visser: Law of Delict* (Durban: LexisNexis, 2010), p. 5.

[79] Neethling and Potgieter, *Law of Delict*, p. 3.

[80] *Ibid*., p. 25.

change, the courts are more reluctant to find the defendant liable for the resultant harm because of the potential of indeterminate liability and the plaintiff may be required to establish that the defendant had a legal duty (or 'duty of care' as it is commonly known in the English law of tort) to prevent harm. This is an aspect of wrongfulness, which is core to establishing delictual liability.

(2) Wrongfulness

13.45 Wrongfulness is concerned with whether the social, economic and other costs associated with imposing liability can be justified, or, stated differently, whether it is reasonable to impose liability.[81] For example, in cases of pure economic loss, if a multiplicity of claims is likely to result if liability is imposed or there is a possibility that the plaintiff could incur indeterminate liability, the court is unlikely to find the defendant liable.[82] The enquiry into wrongfulness might also focus on the infringement of a right or the breach of a duty, particularly in the case of an omission.

13.46 The complexities of the wrongfulness enquiry in the context of environmental damage, particularly where the damage is caused by the user of a product as opposed to the manufacturer, are illustrated in *Natal Fresh Produce Growers' Association and Others* v. *Agroserve (Pty) Ltd and Others*[83] where the plaintiff sought an interdict that would prohibit the defendants from manufacturing and distributing (duly registered) hormonal herbicides in South Africa. These herbicides are transported through water and air and are deposited on, and cause damage to, fresh produce (on the evidence, specifically in the Tala Valley area in KwaZulu Natal). The court was of the view that the manufacture of the herbicides was not rendered unlawful merely because the use of the herbicides by certain third parties resulted in damage to the plaintiffs. The court upheld an exception to the plaintiff's plea, maintaining that:

> [i]t may be that the use [of the herbicides] cannot take place without the manufacture and distribution, so that the manufacture and

[81] Du Bois *et al.*, *Wille's Principles of South African Law* (Cape Town: Juta Law, 2007), pp. 1098–9.
[82] *Ibid.*, p. 1106. [83] 1990 (4) SA 749 (N).

distribution can be regarded as a *causa sine qua non* of the use, but that is not sufficient to saddle the manufacturers with legal responsibility of the conduct of the users.[84]

13.47 It should be noted however that the decision in *Natal Fresh Produce Growers' Association and Others* v. *Agroserve (Pty) Ltd and Others* precedes the adoption of the Constitution and NEMA. Today the outcome may well have been different in light of the environmental right and NEMA's implementation of the preventive, polluter pays and precautionary principles.

13.48 In exercising its discretion in deciding whether or not conduct is wrongful, the court is informed by notions of public policy and the 'legal convictions of the community'. Public policy is informed by the spirit, purport and objects of the Bill of Rights.[85] In the context of damage (injury, loss of life or damage to property) caused by climate change, the constitutional rights most likely to be invoked include rights relating to bodily integrity, property and to the environment. Thus, in *Hichange Investments (Pty) Ltd* v. *Cape Produce Co. (Pty) Ltd t/a Pelts Products*,[86] in a consideration as to what is 'significant' pollution, which, if found to exist, would afford the plaintiff a particular cause of action, the court expressed the view that 'in the light of the constitutional right a person has to an environment conducive to health and well-being, I agree with the view expressed in Glazewski in *Environmental Law in South Africa* … that the threshold level of significance will not be particularly high'.[87]

13.49 Whether or not the defendant will be liable for harm caused by omissions, by negligent misstatements,[88] and harm which takes the form of pure economic loss[89] will often depend on whether the plaintiff is able to prove wrongfulness. In other words, harm caused in these cases is generally not prima facie wrongful.

[84] At 755–6.

[85] Section 39(2) of the Constitution. See the decision in *Carmichele* v. *Minister of Safety and Security* 2001 (4) SA 938 (CC). See also Du Bois *et al*., *Wille's Principles of SA Law*, p. 1101.

[86] 2004 (2) SA 393 (E). [87] At 414–5.

[88] In this case the court will consider factors such as the existence of a contractual or similar relationship between the parties.

[89] Although such claims were largely denied prior to 1979, this position has been relaxed as a result of the decision in *Administrateur, Natal* v. *Trust Bank van Afrika Bpk* 1979 (3) SA 824 (A).

13.50 To be liable in the case of an omission, which is a likely scenario in the context of climate change, the court, in addition to considering policy issues such as the possibility of indeterminate liability, generally requires the existence of some other factor which indicates that the harm is actionable.[90] These factors include:[91]

- preceding positive conduct that has created a new source of danger;[92]
- control of a dangerous thing or situation;[93]
- existence of a special relationship between the parties;[94]
- an obligation to act in terms of common law or statute – consider for example the duty of care imposed by section 28 of NEMA (see para. 13.10 above) which may well be invoked in the context of climate change litigation; useful to the plaintiff in such a case is the principle that an act or omission in violation of a statutory provision is prima facie wrongful;[95]
- obligations which arise out of a particular office. [96]

[90] In other words, the defendant will be liable in respect of an omission where there is a legal duty in the circumstances to act. *Minister van Polisie* v. *Ewels* 1975 (3) SA 590 (A).

[91] See Du Bois *et al*., *Wille's Principles of SA Law*, pp. 1113–7; Neethling and Potgieter, *Law of Delict*, pp. 58–71; and Loubser and Midgley, *The Law of Delict in SA*, pp. 217–9.

[92] Before the (minority) decision in *Silva's Fishing Corporation (Pty) Ltd* v. *Maweza* 1957 (2) SA 256 (A), prior conduct was an 'indispensable' requirement for liability for omissions. The courts now accept that, in the absence of prior conduct, other factors may nonetheless be sufficient to establish liability. Neethling and Potgieter, *Law of Delict*, pp. 58–9.

[93] Visser refers to the classic example where 'a landowner or occupier of rural land neglects to control a fire not started by him or herself and the fire then spreads and causes damage on a neighbouring property' (*Minister of Forestry* v. *Quathlamba (Pty) Ltd* 1973 (3) SA 69 (A)), in Du Bois *et al*., *Wille's Principles of SA Law*, p. 1114.

[94] In *Silva's Fishing Corporation (Pty) Ltd* v. *Maweza* 1957 (2) SA 256 (A) the relationship involved a boat owner and the crew that was contracted to operate the boat. Neethling and Potgieter, *Law of Delict*, p. 69.

[95] *Ibid*., p. 76.

[96] *Ibid*., p. 70. Some authors point out that there is some authority that delictual liability may arise where the defendant has created an impression or an expectation which the plaintiff may reasonably rely on. The idea is that: '[w]here one party acts in reasonable reliance on the impression created by another party that the latter will protect the person or property of the former, a legal duty rests upon the party creating the impression to prevent prejudice to the party acting in reliance on that impression'. As translated from Neethling and Potgieter, 'Deliktuele aanspreeklikheid weens 'n late: 'n nuwe riglyn vir die regsplig om positief op te tree?', *Tydskrif vir die Suid-Afrikaanse Reg*, 4 (1990), 763 at 766. See also *Compass Motors Industries (Pty) Ltd* v. *Callguard (Pty) Ltd* 1990 (2) SA 520 (W). However this is not a well-tested and established principle of the South African law of delict.

13.51 In some cases several factors may be at issue.[97] It is also recognised that 'the situations in which there will be liability for omissions are constantly evolving'[98] and that constitutional values have an important role to play in this regard.

13.52 In determining wrongfulness for an omission, a distinction is made between individuals and public bodies, and 'the threshold at which the harm caused by the omissions of public bodies will be held to be wrongful' is lower than that for individuals.[99]

13.53 Constitution values and imperatives play an important role in determining liability for omissions by public bodies. In *Van Duivenboden*[100] and *Carmichele*[101] the constitutionally embedded notion of public accountability was raised as an aspect of wrongfulness. In certain circumstances where a public authority is involved there may be a constitutional duty to act, making *accountability* (the ability to justify one's actions) a pivotal enquiry when determining liability of public authorities.[102]

13.54 The law recognises various defences excluding wrongfulness, such as authority and consent to a harmful act, which may be raised in the context of climate change litigation.

(3) Fault (intention/negligence)

13.55 As a general rule, fault (either intention (*dolus*) or negligence (*culpa*)) is required for delictual liability.[103]

13.56 Intention may take one of three forms: *dolus directus* where the wrongdoer intends the harmful consequence of his conduct;

[97] The decision in *Minister van Polisie* v. *Ewels* 1975 (3) SA 590 (A) illustrates this. The case involved the assault of an ordinary citizen in a police station by a policeman not on duty, in the presence of other policemen who failed to prevent the assault. Neethling indicates that the duty to prevent the assault 'may be deduced from the statutory duty to prevent crime, from the special relationship between policeman and citizen, as well as from the public office occupied by the policemen'. Neethling and Potgieter, *Law of Delict*, p. 72.

[98] Du Bois *et al.*, *Wille's Principles of SA Law*, p. 1114 (footnotes omitted).

[99] *Ibid.*, p. 1113.

[100] *Minister of Safety and Security* v. *Van Duivenboden* 2002 (6) SA 431 (SCA).

[101] 2001 (1) SA 489 (SCA) and the 2001 (4) SA 938 (CC) decisions.

[102] Du Bois *et al.*, *Wille's Principles of SA Law*, p. 1115.

[103] Neethling and Potgieter, *Law of Delict*, p.123. South African law recognises limited instances of strict liability (see *ibid.*, pp. 357–75).

dolus indirectus where the wrongdoer intends one unlawful consequence, knowing that this will result in additional consequences and the aggrieved party is seeking compensation for harm caused by the additional consequences; and *dolus eventualis* where the wrongdoer, while pursuing a particular consequence, does not desire, but does foresee the possibility, of a further consequence causing harm for which the aggrieved party seeks compensation.[104]

13.57 In the absence of an intention to cause harm, the defendant may still be liable if the defendant acted *negligently*. The formula for *negligence* is stated in *Kruger* v. *Coetzee*:[105]

'For the purposes of liability *culpa* arises if–

(a) a *diligens paterfamilias* [a reasonable person] in the position of the defendant–
   (i) would foresee the reasonable possibility of his conduct injuring another in his person or property and causing him patrimonial loss; and
   (ii) would take reasonable steps to guard against such occurrence; and
(b) the defendant failed to take such steps.'[106]

13.58 The reasonable person 'is not an exceptionally gifted, careful or developed person; neither is he underdeveloped, nor someone who recklessly takes chances or who has no prudence'.[107] Where the wrongdoer causes harm while engaged in an activity that requires a certain level of expertise (e.g. medical surgery) the test for negligence is that of the reasonable expert (e.g. the reasonable surgeon).[108] Grossman makes the point that '[a]t the level of expert knowledge, potential climate change defendants have likely known of the climate-changing risks of their products for quite some time'.[109]

13.59 Once foreseeability has been established, the question arises 'whether the reasonable person would have taken steps to

[104] *Ibid*., pp. 127–8; Du Bois *et al*., *Wille's Principles of SA Law*, p. 1129; and Loubser and Midgley, *The Law of Delict in SA*, pp. 106–7.

[105] 1966 (2) SA 428 (A). [106] At 430.

[107] Neethling and Potgieter, *Law of Delict*, p. 135. [108] *Ibid*., p.139.

[109] David A. Grossman, 'Warming Up to a Not-So-Radical Idea: Tort-based Climate Change Litigation', *Columbia Journal of Environmental Law*, 28(1) (2008), at 48 (original footnotes omitted).

prevent the damage'.[110] This entails a number of considerations, including: the seriousness of the damage that may materialise as a result of the defendant's conduct; the purpose or utility of the defendant's conduct; and the cost of taking precautionary measures.[111]

13.60 Liability for negligence may be limited through contractual and statutory mechanisms. Mechanisms to limit liability will however be interpreted restrictively and will be subject to constitutional scrutiny.

13.61 In the context of climate change litigation, it is likely that most defendants have some knowledge of the possible negative consequences that may arise from their actions although they may not have the direct intention to cause harm through global warming. Intention in the form of *dolus indirectus* or *dolus eventualis* may therefore be at issue, or if not *dolus*, then negligence.

(4) Damage

13.62 The law of delict aims to compensate persons who have suffered loss as a result of damage caused by the defendant. Damage is described as '… the detrimental impact upon any patrimonial or personality interest deemed worthy of protection by the law'.[112]

13.63 Determining patrimonial loss as a result of damage to property can be a relatively easy exercise achieved by 'comparing the market value of the property before it was damaged to the market value thereafter'.[113]

13.64 In the context of climate change 'property damages could include lost coastal land, buildings, structures, infrastructures, and agriculture'.[114] It has also been observed that sea level rise plaintiffs may have a claim 'based on the *present* costs of *preventing* future harms'.[115] This would include the cost of building sea walls, raising land and relocating structures.[116]

[110] Neethling and Potgieter, *Law of Delict*, p. 145.
[111] *Ibid*., pp. 146–7. [112] *Ibid*., p. 212.
[113] Du Bois *et al*., *Wille's Principles of SA Law*, p. 1136 (footnotes omitted).
[114] Grossman, 'Tort-based Climate Change Litigation', at 16.
[115] Grossman, 'Tort-based Climate Change Litigation', at 17.
[116] *Ibid*., at 18.

13.65 As a general principle, an aggrieved party may not claim for loss which he or she could reasonably have prevented. Furthermore, where harm has resulted from a multitude of causes, the law provides for the apportionment of damages. It may also happen that the plaintiff has contributed to the loss suffered. Such contributory negligence is governed by the Apportionment of Damages Act,[117] section 1(1)(a) which states that where any person suffers damages that are partly his own fault and partly the fault of another person, the damages claim shall be reduced by the court to such extent as the court may deem just and equitable having regard to the degree in which the claimant was at fault in relation to the damage.

13.66 Where potential harm is envisaged, the interdict (see para. 13.81 below) provides a useful remedy for a plaintiff seeking to prevent such harm from materialising.

(5) Causation

13.67 The defendant must have caused the harm for which the plaintiff seeks redress. Generally both 'factual' and 'legal' causation are required in order to establish liability.

13.68 The method for determining factual causation is the *conditio sine qua non* test – the 'but for' test, which 'entails that one mentally eliminates the wrongful conduct which one suspects was the cause of the harm and that one then asks what probably would have happened if lawful conduct had been substituted for the conduct which had been eliminated'.[118]

13.69 Linking factual causation to a particular defendant in the case of harm caused by climate change, which is the result of a multitude of factors (many greenhouse gas emitters), does present a challenge. It has been said however that 'it need be established only that the defendant's conduct was *one* of the antecedents which jointly amount to the cause of the harm, not that it was the only or even the main cause of the harm'.[119] Furthermore, '[a] plaintiff is not required to establish the causal link with certainty, but only

[117] Act 34 of 1956.
[118] Du Bois *et al.*, *Wille's Principles of SA Law*, p. 1117 (footnotes omitted).
[119] *Ibid.*, p. 1118.

to establish that the wrongful conduct was probably a cause of the loss, which calls for a sensible retrospective analysis of what would probably have occurred, based upon the evidence and what can be expected to occur in the ordinary course of human affairs rather than an exercise in metaphysics'.[120]

13.70 Decisions about factual causation turn on an enquiry of probabilities.[121] In other words if a 'greater than 50 per cent chance' that the conduct caused the harm is established, the requirement for causation is met and the fact that there are a multitude of causes is a factor that will then be taken into account in assessing the damages to be awarded to the plaintiff.[122]

13.71 An argument is made that 'the studies and models such as those the IPCC relied upon provide a solid basis for arguing that a general causal link exists between greenhouse gas emissions, climate change, and effects such as sea-level rise, thawing permafrost, and melting sea ice – all probably beyond the "more likely than not" standard used in the legal arena'.[123] The difficulty however, as stated above, is the multiple sources of greenhouse gas emissions. As a result, causation, in its traditional formulation, is likely to constitute a stumbling block in establishing liability for climate change. This is confirmed in Chapter 17 on English law, which considers the use, such as has occurred in the case of harm caused by exposure to asbestos from different sources, of the notion of 'material increase in risk' as a possible alternative approach to causation. It would appear too that the South African courts may be persuaded to deviate from the *conditio sine qua non* test where it is appropriate to do so.[124]

13.72 The notion of legal causation entails a normative enquiry on the premise that it would be unfair if the defendant were required to compensate the plaintiff for 'the endless chain of harmful consequences which his act may have caused'.[125] The defendant will therefore not be liable for damages that are too remote.

[120] Nugent JA in *Minister of Safety and Security* v. *Van Duivenboden* 2002 6 SA 431 (SCA) at 449, cited in Du Bois *et al*., *Wille's Principles of SA Law*, p. 1118.
[121] *Ibid*., p. 1120. [122] *Ibid*.
[123] Grossman, 'Tort-based Climate Change Litigation', at 23.
[124] See *Minister of Safety and Security* v. *Van Duivenboden* 2002 6 SA 431 (SCA) and the discussion in Du Bois *et al*., *Wille's Principles of SA Law*, pp. 1118–20.
[125] Neethling and Potgieter, *Law of Delict*, p. 187.

Consider for example the unsuccessful plaintiff's claim in the *Natal Fresh Produce Grower's Association* case (see para 13.46 above).[126]

13.73 In determining legal causation, South African courts have adopted a flexible approach which entails weighing up various factors, 'such as reasonable foreseeability, directness, the absence or presence of a *novus actus interveniens*, legal policy, reasonability, fairness and justice'.[127]

13.74 As mentioned earlier, the South African approach to delictual liability is one of general principles rather than separate delicts or torts, although over time certain principles have crystallised around common forms of liability. In the context of climate change liability, product liability and nuisance are two such forms worthy of further reflection.

Product liability

13.75 Harm caused by a defective product is generally presumed to be wrongful. Although strict liability for defective products was rejected by the courts,[128] this is likely to change now that the Consumer Protection Act ('CPA'),[129] which introduces a form of strict liability and became operative in March 2011, is in force.

13.76 In the context of climate change, the notion of product liability claims would likely focus on the liability for harm caused by the manufacturers (rather than users) of products that emit greenhouse gases. These include car manufacturers and utilities such as electricity suppliers who use fossil fuels in electricity generation. The difficulty which plaintiffs would face include the elements of wrongfulness and causation as the decision in the *Natal Fresh Produce Growers' Association* case[130] (see paras. 13.46 and 13.72 above) illustrates.

[126] In this case however the decision turned on whether or not the defendant's conduct could be regarded as wrongful.

[127] *OK Bazaars (1929) Ltd* v. *Standard Bank of South Africa Ltd* 2002 (3) SA 688 (SCA), cited in Du Bois *et al*., *Wille's Principles of SA Law*, p. 1130.

[128] See *Wagener* v. *Pharmacare Ltd; Cuttings* v. *Pharmacare* 2003 (4) SA 285 (SCA).

[129] Act 68 of 2008. [130] 1990 (4) SA 749 (N).

13.77 The CPA may assist the plaintiff in that it introduces a statutory form of liability for harmful products.[131] The CPA establishes liability for damage caused by goods. Producers, importers, distributors or retailers of any goods are each liable for any harm caused.

Nuisance and neighbour law

13.78 Cases of nuisance and neighbour law may give rise to an interplay of principles of property law and the law of delict. Nuisance typically involves 'forms of *unreasonable* use of land by one neighbour at the expense of another'.[132] Nuisance claims, using the principles of delict, are however not restricted to neighbours, and are generally concerned with an act or omission that inconveniences another's right of use and enjoyment.[133]

13.79 The principle *sic utere tuo ut alienum non laedas* underpins neighbour law and means that one should only use one's property so that it does not harm others. For example, a plaintiff could sue a car manufacturer or a State-owned enterprise for harm to his property if such an enterprise utilises its property unreasonably and wrongfully.[134] A public nuisance concerns an act or omission that offends, threatens or inconveniences the public at large.[135] Remedies for both public and private nuisance claims may include damages and/or an interdict.

Private law remedies

13.80 In private law proceedings, the typical remedies which a plaintiff might seek as a result of unlawful harm to person or property are damages (see (4) Damage above) and/or an interdict.

13.81 An interdict may take the form of either a mandatory or a prohibitory interdict, which may be either interim or final. The

[131] Cf. sections 55, 56, 60 and 61 of the Act.
[132] Neethling and Potgieter, *Law of Delict*, p. 121 (original footnote omitted).
[133] See for example *Verstappen* v. *Port Edward Town Board* 1994 (3) SA 569 (D) and *Minister of Health and Welfare* v. *Woodcarb (Pty) Ltd* 1996 (3) SA 155 (N).
[134] Neethling and Potgieter, *Law of Delict*, pp. 117–24.
[135] See *Diepsloot Residents' and Landowners' Association and Another* v. *Administrator, Transvaal* 1994 (3) SA 336 (A).

requirements that entitle the applicant to seek a final interdict are '(a) a clear right; (b) an injury actually committed or reasonably apprehended; and (c) the absence of similar protection by any other ordinary remedy'.[136] The court's discretion whether or not to award a final interdict is limited and will depend on whether or not an alternative remedy (for example damages) is adequate.[137]

13.82 While there is to date no climate change litigation per se on which to comment, the discussion clearly demonstrates the evolving nature of the private law principles which renders the law capable of adapting to new scenarios and threats of harm. There are concerns, however, about whether the principles are capable of adapting quickly and adequately enough. It has been said that 'the principal objections to the law of delict as an effective tool in environmental compliance relate to problems of proof and the fact that the essential elements of the Aquilian action sit uncomfortably in context of environmental pollution or degradation'.[138]

(D) Other law

The protection of human rights

13.83 In addition to an environmental clause, the Bill of Rights provides for the right to life,[139] and the right to healthcare, food and water, and social security in certain circumstances.[140] These rights may ultimately impose a burden on the State if they are successfully invoked in circumstances of hardship brought about by the effects of climate change.

13.84 The Bill of Rights also recognises, in section 25, that '[n]o one may be deprived of property except in terms of law … and no law may permit arbitrary deprivation of property'. Furthermore, the section provides that '[p]roperty may be expropriated only in terms of law … (a) for a public purpose or in the public interest; and (b) subject to compensation …'. As a result, the State, should

[136] *Setlogelo* v. *Setlogelo* 1914 AD 221 at 227.
[137] Harms, *Civil Procedure in the Superior Courts* (Durban: LexisNexis, 2010), para. A5.2 ('Interdicts').
[138] Summers, 'Chapter 13 – Common-Law Remedies for Environmental Protection' in Paterson and Kotzé, *Environmental Compliance and Enforcement in SA*, p. 358.
[139] Section 11. [140] Section 27.

it seek to regulate (restrict) property rights in order to mitigate the hazards of climate change, will, if challenged, be required to demonstrate that any deprivation of property is not arbitrary. In the event that a deprivation of property amounts to an expropriation, the State will also be required to compensate for the loss of property.[141]

The public trust doctrine in South African law

13.85 In South Africa the notion of *public trust* is explicitly used in statutes with reference to water,[142] minerals[143] and the environment.[144] In so far as the environment is concerned, NEMA provides that 'the environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage'.[145]

13.86 The public trust doctrine, in effect, places a responsibility on the State to regulate harmful behaviour that may contribute to climate change.

(E) Regional arrangements and 'soft' law

13.87 South Africa is a party to the 1992 Treaty of the Southern Development Community ('SADC'), a regional economic cooperation agreement. Although the Treaty does not refer specifically to climate change, among its objectives are that the fifteen member countries '… coordinate, harmonise, and rationalise their policies and strategies for sustainable development in all areas of human endeavour…',[146] and agree to cooperate in areas of natural resources and environment.[147] In the same vein South Africa has been an active participant in the New Partnership for Africa's

[141] On the use of the terms 'deprivation' and 'expropriation', see *First National Bank of SA Ltd t/a Wesbank* v. *Commissioner, South African Revenue Service; First National Bank of SA Ltd t/a Wesbank* v. *Minister of Finance* 2002 (4) SA 768 (CC) at para. [57]; and see generally the discussion in A. J. van der Walt, *Constitutional Property Law* (Cape Town: Juta Law, 2005), pp. 180–91.

[142] See section 3 of the National Water Act 36 of 1998.

[143] See the Preamble to the Mineral and Petroleum Resources Development Act 28 of 2002.

[144] See section 2(4)(*o*) of the National Environmental Management Act 107 of 1998.

[145] Section 2(4)(*o*). [146] Preamble. [147] Art 21(3)(e).

Development ('NEPAD'), which includes an environmental component. This initiative has been carried forward by the African Ministerial Conference on the Environment ('AMCEN') with the support of the African Union ('AU'). As regards climate change, South Africa has been at the forefront of leading the African agenda through NEPAD in climate change negotiations including the various Conferences of the Parties (COPs).

(F) Practicalities

13.88 The South African legal system provides a comprehensive framework for potential climate change litigants to obtain relevant environmental information, with protection for whistleblowers, and to pursue a variety of remedies in a number of fora.

13.89 On the question of jurisdiction, section 19 of the Supreme Court Act[148] empowers a court to take jurisdiction over persons residing within a particular area and over causes of action arising within that area. A plaintiff seeking recourse in the South African courts where the defendant does not reside in South Africa is required to attach property to confirm jurisdiction. This may present practical difficulties for the plaintiff. In addition, in terms of the Prescription Act,[149] most debts prescribe after a lapse of only three years, requiring legal action to be commenced soon after the damage is suffered.

13.90 Public interest litigation received a major boost when the decision in *Biowatch Trust* v. *Registrar, Genetic Resources, and Others*[150] was handed down by the Constitutional Court. Although Biowatch, an environmental watchdog, had been successful in the court a quo in an application for access to certain information on genetically modified organisms, the Court had made an adverse costs award against Biowatch on the basis of 'inept requests for information'. The Constitutional Court, however, found that the action of the High Court 'was demonstrably inappropriate on the facts, and unduly chilling to constitutional litigation in its consequences'.[151] The Court reversed the decision of the High Court

[148] Act 59 of 1959. [149] Act 68 of 1969.
[150] 2009 (6) SA 232 (CC). [151] At para. [60].

and ordered the relevant governmental authorities to pay the costs incurred by Biowatch.

(G) Conclusion

13.91 The above survey shows that South Africa has in place a broad array of laws which apply to the climate change phenomenon. These are by and large of an anticipatory and regulatory nature in that the legislature has put in place an imposing body of statutes and regulations to prevent activities which directly or indirectly contribute to climate change. These range from statutes regulating exploitation of natural resources, to planning laws, to laws combating various forms of waste generation and pollution control.

13.92 As regards potential liability for the climate change phenomena, the point of departure for a plaintiff will be the delictual principles outlined above. While the fault requirement may be met, we suggest that any plaintiff may be hard pressed to overcome the other requirements, in particular causation. Nevertheless the increasing array of public laws and norms may result in the bar being lowered in this regard.

13.93 It is suggested that before we see litigation around the effects of climate change in South Africa, we are more likely to see the courts applying their minds to more immediate environmental problems such as the phenomenon of acid mine drainage, the consequences of which are coming to the fore.