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LLM (ENVIRONMENTAL LAW)

The Duty to Adapt to Climate Change

Statutory and common law perspectives
from South Africa and Australia

Marthán Theart

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Supervisor: Alexander R Paterson

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I hereby declare that I have read and understood the regulations governing the submission of LLM (Environmental Law) dissertations, including those relating to length and plagiarism, as contained in the rules of the University, and that this dissertation conforms to those regulations.

Marthán Theart

Date

Abstract

The UNFCCC predicts that it is highly likely that global warming will cause sea-level rise and coastal inundation and that may cause extensive damage to coastal property owners. There is little we can do to prevent these coastal hazards, but we can adapt to climate change. This dissertation explores the possibility of the existence of a legal duty to adapt to climate change in the legal jurisdictions of Queensland, Australia and South Africa. It is argued that such a duty will most likely fall on the government of a legal jurisdiction. The relevant policy and statutory planning regimes of both jurisdictions is firstly explored, from wide overarching environmental policies to more specific planning statutes. Generally, the various policies and statutes in both jurisdictions require public authorities to integrate climate change considerations into planning decisions and decisions relating to environmental impact assessments, but this cannot be said to be a legal duty to adapt to climate change. It is then explored whether the duty can be said to exist in common law. The common law is an ill-suited instrument to deal with modern issues such as climate change, owing to its roots in the industrial era. However, it is inherently flexible and is capable of being developed by the courts. Its application in the public sphere is restricted by the doctrine of the separation of powers and so-called 'tort-reforms.' The focus of this inquiry is on the 'duty of care' doctrine of the tort of negligence as applied in Australia and the element of 'unlawfulness' in the South African delictual system. The possibility of there being a duty of care on the Queensland and Commonwealth government towards coastal private property owners to adapt to climate change is dependent on the interpretation of tort reforms and the development of rules regulating the role the judiciary plays in policy-making. In South Africa, whether it is unlawful for the State to omit to adapt to climate change might well depend on State resources and the interpretation of the Constitution and its role in the common law.

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1. Introduction

It is a widely held view that even if the earth's human inhabitants fully desist in their activities releasing carbon emissions into the earth's atmosphere, the current global warming trend will persist for decades to come.¹ However, since no nation on earth can claim to have the political will to undertake cutting its carbon emissions to zero, it is imperative that humans adapt to live with the consequences of global warming. A gradual rise in the earth's temperature is projected to significantly affect the lives of coastal inhabitants, as sea levels are highly likely to rise and coastal storms are predicted to become more severe as we head deeper into the 21st century. A failure to adapt may result in extensive coastal property damage and even the loss of lives and livelihoods.

In a lawless society, damage, such as the damage described above, will always 'rest where it falls.' However, under industrial age law, there are legally recognised circumstances in which the burden of damage is shifted from one individual to another.² These circumstances can be found in government policy, statutory law and in the common law. These sources of law occasionally provide that the burden of damage falls on the State,³ an entity often thought of as the trustee over the natural and human environment. A duty to take measures to guard against coastal damage likely to be inflicted by changing weather conditions may thus be found in government policy, therefore obviating the need to establish such a duty at common law and improving the chances of success in a claim for damage to coastal private property.⁴ On the other hand, in the absence of a clear duty on the State to adapt to climate change, the common law may be a useful tool for finding government liable for future damage related to a failure to adapt to climate change

¹ Working Group II Contribution to the Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report, Climate Change Impacts, Adaptation and Vulnerability, Summary for Policymakers* (2007) 17

² Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) 3

³ In this dissertation, 'State' shall refer to the government bodies at national level, whereas 'state' shall refer to federal division of a country, such as Queensland in Australia.

⁴ In both legal systems, legislative initiatives may limit the operation of the common law in specified instances.

in the present day, and hence imposing a duty on government, albeit retrospectively.

In this dissertation, the climate change adaption law of Queensland and that of South Africa will be scrutinised and compared. The Queensland coast is highly likely to be affected by violent episodes of future subtropical precipitation and sea level rise, making it particularly vulnerable to climate change. Queensland, an Australian state, is situated in a developed country that is presumably in a good position to adapt to climate change due to its relatively greater adaptation capacity. It is also worth looking at this state's adaptation regime because it is regarded as probably the most comprehensive climate change adaption regime in Australia. The English common law system is applied throughout Australia and thus also forms part of this regime. Retrospective liability for climate related damage is regulated by the law of tort in this country. South Africa's climate change regime, on the other hand, is less comprehensive even though it too is vulnerable to the effects of climate change, but for different reasons. Unlike Queensland, no climate change hotspots have been identified, but even slight changes in coastal weather patterns can cause significant damage to poor South Africans that are relatively deprived of adaption capacity. The South African common law system is classified as Roman-Dutch Law, and the law of delict is relevant to retrospective liability allocation.

The dissertation can therefore be said to follow a functionalist⁵ approach in that it will be assumed that these two legal systems respond rationally to a common problem, but in different ways. In comparing the application of a common problem in two different legal systems, one can identify where one system fails to sufficiently address the problem and where one system is more efficient, cost-effective or conceptionally sound in solving the problem. In this way, one jurisdiction with relative weaknesses in addressing the climate change problem can

⁵ Roederer CJ 'Working the common law pure: developing the law of delict (tort) in light of the spirit, purport and objects of South Africa's Bill of Rights' (2009) 26(2) *Arizona Journal of International and Comparative Law* 429 – 503 at 442-443

learn from the other jurisdiction that is relatively effective at addressing the same problem.

However, for the sake of brevity, an all-embracing comparative study will be avoided in this dissertation. Firstly; although it is noted that climate change is predicted to affect the coastal zone, agriculture, State infrastructure, biodiversity and human health,⁶ the dissertation shall solely address the issue of likely future damage to coastal private property inflicted by accentuated coastal hazards resulting from sea level rise, coastal floods, coastal inundation and increased coastal erosion. These effects of climate change, particularly sea level rise, are said to be the most predictable consequences of climate change⁷ and will hence provide the below legal and philosophical arguments with more authority than would the other predicted future effects of climate change.

Secondly, it is acknowledged that modern environmental statutes consist of various elements, such as institutional arrangements; appeals and reviews; compliance mechanisms; and planning and regulatory devices. The dissertation shall focus on the latter, although short references to the other elements cannot be entirely avoided since certain planning and regulatory devices must be understood in the correct context.

Thirdly, the law of delict and the law of tort are complex legal systems that simply cannot be discussed as a whole in this dissertation. The dissertation must therefore be delimited to a discussion on certain key elements in the tort/delict systems. Only the intricacies of the 'duty of care,' concept, a requirement for establishing a tort of 'negligence'⁸ in Australian common law will, in the course of this dissertation, be scrutinised, keeping in mind the limitations imposed by statutory law in Queensland and the specific rules relating to private claims in damages against government.⁹

⁶ See for instance Working Group II Contribution to the Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report, Climate Change Impacts, Adaptation and Vulnerability, Summary for Policymakers* (2007)

⁷ Farber DA 'Adapting to climate change: who should pay?' (2007) 23 (1) *Journal of Land Use* 1 at 9

⁸ Balkin RP and Davis JLR *Law of Torts* (2004) 199

⁹ Aronson M and Whitmore S *Public Torts and Contracts* (1982) 35

Although there are no equivalents to the 'duty of care' concept in South African delictual law, the concept of 'unlawfulness,' one of the five elements that needs to be shown for an act or omission to constitute a delict, is often associated with the 'duty of care' concept in English tort law. The Roman-Dutch law of delict requires an applicant to prove five elements¹⁰ in order for it to be successful in a claim of damages. The element of 'unlawfulness' (or 'wrongfulness') will be the focus of this dissertation owing to its importance in establishing a legal duty on the defendant.¹¹ Both elements, 'wrongfulness' and 'duty of care,' serve as mechanisms that guard against limitless liability in delict¹² and tort¹³ respectively. They are thus significant hurdles that need to be surmounted by a plaintiff in a 'problem' such as the one identified above. Moreover, these two elements are strongly associated with the word 'duty.' Seeing that this dissertation is dedicated to establishing a duty to adapt to climate change, it is apposite to compare the two common law systems' retrospective duty allocating mechanisms.

A functionalist comparison is not complete without a brief discussion of the common problem that will be applied to the two legal regimes respectively. In chapter 2, a rapid appraisal of the implications of climate change for both coastal regions, as per the scientific community, will be conducted. Adaptation methods and adaptation responsibility will also be covered in the same chapter. Chapter 3 deals with domestic policy and statutory frameworks of relevance to climate change the two legal jurisdictions. This chapter divides into four subsections. In 3.1, the international adaptation regime will cursorily be addressed; 3.2 deals with the Australian and Queensland adaptation regime; the South African adaption regimes is covered in 3.3; and analyses and comparison of the two domestic regimes can be found in 3.4.

¹⁰ Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) 3-5; these elements are 'conduct,' 'unlawfulness,' 'negligence,' 'causation' and 'damage.'

¹¹ Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) 137-138; the authors, however, warn against confusing the element of fault with that of the English Law concept of 'duty of care.'

¹² See, for instance, *Minister of Safety and Security v Hamilton* (2004) 2 SA 216 (SCA) at para 35

¹³ See for example, *Donoghue v Stevenson* [1932] AC 562

Chapter 4 addresses the issue of the relevance of the common law for climate change adaptation. This chapter divides into 'the role of the common law in the environmental context' (4.1), 'a duty to adapt to climate change under tort law' (4.2) and 'a duty to adapt to climate change under the law of delict' (4.3). In 4.1, the limitations of statutory frameworks are discussed in the first subsection, 4.1.1 and 4.1.2 then addresses the rise and recognition of the common law in the environmental context. The problems with the role of the common law in the environmental context are discussed in 4.1.3 followed by a discussion of the manner in which the common law sought to overcome these problems in 4.1.4. 'A duty to adapt to climate change under tort law' is the title of section 4.2 and applies the 'duty of care' concept in the climate change context. It starts with a discussion on the general principles of the tort of negligence in 4.2.1, then continues in 4.2.2 to address the more specific principles that apply in the 'duty of care' concept and ends off with a general exposé of factors that impact on the application of the duty concept. In 4.3 a similar structure is followed, but discusses climate change in the context of the South African common law. An overview of the general principles of the law of delict is found in 4.3.1 and 4.3.2 addresses the basic requirements for establishing unlawfulness under the law of delict, including the impact of the Constitution of the Republic of South Africa on this element of delict. There are also factors that impact on the application of duty in delict, and these will be discussed in 4.3.3. The final section, 4.4, compares the duty to adapt to climate change under tort law and the law of delict and a conclusion is reached in chapter 5.

2. The Climate change adaptation imperative

2.1 The need to adapt

The Intergovernmental Panel on Climate Change's (IPCC) data suggests that the earth has warmed significantly since the dawn of the industrial age. This unprecedented increase in the earth's temperature can be ascribed to the use of Greenhouse Gases (Ghg's) in industrial activity. The amount of Ghg's already in the atmosphere will perpetuate this global warming trend, even if the release of Ghg's into the atmosphere are decreased significantly or even if it is ceased completely. A

further temperature hike is also predicted to affect the world's climate patterns and distributions, commonly known as the phenomenon of 'climate change'.¹⁴ The exact extent and implications of climate change is not known, but certain models and predictions make it clear that climate change and its concomitant repercussions are inevitable.¹⁵ From a land use planning context, these repercussions warrant the infiltration of certain 'climate change' standards and codes into planning laws and instruments in order to ensure the continual harmonious development and in some instances, existence of coastal human settlements.¹⁶ In other words, it is imperative for human settlements to adapt to the effects of climate change. The effects that must be heeded by those planning for future development of the coastal zone are sea-level rise, increased incidences and severity of floods, coastal inundation and incrementally more expeditious coastal erosion.¹⁷

It is also trite that the climate change will affect different regions of the world in different manners. Some regions are particularly vulnerable to climate change on account of their geographic location and socio-economic circumstances.¹⁸ North eastern Australia and Southern Africa are not critically threatened by predicted effects of climate change, but inhabitants, planners and policymakers for the coastal zone in these regions can ill afford apathy toward climate change adaptation. Climate change is highly likely¹⁹ to result in increased incidences of severe storm events (and the severity of these events) associated with heavy precipitation, thus increasing the risk of flooding and coastal erosion in Queensland,

¹⁴ Working Group II Contribution to the Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report, Climate Change Impacts, Adaptation and Vulnerability, Summary for Policymakers* (2007)

¹⁵ *Ibid*; at 18

¹⁶ Mace MJ 'Adaptation under the UN Framework Convention on Climate Change: The International Legal Framework' in Adger, et al *Fairness in Adaptation to Climate Change* (2006) 53 at 55

¹⁷ Working Group II Contribution to the Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report, Climate Change Impacts, Adaptation and Vulnerability, Summary for Policymakers* (2007) at 18

¹⁸ Mace MJ 'Adaptation under the UN Framework Convention on Climate Change: The International Legal Framework' in Adger, et al *Fairness in Adaptation to Climate Change* (2006) 53 at 54-55

¹⁹ Working Group II Contribution to the Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report, Climate Change Impacts, Adaptation and Vulnerability, Summary for Policymakers* (2007) - The IPCC's term 'highly likely' translates into over 90% certainty.

Australia. The Queensland coast is also likely to be affected by sea level rise and increasing incidences of extremely high sea levels, thus contributing also to coastal inundation.²⁰ Needless to say, coastal structures are in danger of being severely damaged if these risks eventuate, especially in a state where 85% of the population live within the coastal zone and where the population growth is in excess of 9%.²¹ Urban 'hotspots' where urban adaptation is most needed were identified as being South East Queensland (including the city of Brisbane) and the Wet Tropical Coast (including the city of Cairns).²² Climate change will disproportionately affect communities with limited adaptive capacities, such as the Torres Strait Islanders who, without sufficient access to support facilities in their relatively isolated location, are at risk of future inundation.²³

The effect of climate change on South Africa will be largely similar, in that a change in precipitation patterns are highly likely to accompany the increase in temperature, and events of precipitation is highly likely to be more severe, and occur more frequently. The eastern half of the country is expected to become wetter and the western half drier. Low lying urban areas in the coastal zone are therefore in danger of being affected by floods, erosion, sea level rise and therefore inundation.²⁴ Durban and parts of Cape Town²⁵ can be identified as potential 'hotspots' owing to their proximity to the sea and its urbanised nature. Although less than half of the South African population lives in the coastal zone, coastal cities, especially Durban and Cape Town are growing at a rapid rate.²⁶ As many as 2.7% of the South African population is reported to move to urban centres annually to seek work, which is

²⁰ PMSEIC Independent Working Group *Climate Change in Australia: Regional Impacts and Adaptation – Managing the risks for Australia* (2007) at 13-18

²¹ Queensland Government *Queensland State Coastal Management Plan* (2001) at 8-9; mainly due to urbanisation and large scale settlement in Queensland

²² PMSEIC Independent Working Group *Climate Change in Australia: Regional Impacts and Adaptation – Managing the risks for Australia* (2007) at 24

²³ Ibid at 28

²⁴ Department of Environmental Affairs and Tourism *South Africa Environment Outlook: A Report on the State of the Environment – Executive Summary and Key Findings* (2006) at 5-6

²⁵ See Mukhiebiri P and Ziervogel G *Framework for Adaptation to Climate Change in the City of Cape Town* (2006) and Bouchard B et al *Improving Flood Risk Management of Informal Settlements in the City of Cape Town* (2007)

²⁶ Kok P and Collinson M *Migration and urbanisation in South Africa* (2006) 26-27

resulting in an increase in the informal settlements and poverty rates in cities.²⁷ Seventy three percent of the urban population in Southern Africa already live in peri-urban informal settlements.²⁸ People in these settlements are poor and do not have the adaptive capacity necessary to guard against the future effects of climate change. This places immense pressure on local and provincial authorities in urban South Africa charged with planning, providing access to housing and service delivery responsibilities to take these adaptive measures on the informal settlements' residents' behalf.²⁹ Moreover, coastal developments in the past have proceeded with scant consideration for the impact on the coastal zone and therefore exposed settlements to the future effects of climate change, such as sea level rise, inundation and coastal erosion.³⁰ There is also reason to believe that this continues to be the trend, especially along the south and southeast coast of South Africa.³¹

2.2 How to adapt

The above paragraphs make it clear that the climate change impacts necessitate the adoption of adaptation measures. Furthermore, it is often argued that a precautionary approach must be adopted when considering adaptation measures, so that the uncertainty that exists as to the precise impact of climate change is not used as an excuse to avoid or delay action to enhance adaptive capacity.³² Two more issues need to be elaborated to lay a proper foundation for this dissertation: the type of adaptation measures and the entities responsible for taking adaptation measures.

²⁷ Kruys GPH 'Population growth: its effect on human security with emphasis on South Africa' (2008) 40 at 51-53

²⁸ Kok P and Collinson M *Migration and urbanisation in South Africa* (2006) at 26-27

²⁹ Kruys GPH 'Population growth: its effect on human security with emphasis on South Africa' (2008) 40 at 51-53

³⁰ Scheier SM 'A coastal zone management policy for South Africa: some perspectives' (1997) 4 *SAJELP* 167 at 170

³¹ Glazewski J 'Towards a coastal zone management act for South Africa' (1997) 4 *SAJELP* 1 at 2-4

³² McDonald J 'A risky climate for decision-making: the liability of development authorities for climate change impact' (2007) 24 *EPLJ* 405 at 406; McDonald J 'The adaptation imperative: managing the legal risks of climate change impacts' in Bonyhady T and Christoff P *Climate Law in Australia* (2007) 124 at 126-127; See article 3 of the United Nations Framework Convention on Climate Change that requires the precautionary principle to guide convention implementation

From a coastal zone land use planning perspective, the adaptation process can be described as 'minimising sensitivity or exposure to risk by increasing resilience; improving the capacity of individuals, organisations and communities to cope with damage...'³³ and may take the form of event protection, damage protection (accommodation) and risk acceptance.³⁴ As the name suggests, event protection involves taking measures against extreme climatic events such as storms and cyclones. These measures may involve 'hard' or 'soft' engineering solutions such as the construction of seawalls, beach replenishment and the conservation of coastal wetlands. Damage protection includes damage avoidance whereby further development is prohibited in the coastal zone, and damage mitigation whereby strict building codes are applied to buildings situated in the coastal zone. Lastly, risk acceptance involves either taking no action against the risk or implementing a system of planned retreat from the coastal zone.³⁵ The type of adaptation measure taken will depend on the risk inherent at a specific site. High risk areas will typically involve a planned retreat policy, whereas low risk areas necessitate only event protection.

2.3 Adaptation responsibility

A further consideration is the apportionment of the cost of taking the above measures. It is clear that adaptation is not free, and given the novelty of the concept of 'climate change adaptation,' authors and policy-makers are still divided on where the cost of implementing these measures must rest. Farber³⁶ believes this would depend on the importance society attaches to the goals of climate change adaptation. The author identifies behavioural goals,³⁷ loss-spreading,³⁸ just

³³ McDonald J 'The adaptation imperative: managing the legal risks of climate change impacts' in Bonyhady T and Christoff P *Climate Law in Australia* (2007) 124 at 126

³⁴ McDonald J 'A risky climate for decision-making: the liability of development authorities for climate change impact' (2007) 24 *EPLJ* 405 at 406

³⁵ McDonald J 'The adaptation imperative: managing the legal risks of climate change impacts' in Bonyhady T and Christoff P *Climate Law in Australia* (2007) 124 at 126

³⁶ Farber DA 'Adapting to climate change: who should pay?' (2007) 23 1 *Journal of Land Use* 1 at 19-25

³⁷ See Kaplow L 'An economic analysis of legal transitions' (1986) 99(2) *Harvard Law Review* 509 511-512 for an analysis of how law can change future behaviour. One of the ways in which this may happen is by the allocation of loss. Such allocation can deter certain behaviour. In this context, if

desserts,³⁹ as well as distributive and social goals⁴⁰ as the main aims of climate change adaptation. A conclusion is reached that, from a moral standpoint, it is desirable for polluters to carry the financial burden of adapting to climate change. Not only would such an arrangement give emitters their just dessert, it would also change the behavioural patterns of polluters in that it will become expensive to pollute. Requiring wealthy polluters to bear the adaptation burden for those most vulnerable to climate change, the poor, would also satisfy Farber's final criterion: 'distributive and welfare goals.'⁴¹

The next most morally appealing option for Farber is 'the public pays.' According to this doctrine, climate change adaptation funds are acquired from the fiscal purse. The 'distributive and welfare' effects of such an arrangement are obvious: everyone makes a small contribution towards adaptation funds so that even those without adaptive capacity are protected from future climate ills.⁴² Some suggest that the taxation collected from emitters be ear-marked for climate change adaptation, which will accordingly be devised and implemented by the government in its position of trustee over the general public.⁴³ In this way, emitters will still get their

climate change responsibility is attributed to local authorities, the latter will ensure that their planning policies incorporate measures to guard against climate change.

³⁸ Farber DA 'Adapting to climate change: who should pay?' (2007) 23 1 *Journal of Land Use* 1 at 22-23 Since only random portions of the population suffers loss from climate change, it would only seem fair to some that the loss is spread over the entire population.

³⁹ See Adler MD 'Corrective justice and liability for global warming' (2007) 155 *U.Pa.L. Rev* 1859 for an account of the role of the theory of 'just dessert' in climate law. This goal encompasses the theories of corrective justice and unjustified enrichment. It involves moral arguments to apportion blame for certain conduct. The wrongdoer must restore the moral imbalance. Furthermore, those that profited under certain conditions owe a moral duty to recompense another that has lost out at their expense. Those to blame for climate change would get their just dessert if they are ordered to pay for adaptation measures.

⁴⁰ See Deitz S 'The impacts of climate change: perspectives from the Stern Review' (2007) XIII (2) *Brown Journal of World Affairs* 173 at 178-179 for the disproportionately acute effect of climate change on the relatively poor nations and the poor within nations. Policy, at international or national level, affects the distribution of income and wealth and therefore may either harm or benefit those worst off in society. According to this goal, an adaptation policy must favour those worst off in society.

⁴¹ Farber DA 'Adapting to climate change: who should pay?' (2007) 23 1 *Journal of Land Use* 1 See the table on page 34 for a summary.

⁴² Ibid at 28-29 Such an argument is particularly strong if the government agencies involved have sufficient human, financial and technical resources to implement and monitor adaptation programmes.

⁴³ Ibid at 31-33

just desert and the temptation to engage in ‘moral hazard’ practices might well be suppressed.

Wherever the burden of bearing adaptation cost falls, it only seems viable only for the government to undertake adaptation action. State agencies presumably have the human resources and expertise to implement adaptation programmes and have many times pronounced their trusteeship over the environment (including the human environment).⁴⁴ It is crucial that public authorities consider it necessary for them to take pre-eminent action against climate change at this critical juncture in human history.⁴⁵ The following paragraphs of this dissertation will be devoted to establishing whether the Australian, Queensland and South African governments have assumed responsibility for protecting its people against climate change impacts and, if so, to what extent.

3. Domestic policy and statutory frameworks of relevance to climate change adaptation

3.1 International adaptation regime

There is no legal duty on individual nations to take adaptation action in international law, though they are strongly urged to build adaptive capacity as soon as is practicable. The United Nations Framework Convention on Climate Change (UNFCCC)⁴⁶ identifies principles that should guide climate change adaptation implementation, which includes intergenerational equity, common but differentiated responsibilities and most importantly, the precautionary principle.⁴⁷

⁴⁴ See for example the South African framework environmental act, the National Environmental Management Act 107 of 1998 Sec 2(4)(o).

⁴⁵ Some believe that if the world’s carbons emissions are not drastically decreased now, climate change will have catastrophic future effects – see, for example, Dietz S ‘The impacts of climate change: perspectives from the Stern Review’ (2007) XIII(2) *Brown Journal of World Affairs* 173

⁴⁶ This instrument is not yet regarded as ‘hard law’ that imposes legal obligations on parties; rather it has mere persuasive force as a soft law at international level. Only ‘final’ conventions and customary international law qualify as hard law. The document can neither be said to be a final convention nor can it be said that its principles and obligations have hardened into customary international law. This process requires these obligations and principles to be practiced by states and regarded by states as binding. The uncertainty that surrounds the precise manner in which climate change is going to affect nations has caused members to postpone taking adaptation measures.

⁴⁷ UNFCCC article 3

In accordance with the latter principle, parties are required to take 'precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects' and where there are threats of serious or irreversible damage, lack of full scientific certainty 'should not be used as a reason for postponing such measures.'⁴⁸ This principle must thus be kept in mind by the parties when implementing their commitments under this framework convention. One of these commitments is the imperative to formulate and implement national programmes to facilitate adequate adaptation.⁴⁹ Both South Africa and Australia are parties to this convention and hence are expected to devise and publish national adaptation programmes of action⁵⁰ (to use the language of the convention).

Climate change adaptation was also the subject of discussion at the Copenhagen Conference on Climate Change in 2009. The basis for the discussion was laid by certain guidelines for the development of adaptation provisions adopted at the 13th sitting of the Conference of the Parties in Bali two years earlier, called the Bali Action Plan.⁵¹ In working towards a decision at Copenhagen, the Parties were urged to enhance action on adaptation by, inter alia, undergoing vulnerability assessments so that priority areas of adaptation can be identified. Furthermore, Parties were required to integrate adaptation actions in sectoral and national planning, enable climate resilient development and to reduce vulnerability generally. Lastly, risk management and risk reduction strategies were recommended as well as disaster management strategies and means to address loss and damage associated with climate change impacts.⁵²

⁴⁸ Ibid article 3

⁴⁹ Ibid article 4.1(b)

⁵⁰ Henceforth, NAPA

⁵¹ Conference of the Parties *Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007* (2007); available at <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf#page=3> (viewed on 8 April 2010), henceforth Bali Action Plan, at 4 It was decided that a comprehensive process is necessary to enable the full, effective and sustained implementation of the UNFCCC through long-term co-operative action in order to reach an agreed outcome and adopt a decision at its 15th session.

⁵² Bali Action Plan at 4

Two years later, at the 15th session of the Conference of the Parties in Copenhagen, not much progress had been made in developing international law on climate change adaptation. It was suggested that a Copenhagen Adaptation Framework on Implementation is adopted in order to identify and clarify the Parties' adaptation duties in international law.⁵³ It was then also strongly argued that this programme must follow a 'country-driven, gender-sensitive, participatory approach to adaptation' and must be based on the principles of good governance, mutual accountability with the aim of integrating adaptation actions into relevant social, economic and environmental policies.⁵⁴ More specifically, Parties were invited to draft specific national adaptation programmes of action based on each Party's development priorities. This would entail initiating or improving risk assessments and consequently reducing the risk of climate change by means of effective and relevant specific national programmes of action.⁵⁵ Certain options on the content of the Programme were put before the Parties, but the Programme was not adopted.

A report⁵⁶ identical to the above one was released by the Conference of the Parties at the conclusion of the Conference in an attempt to continue discussions at the next session. Despite the absence of a definite obligation at international level on states to prescribe and take adaptation measures, the Australian, Queensland and South African governments respectively have attempted to make provisions for adaptation action through certain policies and statutes. The degree to which the relevant policies and statutes create adaptation duties, either directly or by integrating adaptation considerations into social, economic or environmental policies for the State agencies of these jurisdictions will be analysed below.

⁵³ The Ad Hoc Working Group on the Long-Term Cooperative Action under the Convention Report of the Ad Hoc Working Group on the Long-Term Cooperative Action under the Convention on its eighth session, held in Copenhagen from 7 to 15 December 2009 (2009), available at http://unfccc.int/files/meetings/cop_15/application/pdf/cop15_cph_auv.pdf (viewed on 8 April 2010), henceforth AWG-LTCAC1 at 10

⁵⁴ AWG-LTCAC1 at 16

⁵⁵ AWG-LTCAC1 at 16-17

⁵⁶ Conference of the Parties Work undertaken by the Conference of the Parties at its Fifteenth Session on the basis of the Report of the Ad Hoc Working Group on the Long-Term Cooperative Action under the Convention (2009), available at <http://unfccc.int/resource/docs/2010/cop16/eng/02.pdf> (viewed on 8 April 2010)

3.2 Australian and Queensland adaptation regime

3.2.1 Relevant policies

The framework Australian policy on the environment is the National Strategy for Ecologically Sustainable Development (ESD).⁵⁷ It serves to integrate the notion of ecologically sustainable development into decision-making processes. According to the policy, this involves considering the social, economic and environmental implications of decisions at international, national, state and local levels and taking a long-term view when taking decisions and actions.⁵⁸ Such an approach, it postulates, will decrease the possibility of serious environmental impacts arising from economic activity.⁵⁹ Its overall goal is to improve quality of life by improving community well-being and welfare and the welfare of future generations. In doing so, decisions must be guided by the precautionary principle, the 'integrated approach,' and public participation.⁶⁰ The importance of ecologically sustainable development and the precautionary principle in climate change adaptation regimes has already been mentioned.⁶¹

More pertinent to a dissertation focussing on coastal planning measures, is that governments must seek to improve the safety and aesthetic amenity of urban areas and work to retain and improve natural ecosystems within urban areas.⁶² The safety of people and property in the coastal zone must thus be a consideration when undertaking coastal development. Retaining and improving essential coastal processes and ecosystems such as wetlands and estuarine areas is also an effective way to adapt to climate change in that it may mitigate coastal inundation by absorbing water and the impact of storm surges. Moreover, environmental impact assessment mechanisms and coastal zone management measures must be in line

⁵⁷ Australian Government *National Strategy for Ecologically Sustainable Development* (1992) available at <http://www.environment.gov.au/esd/national/nсед/strategy> (viewed on 12 November 2009), henceforth the NSED

⁵⁸ NSED at 'What is Ecologically Sustainable Development?' and at 'Who will be affected by ESD?'

⁵⁹ Ibid

⁶⁰ NSED at 'Australia's Goal, Core Objectives and Guiding Principles for the Strategy'

⁶¹ Supra at notes 47-49

⁶² NSED at 'Urban and Transport Planning Part 2 Sectoral Issues – Chapter 6' at 'Objective 6.4'

with the principles of ESD. Scientific uncertainty will therefore be no excuse to shrug off adaptation responsibility in the coastal zone or in the Environmental Impact Assessment process. In addition, integrated coastal zone management is required by the policy – ‘integrated’ in the sense of intersectoral integration, intergovernmental integration and spatial integration (the land and sea at the coastal region must be managed as a whole)⁶³ in coastal zone management.

Another overarching Australian policy is the Intergovernmental Agreement on the Environment (IGAE).⁶⁴ The IGAE was essentially adopted as part of the Commonwealth’s approach of ‘co-operative federalism’ in the 1990s. Although its focus is co-operative environmental governance, it nevertheless gives us insight into standard principles and values to be adopted by all government bodies involved in environmental governance.⁶⁵ Firstly, it requires that relevant environmental considerations are incorporated into decisions at all levels of government and that the results of a proper environmental examination into the potential impact of a decision must inform such decisions. Secondly, the precautionary principle and inter-generational equity must guide decisions impacting on the environment. Thirdly, schedule 5 states that the ‘national greenhouse response strategy’ must contain ‘measures for adapting to the impact of climate change.’ In conclusion, this agreement which prescribes the application of the precautionary principle for all decisions affecting the coastal zone, may well require an examination of climate change impacts on the coastal zone before a decision is taken and makes it peremptory for the national climate change strategy to include climate change adaptation measures.

The chief document dealing with climate change adaptation on national level in Australia is the Council of Australian Governments’ (COAG) National Climate Change

⁶³ B Cicin-Sain and R Knecht *Integrated Coastal and Ocean Management: Concepts and Practices* (1998) 45 The focus of the dissertation will be on the spatial integration and how this space is managed

⁶⁴ Commonwealth Government *Intergovernmental Agreement on the Environment* (1992), available at <http://www.environment.gov.au/esd/national/igae/> (viewed on 12 November 2009) (IGAE)

⁶⁵ Pearson L ‘Chapter 10: Australia’ in Paterson AR and Kotzé LJ *The Role of the Judiciary in Environmental Governance: Comparative Perspectives* (2009) 321 at 326-327

Adaptation Framework of June 2007.⁶⁶ The goal of this document is to 'reduce the risks of climate change and to realise any opportunities' by devising targeted strategies that will build the country's adaptive capacity to deal with climate change impact in key sectors and regions in the medium run (5-7 years).⁶⁷ Importantly, it recognises that government will take the lead in adapting to climate change. The Commonwealth government, the state (and territory) governments and the various local authorities must adopt coordinated approaches to understanding and preparing for the effects of climate change. This entails, inter alia, developing, implementing and reviewing climate change adaptation policies and strategies, including regulations, standards and economic instruments. This also means that climate change considerations must be integrated into existing policies and strategies.⁶⁸ However, of direct importance to this paper is the document's strategy to reduce vulnerability in coastal regions and settlements.⁶⁹

It compels the three spheres of Australian government to identify vulnerable coastal regions and to apply appropriate planning policies, including ensuring the availability of land, where possible, for migration of coastal ecosystems.⁷⁰ The development of codes, standards and guides for planning systems are also seen as essential to increase the resilience of human settlements to climate change. This involves the revision of standards used for building, plumbing, electrical standards and specification for the development and subdivision of land, as well as the reviewing of stormwater and sewerage guidelines. The information used to

⁶⁶ COAG *National Climate Change Adaptation Framework* (2007), available at http://www.coag.gov.au/meetings/130407/docs/national_climate_change_adaptation_framework.pdf (viewed 13 September 2009)

⁶⁷ Ibid at 4

⁶⁸ Ibid at 4: other roles identified for government are establishing and maintaining community and essential services to deal with the impacts of climate change, including emergency and health services; building adaptive capacity, including providing tools and information, raising awareness of adaptation options, educating key professionals about adaptation and investing in climate change science as well as related social, ecological and economic studies; and managing risks from climate change to their own programmes, activities and assets, including natural ecosystems in which governments have management responsibilities (e.g. crown land, state forests and national parks) and infrastructure (e.g. transport, electricity and water).

⁶⁹ Ibid at 6; 12; 17-18

⁷⁰ Ibid at 12

determine vulnerability of settlements to climate-related hazards must also be revisited to ensure that climate change is taken into account.⁷¹

Planning, however, lies at the heart of the state governments' responsibilities.⁷² Policies dealing with climate change adaptation are thus conceivably more comprehensive at state level. And there is no paucity of climate change adaptation documents in the Queensland Government's archives. McDonald⁷³ points out that some documents are broad statements of policy, such as the ClimateSmart Adaptation: 2007-2012;⁷⁴ and that others are specific legislative instruments, such as the Coastal Protection and Management Act 1995 (Qld), the State Coastal Management Plan and some State Planning Policies.

The ClimateSmart Adaptation strategy addresses adaptation issues and is formulated mostly along the lines of the National Climate Change Adaptation Framework. Like its Federal counterpart, it requires government authorities at both state and municipal level to take action to reduce vulnerability, enhance institutional resilience and to form the basis for future adaptation planning.⁷⁵ However, it goes further in that it requires local government to integrate climate change considerations into environmental impact assessments and to prepare a Local Government Climate Change Management Strategy (including maps identifying the areas most at risk to storm tides). It also contains a statement that climate change impacts must be factored into future regional planning, the *State Government Climate Change Management Strategy* and the *Urban Drainage Manual* and that the existing planning tools must be reviewed.⁷⁶

⁷¹ Ibid at 17-18

⁷² Commonwealth Government *Commonwealth Coastal Policy* (2001); found at <http://www.environment.gov.au/coasts/publications/coastal-policy/index.html> (viewed on 15 May 2009) at 7

⁷³ McDonald J 'A risky climate for decision-making: the liability of development authorities for climate change impact' (2007) 24 *EPLJ* 405 at 407

⁷⁴ Queensland Government *Climate Smart Adaptation: An Evaluation Report on Public Submissions* (2006)

⁷⁵ Queensland Government *Climate Smart Adaptation: An Evaluation Report on Public Submissions* (2006) at 8

⁷⁶ Ibid at 8

3.2.2 Relevant statutes and 'statutory instruments'

Queensland's Sustainable Planning Act⁷⁷ (SPA) plays an integral role in our understanding of how the more specific Queensland adaptation policies influence planning in this state. The stated purpose of the SPA is to ensure ecological sustainability by '...managing the process by which development occurs; and managing the effects of the development on the environment...'⁷⁸ In advancing the purpose of the Act, role players are required to ensure that decision-making processes take into account the short and long-term effects of development at local, regional, State and wider levels including 'for example, the effects of climate change.'⁷⁹ This explicit reference to climate change at the outset makes it clear that climate change adaptation shall be a chief consideration for future development. Decisions are also required to incorporate the notions of good governance,⁸⁰ the precautionary principle⁸¹ and intergenerational equity⁸² into the decision-making process. The meaning and importance of the precautionary principle and the intergenerational equity principle in climate change adaptation has already been mentioned.⁸³ Moreover, it will be recalled that integrating climate change considerations into planning instruments is an effective way to adapt to climate change.⁸⁴

'Development,'⁸⁵ for the purposes of this Act, includes carrying out building work;⁸⁶ reconfiguring⁸⁷ a lot;⁸⁸ carrying out operational work;⁸⁹ carrying out plumbing and

⁷⁷ Sustainable Planning Act 2009 (Qld), henceforth the SPA

⁷⁸ SPA Sec 3(a) and (b)

⁷⁹ SPA Sec 5(a)(ii)

⁸⁰ SPA Sec 5(a)(i)

⁸¹ SPA Sec 5(a)(iii)

⁸² SPA Sec 5(a)(iv)

⁸³ See Supra notes 47-49

⁸⁴ See Supra note 57

⁸⁵ SPA Sec 7

⁸⁶ SPA Sec 10(1) provides that 'building' includes building, repairing, altering, underpinning (whether by vertical or lateral support), moving or demolishing a building or other structure, excavating or filling; and 'building' as understood in the Queensland Heritage Act.

⁸⁷ SPA Sec 10(1) at 51 By 'reconfiguring,' the Act means creating lots by subdividing another lot; or amalgamating two or more lots, rearranging the boundaries of a lot by registering a plan of subdivision; or by dividing land into parts by agreement rendering different parts of a lot

drainage work and making a material change of use⁹⁰ of premises. Any 'development' so defined can disturb the soil in the coastal zone or increase coastal population density and therefore place people and property at risk from the effects of climate change. Conversely, if the plumbing and drainage dimension of 'development' is managed effectively, the effects of severe water-related coastal hazards can be avoided or mitigated.

The Act also makes provision for the establishment of certain planning instruments and an integrated development assessment system (IDAS) to achieve ecologically sustainable development. Planning instruments influence future planning decisions, such as coastal development and coastal management measures, which may impact directly on the vulnerability of the Queensland coast to climate change. The IDAS, on the other hand, is an informative measure that aims to provide relevant information, such as the predicted effects of climate change, to decision-makers in order to place the latter in a position to make socially and environmentally desirable development decisions impacting on the coastal zone. These aspects of the Act therefore warrant a rapid appraisal.

In order to understand the SPA's planning instruments, the IDAS needs to be discussed first. IDAS is the system for 'integrating state and local government assessment and approval processes for development.'⁹¹ All development under the Act is 'exempt development' unless it is assessable development, self-assessable development, prohibited development or development requiring compliance assessment.⁹² Planning schemes and related planning instruments under the Act

immediately available for separate disposition or separate occupation; or creating an easement creating access to a lot from a constructed road.

⁸⁸ SPA Sec 10(1) at 47-48 'Lot' is also afforded a wide interpretation: it includes private property (including sectional titles), communal property and state property.

⁸⁹ SPA Sec10(1) at 49-51 'Operational works' include any activity that disturbs the soil, including clearing vegetation (in some instances) and constructing tidal works and waterways.

⁹⁰ SPA Sec 10(1) at 48-49 'A material change in the use of premises' is generally the start of a new use of premises, the re-establishment on that premises of a use that has been abandoned, or a material use in the intensity or scale of the use of premises; or undertaking or changing an environmentally relevant activity under the Environmental Protection Act 1994.

⁹¹ SPA Sec 230

⁹² SPA Sec 231(2)

specify the type of development that is development requiring compliance assessment, self-assessable or assessable development (requiring code or impact assessment or both code and impact assessment) development.⁹³ Those planning instruments and policies both useful and relevant to climate change adaptation will be looked at below.⁹⁴ A development permit is necessary for assessable development,⁹⁵ whereas such a permit is not required for self-assessable development,⁹⁶ exempt development⁹⁷ or development requiring compliance assessment.⁹⁸ Self-assessable development, however, must comply with the relevant codes set out in various instruments and regulations⁹⁹ and a compliance permit is necessary for development requiring compliance assessment.¹⁰⁰ For prohibited development, on the other hand, an application or request for compliance assessment may not be made.¹⁰¹

A development permit authorises development to the extent stated in the permit.¹⁰² From a climate change adaptation point of view, it would be desirable for coastal development to always require a development permit. Development permits can also be subject to a condition prescribed by the assessment manager of a particular development, the concurrency agency for a particular development, the Minister or another Act.¹⁰³ Conditions relating to the resilience of coastal buildings to the effects of climate change, for example, can be prescribed by the various role

⁹³ SPA Sec 232(c) However, the Minister is also empowered to make regulations to the same effect. These regulations override any conflicting reference to IDAS in planning instruments.

⁹⁴ They include State planning regulatory provision, a structure plan, a master plan, a temporary local planning instrument and a planning scheme.

⁹⁵ SPA Sec 238

⁹⁶ SPA Sec 236(1)

⁹⁷ SPA Sec 235(1) Exempt development need also not comply with master plans for declared planned areas or planning instruments except a state planning regulatory provision.

⁹⁸ Sec 237(1)

⁹⁹ SPA Sec 236(2)

¹⁰⁰ Sec 237(2)

¹⁰¹ SPA Sec 238(1)

¹⁰² SPA Sec 243(a)

¹⁰³ SPA Sec 244

players or another Act, such as the Coastal Protection and Management Act,¹⁰⁴ which will be outlined below.

The assessment manager is the authority responsible for managing and deciding the success of an application for a development permit.¹⁰⁵ However, an assessment manager will not always assess an application in its entirety; there are circumstances under which a 'concurrence agency' is to be appointed to assist in administering and managing the application.¹⁰⁶ Moreover, certain responsibilities can also be delegated to an 'advice agency' under section 250 of the Act. Lastly, assessment managers and referral agencies¹⁰⁷ can seek advice or comment from third parties about applications.¹⁰⁸ The identity of the competent authority responsible for development assessments can be crucial to whether climate change adaptation takes place or not. The Act provides a myriad of opportunities under which a climate change specialist can become part of the development application process. One such example, springing from the Coastal Protection and Management Act¹⁰⁹ will be explored below.

The SPA planning regime is a comprehensive one that makes provision for planning instruments at state, regional and local level. Local planning instruments include planning schemes, temporary local planning instruments and planning scheme policies. Planning schemes are the most important planning instruments at this level. They are statutory instruments¹¹⁰ created by each local government¹¹¹ in the state to provide for an integrated planning policy for the local government's planning scheme area.¹¹² They may include planning scheme policies and structure

¹⁰⁴ Coastal Protection and Management Act 1995 (Qld)

¹⁰⁵ SPA Sec 247

¹⁰⁶ SPA Sec 251 states that the concurrency agency shall be prescribed under a relevant regulation or shall be the entity to which the management and administering responsibilities had been delegated or devolved.

¹⁰⁷ Advice agencies and concurrence agencies

¹⁰⁸ SPA Sec 256

¹⁰⁹ Coastal Protection and Management Act 1995 (Qld)

¹¹⁰ SPA Sec 80

¹¹¹ SPA Sec 84

¹¹² SPA Sec 79(b)

plans.¹¹³ One of the core matters of planning schemes is 'land use and development,' which includes the effects of land use and development.¹¹⁴ Therefore, local governments must be aware of the future effects of allowing development and activities close to sections of the coastal zone predicted to be affected by climate change in the long-run. If planning schemes aim to adapt to climate change, they must ensure that the coastal zone is to be kept clear of development and environmentally deleterious activities in order to protect people and property from storm surges and sea-level rise.

When the Minister is satisfied that there are signs of risk of significant environmental harm in a planning scheme area, he or she may direct the local government to make a temporary local planning instrument¹¹⁵ that will have the effect of suspending the relevant planning scheme for up to a year.¹¹⁶ They must be designed to protect planning scheme areas from adverse impacts.¹¹⁷ The requirements and contents of these plans are similar to planning schemes.¹¹⁸ The term 'adverse impacts' may well be interpreted to include 'climate change impacts.' A Minister may find that a particular planning scheme is inadequate in dealing with the projected impacts of climate change and consequently direct a temporary planning scheme until the relevant planning scheme has been amended to provide for climate change adaptation.

Finally, in order to avoid the use of temporary planning schemes, a local authority may prepare planning scheme policies that support the local government actions for making and amending planning schemes before releasing its planning scheme.¹¹⁹ These policies can also support the local dimension of a planning scheme¹²⁰ and support local government actions under the SPA for IDAS.¹²¹ It may

¹¹³ SPA Sec 85

¹¹⁴ SPA Sec 89

¹¹⁵ SPA Sec 105

¹¹⁶ SPA Sec 104

¹¹⁷ SPA Sec 101(b)

¹¹⁸ SPA Sec 106-107

¹¹⁹ SPA Sec 108(c)

¹²⁰ SPA Sc 108(b)

¹²¹ SPA Sec 108(c)

include information local governments may require for development applications, standards identified in a code and guidelines or advice about satisfying criteria in planning schemes.¹²² Although these documents are mere guidelines for local authorities when undertaking action under this Act, they can be of use in jurisdictions projected to be significantly affected by sea-level rise and related coastal hazards, such as Brisbane and Cairns. They may well state the type of development or design that will be inimical to climate change adaptation.

State planning instruments, on the other hand, include state planning regulatory provisions, regional plans, state planning policies and standard planning scheme provisions.¹²³ State regulatory provisions form the backbone of the state planning system. They are afforded statutory instrument status under the Statutory Instruments Act¹²⁴ and prevail over all other planning instruments in the Act and in other Acts.¹²⁵ They advance the purposes of the Act by providing regulatory support for regional planning or master planning in the state.¹²⁶ Significantly also they aim to protect planning scheme areas from adverse impacts.¹²⁷ 'Adverse impacts' are not defined and there is thus space to argue that climate-related damage owing to sea-level rise and coastal inundation fall within this definition, especially since climate change adaptation is an objective of the Act. The Minister is required to make these provisions if she or he is satisfied that there is a sign of risk of serious environmental harm.¹²⁸ Low-lying densely populated coastal areas are submitted to fall within this definition. A Minister will do well to set minimum planning requirements for such areas to guard against future climate-related coastal hazards.¹²⁹

¹²² SPA Sec 114

¹²³ SPA Sec 15

¹²⁴ Statutory Instruments Act 1992 (Qld) It is also explicitly stated that state planning regulatory provisions are not subordinate legislation.

¹²⁵ SPA Sec 17-18

¹²⁶ SPA Sec 16(1)(a)

¹²⁷ SPA Sec 16(1)(b)

¹²⁸ SPA Sec 19

¹²⁹ SPA Sec 21 sets out the content of the plan. Other than the requirement for it to make provisions relating to IDAS, there are no specific requirements.

Whereas state planning provisions apply in the state as a whole, regional plans apply only in 'designated regions'¹³⁰ and to Queensland waters adjacent to local government areas/parts.¹³¹ Regional plans are statutory instruments¹³² that contain regional planning policies. The key elements of regional plans are outcomes for the region and policies and actions necessary for achieving these outcomes. They also set out the desired future spatial structure, including the future regional land use pattern.¹³³ Climate change adaptation may well be a desired outcome for coastal regions and the latter can be planned so that development does not take place too close to the coastal zone, which would place it at risk of future climate change.

Standard planning scheme provisions create a consistent structure for planning schemes and may contain standard provisions for implementing integrated planning at local level.¹³⁴ Local governments are required to amend their planning schemes to reflect standard planning scheme provisions.¹³⁵ These instruments can be a useful mechanism to require coastal jurisdictions to make provision for climate change adaptation in the coastal zone to protect people and property. However, they are by their very nature general provisions and will most likely not require local authorities to insert into planning schemes adaptation outcomes and measures relevant to the unique climate change challenges that it will face in the future.

State planning policies advance the purpose of the Act by stating the state's policy about a matter of state interest. Climate change adaptation is a matter of state interest as state planning policies relating directly and indirectly to this topic currently apply in the state.¹³⁶ They are made by the Minister responsible for the matter¹³⁷ and are also stated to be statutory instruments¹³⁸ and therefore must be

¹³⁰ SPA Sec 22 Regions are designated by the regional planning Minister, who may be advised by a regional planning committee, by means of regulation.

¹³¹ 'Queensland waters' will be elucidated below.

¹³² SPA Sec 24

¹³³ SPA Sec 28

¹³⁴ SPA Sec 50(b)

¹³⁵ SPA Sec 55

¹³⁶ See the following few paragraphs

¹³⁷ SPA Sec 44

¹³⁸ SPA Sec 41

taken into account when development decisions are made. State planning policies are also temporary planning instruments as they are only valid for a maximum of 10 years.¹³⁹

The SPA policies and policies sprouting from other acts addressing climate change adaptation and those which have a direct bearing on the planning system devised in the SPA are the *State Planning Policy 1/03: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide* (SPP 1/03),¹⁴⁰ the Coastal Protection and Management Act 1995, the *State Coastal Management Plan* (SCMP)¹⁴¹ and the various Regional Coastal Management Plans (RCMP).¹⁴² Certain guidelines to these documents are also useful in this quest for ascertaining the content and strength of climate change adaptation policy in Queensland, including 'Mitigating the Adverse Impacts on Stormtide Inundation Guidelines'¹⁴³ (Stormtide Guidelines) issued under the SCMP and the Urban Drainage Manual¹⁴⁴ issued under the COAG's National Framework.

Floods, in particular, are dealt with by SPP 1/03. The stated purpose of this document is to ensure that floods and landslides, inter alia,¹⁴⁵ are adequately

¹³⁹ SPA Sec 45

¹⁴⁰ Queensland Government *State Planning Policy 1/03: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide* (2003); available at <http://www.emergency.qld.gov.au/publications/spp/> (viewed on 12 November 2009)

¹⁴¹ Queensland Government *State Coastal Management Plan* (2002); available at http://www.derm.qld.gov.au/environmental_management/coast_and_oceans/coastal_management/state_coastal_management_plan/ (visited on 12 November 2009)

¹⁴² Regional Coastal Management Plans have been drawn up for the climate change 'hotspots,' South East Queensland and the Wet Tropical Coast. See Queensland Government *South-east Queensland Regional Coastal Management Plan*; available at http://epa.qld.gov.au/environmental_management/coast_and_oceans/coastal_management/regional_coastal_management_plans/southeast_queensland_coast/southeast_queensland_regional_coastal_management_plan/ (viewed on 12 November 2009) and Queensland Government *Wet Tropical Coast Regional Coastal Management Plan*; available at http://epa.qld.gov.au/environmental_management/coast_and_oceans/coastal_management/regional_coastal_management_plans/wet_tropical_coast.html (viewed on 12 November 2009)

¹⁴³ Queensland Government *State coastal Management Plan Guidelines: Mitigating the adverse impact of impacts of stormtide inundation*; available at <http://www.derm.qld.gov.au/register/p01698aa.pdf> (visited on 12 November 2009)

¹⁴⁴ Queensland Government *Queensland Urban Drainage Manual* (2007); available at http://www.derm.qld.gov.au/water/regulation/pdf/guidelines/flood_risk_management/qudm_1.pdf (viewed on 12 November 2009)

¹⁴⁵ SPP 1/03 (2003) at 3 The SPP 1/03, however, also deals with other natural hazards unrelated to this dissertation, such as bushfires.

considered when making decisions about development.¹⁴⁶ It applies in all declared 'natural hazard areas' throughout Queensland. With regard to floods, all instances of material changes of use or associated reconfigurations of a lot that increase the number of people living or working in the natural hazard management area, involve institutional uses where evacuating people may be particularly difficult, involve the manufacture or storage of hazardous materials in bulk or involve described¹⁴⁷ building work¹⁴⁸ are covered by policy. 'Natural hazard areas' may therefore be expanded by local authorities if there is scientific evidence of more severe and far-reaching future climate-related floods in its jurisdiction. One can certainly envisage such an expansion since the policy places floods in the climate change context. It talks of the importance of taking future changes to natural hazards into account when undertaking natural hazard assessments and developing natural hazard mitigation strategies.¹⁴⁹ It also makes explicit reference to the predicted effects of climate change that may impact on the severity and rate of recurrence of future floods and landslides in the *Queensland Greenhouse Policy Framework*.¹⁵⁰ Such an approach is submitted to be consistent with the precautionary principle.

Once 'natural hazard management areas' are declared,¹⁵¹ local authorities must ensure that they are reflected and considered in planning schemes and development assessment. According to the SPP1/03, natural hazard management areas must be identified in planning schemes.¹⁵² Natural hazard areas revised to accommodate for the changes in future flood affected areas can thus significantly influence planning schemes. Strategies for dealing with natural hazards in natural hazard areas are also required to be compatible with the 'nature of the hazard,' and

¹⁴⁶ SPP 1/03 (2003) at 3

¹⁴⁷ SPP 1/03 (2003) 13 Work that involves the physical alteration of a watercourse or floodway, including vegetation clearing, or involves net filling of 50 cubic centimetres.

¹⁴⁸ SPP 1/03 (2003) at 13

¹⁴⁹ SPP 1/03 (2003) at 5

¹⁵⁰ Queensland Government *Queensland Greenhouse Policy Framework: A Climate of Change* (2001) This document mostly addresses climate change mitigation, but is useful for the purposes of this discussion in that its content is consistent with the climate change effects stated in Chapter 2.

¹⁵¹ Schedule 3 contains a list of these areas that serve as an interim list of natural hazard areas until they are declared in local planning schemes.

¹⁵² SPP 1/03 (2003) at 8-9

seek to minimise the adverse impacts of floods on existing developed areas and prevent development from materially increasing the extent or the severity of floods.¹⁵³ Strategies must therefore be 'compatible' with more severe future floods and accompanying landslides attributable to global warming. Existing development can accordingly be made more resilient to floods and future development exacerbating the effects of floods may be prohibited in coastal regions that will be vulnerable to future floods.

The SPP1/03 also requires that codes applicable to assessable and self-assessable development in natural hazard areas are aimed at achieving the above outcomes.¹⁵⁴ Similarly, development assessment within natural hazard management areas must be compatible with the nature of the natural hazard. If compatibility is impossible or undesirable for whatever reason, it must be ensured that assessable development occurs in such a way as to minimise, as far as practicable, the adverse effects of natural hazards so that the floods do not result in an unacceptable risk to people or property.¹⁵⁵ Assessment managers may therefore grant development assessments on the condition¹⁵⁶ that the relevant development is resilient enough to withstand more severe future floods if avoiding development in areas that will be affected by future floods is not viable or desirable.

The CPMA, the SCMP and the various regional plans, on the other hand, are hailed as the chief documents addressing stormtide inundation and sea level rise. The CPMA itself does not directly address climate change adaptation, but is potentially a useful tool in Queensland's adaptation efforts. It defines Queensland's 'coastal zone' as coastal waters; or all areas to the landward side of coastal waters in which there are physical features, ecological or natural processes or human activities that

¹⁵³ Ibid at 8-9

¹⁵⁴ The relevant planning schemes or planning scheme policies are also required to specify information expected to be submitted with development applications subject to the codes.

¹⁵⁵ SPP 1/03 (2003) at 6-7

¹⁵⁶ The IDAS will be discussed more fully later. It should be noted now, however, that the Act makes it possible for assessable development to be granted conditionally by assessment managers.

affect, or potentially affect, the coast or coastal resources.¹⁵⁷ If the latter is absent, the landward side of the coastal zone ends at the 'highest astronomical tide.'¹⁵⁸ The seaward boundary, the end of Queensland waters, is found 3 nautical miles from the high water mark out to sea.¹⁵⁹ Land in the coastal zone is capable of private ownership, with the exception of coastal management districts.

Coastal management districts, also called 'state coastal land,'¹⁶⁰ are subject to unique regulatory and enforcement mechanisms. Coastal management districts can be declared by the Minister,¹⁶¹ having regard to, inter alia, the ecological sensitivity and characteristics of the region, the economic productivity of the region and any interests held in land and development and planning in the region.¹⁶² Sections of the coastal zone that are predicted to be severely affected by climate change in the future may well be declared coastal management districts in order to place them under strict state control, making state-led adaptation easier. The Act further empowers the Minister to declare building lines in coastal management districts, prohibiting or restricting development on the seaward side of building lines.¹⁶³ They are thus important tools for expanding coastal management districts as an adaptation measure to guard against future sea-level rise and stormtide inundation.

The SPA's IDAS applies slightly differently in coastal management districts. It sets out specific considerations the competent authorities must take into account when considering an assessable development application,¹⁶⁴ such as the unique characteristics of the coastal zone and public access to the foreshore. Sea-level rise and coastal inundation can possibly be classified as 'unique characteristics' of the coastal zone and therefore impact on development assessments. Furthermore, for a

¹⁵⁷ CPMA sec 15

¹⁵⁸ CPMA sec 13 states that coastal waters end at the highest astronomical tide

¹⁵⁹ The Commonwealth Ocean Policy (2000) 6 available at <http://environment.gov.au/coasts/publications/coastal-policy/index.html> (visited 22 May 2009)

¹⁶⁰ Sec 17(1) unless it is freehold land, a forest or timber reserve, a watercourse or lake or subject to lease or licence issued by the state

¹⁶¹ CPMA sec 54

¹⁶² CPMA sec 56

¹⁶³ CPMA sec 66

¹⁶⁴ CPMA sec 104(2)

development application in the coastal management district, the Chief Executive of the Environmental Protection Agency will act as either the assessment manager (if the Council's¹⁶⁵ approval is not necessary) or as the concurrence agency, a position marked by the power to veto an approval or to require conditions, but without the vires to consider aesthetic factors.¹⁶⁶ This innovative institutional rearrangement allows an environmental specialist, possibly one with knowledge of the predicted effects of climate change on the region, to play a role in assessing the viability of coastal development. Furthermore, it makes provision for specific conditions that can be attached to assessable development authorisations in order to ensure that the impact on the coastal zone is kept to a minimum.¹⁶⁷ One such condition may very well be that any building is made resilient to future coastal floods and storm tide inundation. Furthermore, compliance with these conditions may be secured by requesting the holder of the authorisation to lodge financial security with the chief executive, which will only be returnable upon fulfilment of the conditions.¹⁶⁸ This is submitted to be an effective way to ensure the long-term effectiveness of climate change adaptation initiatives.

The CPMA's derivative instruments, the SCMP¹⁶⁹ and the various RCMPs make more direct reference to climate change and climate change adaptation.¹⁷⁰ These plans are also 'Statutory Instruments' under the Statutory Instruments Act 1997 and therefore need to be taken into account when making decisions regarding the

¹⁶⁵ The Council is ordinarily the body in charge of assessable developments

¹⁶⁶ Environmental Defenders Office (QLD) Inc 'Coastal Protection and Management' (2008) 8; available at

<http://www.edo.org.au/edoqld/edoqld/new/coastal%20protection%20&%20mgmnt%200508.pdf>;

this provision, however, is not applicable outside of the coastal management districts and the Chief Executive will therefore be unable to impose binding conditions on approvals. His or role will be merely advisory in nature

¹⁶⁷ CPMA sec 106

¹⁶⁸ CPMA Sec 107

¹⁶⁹ CPMA Sec 30 makes provision for these plans

¹⁷⁰ CPMA Sec 35 makes provision for these plans

management of the Queensland or regional coast.¹⁷¹ The CPMA also affords these plans the status of State Planning Policy¹⁷² under the SPA.

The SCMP's principles on coastal use and development are for all practical reasons the same as those adopted in the IPA,¹⁷³ although specific to the management of the coastal regions. Significantly, it prohibits the growth of urban settlements in areas identified to have or have the potential to have unacceptable risk from coastal hazards.¹⁷⁴ These hazards are identified as stormtides, cyclone effects and related inundation. The exact positioning of these areas must be based on the mapping of stormtide hazards as well as considering the impact of physical coastal process, including any impacts from sea-level rise. Where these areas have already been developed, further development in these areas must address the vulnerability to sea-level rise and stormtide inundation and the proposed access to and protection of evacuation routes.¹⁷⁵ Another coastal management outcome for this plan is to ensure that the 'coast is managed to allow for natural fluctuations to occur, including any that occur as a result of climate change and sea level rise, and provide protection for life and property.'¹⁷⁶ In order to achieve this outcome, the principle that 'trends in climate change including sea level rise, more extensive stormtide flooding and associated potential impacts are taken into account in the planning process.'¹⁷⁷ More specifically, a hierarchy of approaches is created¹⁷⁸ to fulfil this climate change adaptation directive:

- *'[A]void – focus on locating new developments in areas not vulnerable to the impacts of climate change;*
- *planned retreat – focus on systematic abandonment of land, ecosystems and structures in vulnerable areas;*

¹⁷¹ SCMP (2002) 14

¹⁷² CPMA Sec 50

¹⁷³ See notes 42 and 43 above

¹⁷⁴ SCMP (2002) at 17

¹⁷⁵ SCMP (2002) at 29

¹⁷⁶ SCMP (2002) at 27

¹⁷⁷ *Ibid* at 27

¹⁷⁸ *Ibid* at 27

- *accommodate – focus on continued occupation of near-coastal areas but with adjustments such as altered building design; and*
- *protect – focus on the defence of vulnerable areas, populations centres, economic activities and coastal resources.'*

The South-East Queensland Regional Coastal Management Plan (SEQRCMP)¹⁷⁹ does not contain a specific climate change adaptation policy. Instead it refers the reader to its policy directives on erosion prone areas and the SCMP's climate change adaptation directive. However, a related policy document, the *South-East Queensland Regional Plan*,¹⁸⁰ states that land in this region that is not already subject to a development commitment must take into account sea level rise of at least 0.8 meters; and land that is already subject to a development commitment must accommodate for a gradually rising sea level.¹⁸¹ The Wet Tropical Coast Regional Coastal Management Plan (WTCRCMP) does not identify areas particularly at risk from climate change either. Only broad statements are made that development agencies must incorporate available data into development decisions and must make a concerted effort to enhance knowledge of the future effects of climate change in the region.¹⁸²

3.3 South African adaptation regime

3.3.1 Relevant policies

The South African government has released several policies indirectly relevant to and dealing explicitly with climate change adaptation.¹⁸³ The National Framework for Sustainable Development in South Africa¹⁸⁴ (NFSD) falls into the former

¹⁷⁹ SEQ Regional Coastal Management Plan (200_) at 32

¹⁸⁰ Queensland Government South East Queensland Regional Plan (2009) at 45

¹⁸¹ Ibid at 45 The projected sea level rise is as follows: 0.3 meters in 2050; 0.4 meters in 2060; 0.5 meters in 2070; 0.6 meters in 2080; 0.7 meters in 2090; and 0.8 meters in 2100.

¹⁸² WTC Regional Coastal Management Plan (200_) at 50-51

¹⁸³ At the time of writing, however, the Department of Water and Environmental Affairs is in the process of drafting a broad climate change policy, named the 'Zero' Policy.

¹⁸⁴ Department of Environmental Affairs and Tourism *A National Framework for Sustainable Development in South Africa* (July 2008), available at http://www.environment.gov.za//nssd_2005/background_docs/08%20JULY%202008%20NFSD.pdf (visited on 12 April 2010), henceforth the NFSD

category. It serves to prescribe how the concept of sustainable development is to be understood and applied in South Africa.¹⁸⁵ According to the policy, sustainable development in a developing country such as South Africa means economic growth, but within ecological thresholds.¹⁸⁶ A 'zero growth' strategy' as proposed by developed countries is stated to be undesirable in the developing country framework.¹⁸⁷ In addition, the challenge of meeting fundamental human rights needs, further compounds the notion of sustainable development in South Africa.¹⁸⁸ It also identifies more specific challenges and constraints. The pertinent ones include 'the need for settlements that are spatially integrated and create safe and healthy living environments,'¹⁸⁹ 'the need for a more integrated approach to land use and development'¹⁹⁰ and 'the need for improved integration of environmental considerations into Integrated Development Plans and Spatial Development Frameworks.'¹⁹¹

It seeks to address the above challenges by, inter alia, creating sustainable human settlements by ensuring that the design of urban infrastructure takes into account sustainability design criteria;¹⁹² and integrating environmental considerations into sectoral policy and activities as well as spatial planning devices.¹⁹³ Climate change is also regarded by the policy to be a cross-cutting developmental and environmental challenge. However, it does not specify that the South African coast needs to be protected from future sea-level rise and coastal storm inundation.¹⁹⁴ Instead it identifies sea-level rise as a threat for densely populated, low-lying coastal areas in Africa. Adaptation costs in this regard are projected to be as much as 5-10% of an

¹⁸⁵ NFSD at 12 The framework refers the reader to the definition of sustainable 'development' in the National Environmental Management Act 107 of 1998

¹⁸⁶ NFSD at 14

¹⁸⁷ NFSD at 15

¹⁸⁸ NFSD at 19-21

¹⁸⁹ NFSD at 30

¹⁹⁰ NFSD at 31

¹⁹¹ NFSD at 31

¹⁹² NFSD at 38

¹⁹³ NFSD at 33-34

¹⁹⁴ NFSD at 40 It emphasizes the danger of stresses on water resources and agriculture as a result of less future precipitation and changing precipitation patterns.

African nation's GDP.¹⁹⁵ It then also refers the reader to the National Climate Change Response Strategy for South Africa or the NCCRS.¹⁹⁶

The NCCRS emphasizes that South Africa's international climate change obligations must be fulfilled in a manner consistent with other government policies and national priorities. Other government policies envisaged here may be the overarching Reconstruction and Development Programme that aims to accelerate the provision of services to poor households within a broad sustainability framework.¹⁹⁷ A relevant national priority in this regard may well be poverty alleviation. As far as climate change adaptation is concerned, the chief objective is to 'offset South Africa's vulnerability to climate change.'¹⁹⁸ Although coastal management is listed as a climate change adaptation issue on an international scale, it is not listed as a climate change adaptation priority for South Africa. It however provides that the increased incidences and severity of future floods must be addressed by incorporating relevant adaptation measures into the National Disaster Management Act¹⁹⁹ and by ongoing monitoring and forecasting as well as establishing new baselines and improving the resilience of buildings to floods.²⁰⁰ To the end of climate change adaptation it prescribes the development of existing statutory instruments and policies to address climate change, albeit by means of broad adaptation objectives instead of specific adaptation principles and methods.²⁰¹

¹⁹⁵ NFSD 59

¹⁹⁶ Department of Environmental Affairs and Tourism *A National Climate Change Response Strategy for South Africa* (2004), available at http://unfccc.int/files/meetings/seminar/application/pdf/sem_sup3_south_africa.pdf (last visited on 13 April 2010)

¹⁹⁷ Government of the Republic of South Africa *The Reconstruction and Development Framework*; available at <http://www.anc.org.za/rdp/rdp.html> (visited on 13 April 2010)

¹⁹⁸ NCCRS at 17

¹⁹⁹ The Disaster Management Act 57 of 2002

²⁰⁰ NCCRS at 19

²⁰¹ NCCRS at 29

The White Paper for Sustainable Coastal Development in South Africa²⁰² is particularly pertinent to this dissertation. It is South Africa's framework policy for integrated coastal management that purports to ensure sustainable coastal development that involves a balance between material prosperity, social development, cultural values, spiritual fulfilment and ecological integrity, in the interest of all South Africans.²⁰³ The policy statements relevant to the dissertation are found under the theme of 'coastal planning and development.' The policy purports to, inter alia, make provisions to 'plan and manage coastal development so as to avoid increasing incidence and severity of natural hazards and to avoid exposure of people, property and economic activities to significant risk from dynamic coastal processes' and to take into account the 'potential consequences medium- and long-term climate change and associated sea level rise... in all coastal planning and management.'²⁰⁴

Various measures are enumerated in fulfilment of the first goal. Firstly, the biophysical features of the coast must act as a natural buffer against coastal hazards and therefore as a 'development set-back.' Secondly, the areas subject to high energy coastal processes must be identified and managed. Thirdly, inappropriately located structures must be relocated and removed where possible. Fourthly, restoration and/or extensions of structures in hazardous coastal areas will be discouraged. And lastly, the precautionary, risk averse approach will guide decision-making, especially in dynamic and high risk areas.²⁰⁵ Government seeks to achieve the second goal by making provision for appropriate preventative and adaptive measures in all coastal planning and management decisions and actions. Attention will specifically be paid to the potential impact of sea level rise on low-lying, densely populated areas of the coast. And to this end, special consideration will be given to

²⁰² Department of Environmental Affairs and Tourism *White Paper for Sustainable Coastal Development in South Africa* (2000); available at http://www.environment.gov.za/Services/documents/White-papers/White_Paper.pdf (last visited on 13 April 2010); henceforth the WPSCD

²⁰³ WPSCD at 7

²⁰⁴ WPSCD at 65

²⁰⁵ WPSCD at 71

coastal infrastructure such as beachfront buildings as well as adequate monitoring and public awareness about possible implications of climate change.²⁰⁶

The most comprehensive account of climate change adaptation at local level is the City of Cape Town's *Framework for Adaptation to Climate Change*,²⁰⁷ released in 2006. However, the document does not have binding force and merely makes reference to the effect of climate change on the Western Cape and contains a series of recommendations for action by local government²⁰⁸ and case studies on the projected effects of climate change at certain geographical locations within the municipal area and the projected costs of related damages annually.²⁰⁹

3.3.2 Relevant statutes

A discussion on the environmental statutory measures must necessarily start with the constitutionally enshrined environmental right. The environmental right is found in section 24 of the Constitution and reads as follows:

'Everyone has the right –

- (a) to an environment that is not harmful to their health and 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.*

Subsection (a), or 'the environmental right' is of particular importance to the common law since it applies horizontally, or between natural and juristic persons,

²⁰⁶ WPSCD at 71

²⁰⁷ Mukhiebair P and Ziervogel G *Framework for Adaptation to Climate Change in the City of Cape Town* (2006)

²⁰⁸ *Ibid* 41 For example, it is proposed that local government draws up a coastal vulnerability map; devises set-back lines based on the vulnerability map; and implements structural mitigation measures to minimise the effects of storm tides and floods.

²⁰⁹ *Ibid* 39-40 Studies were conducted for Strand, Northern False Bay, Table Bay, all ports and harbours and the Cape Flats. The document also includes a more detailed case study of Woodridge Island in Woodstock and Muizenberg in False Bay.

as envisaged by section 8(2) of the Constitution.²¹⁰ The law that regulates matters between individuals, such as the law of delict can thus potentially be affected by this important subsection.²¹¹ The ambit of the environmental right is exceptionally wide from a number of perspectives. Firstly, it is afforded to ‘everyone,’ thus having a potentially wide range of litigants.²¹² Secondly, the meaning of environment, as set out in the Act that gives effect to section 24, the National Environmental Management Act or NEMA,²¹³ defines ‘environment’ to include both the natural and human environment. Lastly, the terms ‘health’ and ‘well-being’ can arguably also be interpreted to have wide reaching implications. ‘Health’ is not a foreign concept to South African law, since the right to health has always been recognised under the law of nuisance. A land use that is proved to objectively affect another’s health will be found to be a nuisance.²¹⁴ The constitutional concept of ‘health’ is similarly objectively ascertainable with reference to a minimum standard, such as the one preferred by the World Health Organisation, ‘state of complete physical, mental and physical well-being.’²¹⁵ ‘Well-being’ on the other hand is an open-ended notion and cannot be defined precisely.²¹⁶ The meaning of this word can conceivably be relative to the personality of the person seeking to enforce the right and would have to be determined in the light of the facts before the court.²¹⁷ In *Hichange Investments (Pty) Ltd v Cape Produce Company (Pty) Ltd t/a Pelts*

²¹⁰ Du Bois F and Glazewski J ‘The environment and the Bill of Rights’ in *Butterworth’s Bill of Rights Compendium* (1997) 2B1 at 2B4.5.1; see also *Minister of Health and Welfare v Woodcarb (Pty) Ltd and Another* 1996 (3) SA 155 (N) for an example of how the right was applied horizontally in an environmental case.

²¹¹ Take note that subsection (b) is a duty on government and is thus not always relevant to the law of delict – see Feris L ‘Chapter 24: Environment’ in I Currie and J De Waal *The Bill of Rights Handbook* (2005) 524-525.

²¹² This wide range of course leaves it open to those protecting economic rights under the guise of enforcing the environmental right – see Sachs J’s judgment in *Fuel Retailers Association of Southern Africa v Director-General Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* 2008 (6) SA 4 (CC) at para 109

²¹³ 107 of 1998 Section 1

²¹⁴ *Verstappen v Port Edward Town Board and Others* 1994 (3) SA 569 (D) at 577H

²¹⁵ Feris L ‘Chapter 24: Environment’ in I Currie and J De Waal *The Bill of Rights Handbook* (2005) 526

²¹⁶ *HTF Developers (Pty) Ltd v The Minister of Environmental Affairs and Tourism* 2006 (5) SA 512 (T) at para 18

²¹⁷ Glazewski J ‘Chapter 19: The environmental right’ in Haysom, Davis and Thompson *South African Constitutional Law* (2007) at 19.5.2

Products and Others,²¹⁸ the applicant's 'well-being' was found to be infringed by the respondent's contamination of the air with hydrogen sulphide, thereby creating an 'environment of stench.' The insertion of 'well-being' is welcomed not only because it raises the minimum standard of environmental quality to which 'everyone' should be exposed, but also because it may entail a sense of environmental integrity. It is argued that the net cast by 'well-being' is wide enough to capture issues such as the conservation of fauna and flora, the maintenance of biodiversity²¹⁹ and proper planning in the urban environment.²²⁰ Some even go as far as submitting that it includes notions of ethics and spiritual dimension of the natural environment.²²¹

The importance and influence of the environmental right, often underestimated,²²² was pointed out in the oft quoted statement of Olivier JA in Director: Mineral Development, Gauteng Region, and Another v Save the Vaal Environment and Others:²²³

'Our Constitution, by including environmental rights as fundamental, justiciable human rights, by necessary implication requires that environmental considerations be accorded recognition and respect in the administrative processes in our country. Together with the change in the ideological climate must also come a change in our legal and administrative approach to environmental concerns.' [own emphasis]

The National Environmental Management Act²²⁴ or NEMA, in effect an extension of Section 24 of the Constitution, enjoys the status of 'Constitutional Legislation' The NEMA's interpretation and operation is ruled by certain principles. Following the international trend, the central theme of NEMA's Section 2 principles is 'sustainable development' and two integral aspects of this philosophy, namely that a risk-averse and cautious approach is applied, which takes into account the limits of current

²¹⁸ Hichange Investments (Pty) Ltd v Cape Produce Company (Pty) Ltd t/a Pelts Products and Others [2004] 1 All SA 636 (N) at 414I

²¹⁹ Feris L 'Chapter 24: Environment' in I Currie and J De Waal *The Bill of Rights Handbook* (2005) 526

²²⁰ It may be argued that exposure of coastal private property to climate change related hazards amounts to improper planning that diminishes those property owners' 'well-being.'

²²¹ Kidd M *Environmental Law* (2008) 21

²²² Feris L 'Constitutional environmental rights: an underutilised resource' (2008) 24 *SAJHR* 29

²²³ 1999 (2) SA 709 (SCA) at 719C-D

²²⁴ The National Environmental Management Act 107 of 1998, henceforth NEMA

knowledge about the consequences of decisions and actions;²²⁵ and that ‘negative impacts on the environment and on people’s environmental rights are anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied’²²⁶ are among the principles of the Act. The Act therefore encourages prospective action to be taken by government to guard against future environmental risks, such as climate change. Cognisance must also be taken of the government’s trusteeship over the environment²²⁷ and the fact that ‘global and international responsibilities’ must be discharged in the national interest.²²⁸ In addition, it is also significant that

‘Sensitive, vulnerable, highly dynamic and stressed ecosystems, such as coastal shore, estuaries, wetlands and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.’²²⁹

The importance of coastal management must accordingly influence all human activities that have an impact on the environment in the coastal zone. It will be recalled that planning for and adapting to climate change constitutes an integral aspect of coastal management under the White Paper for Sustainable Coastal Development.²³⁰

There is plenty of scope for arguing that the planning framework in South Africa sits comfortably with implementing planning-related climate change adaptation measures. Firstly, the Local Government: Municipal Systems Act²³¹ or LGMSA makes provision for the chief development and planning instrument,²³² the Integrated

²²⁵ NEMA Sec 2(4)(a)(vii)

²²⁶ NEMA Sec 2(4)(a)(viii)

²²⁷ NEMA Sec 2(4)(o)

²²⁸ NEMA Sec 2(4)(n)

²²⁹ NEMA Sec 2(4)(r)

²³⁰ See Supra note 174

²³¹ Local Government: Municipal Systems Act 32 of 2000 (LGMSA)

²³² Take note that there is a myriad of other legislation at national level that makes provision for other land use planning measures, such as the Development Facilitation Act 67 of 1995, the Physical Planning Act 88 of 1967, the Physical Planning Act 125 of 1999 and the Less Formal Township establishment Act 113 of 1991. These acts are, however, of less relevance to the dissertation.

Development Plan or IDP.²³³ Each municipality in South Africa is to adopt this 'single, inclusive and strategic plan' for the development of the municipality.²³⁴ IDPs must contain a long-term vision of the development of a municipality.²³⁵ This includes an assessment of the existing level of development in a municipality's area of jurisdiction;²³⁶ development priorities and objectives;²³⁷ a spatial development framework;²³⁸ applicable disaster management plans;²³⁹ key performance indicators and performance targets;²⁴⁰ and operational strategies.²⁴¹ Its strategies are to be aligned with other legislation and policy.²⁴² IDPs of coastal jurisdictions therefore can potentially include climate change adaptation as a priority and objective and as an operational strategy to address the potential effects of climate change on beachfront property. Disaster management plans can furthermore be adapted to account for climate change. Spatial development frameworks can furthermore indicate climate change risk areas where development must be restricted or prohibited.

IDPs guides and informs all planning and development in a municipality's area of jurisdiction and must influence all decisions with regard to planning, management and development in a municipality.²⁴³ It binds the municipality in the exercise of its powers and duties except to the extent of any inconsistency between a municipality's IDP and national or provincial legislation, in which case such legislation prevails.²⁴⁴ It is therefore insubordinate to statutory instruments, such as NEMA but prevails over other policies and regulations, such as zoning schemes and structure plans.

²³³ LGMSA Sec 25 and Sec 26

²³⁴ LGMSA Sec 25

²³⁵ LGMSA Sec 26(a)

²³⁶ LGMSA Sec26(b)

²³⁷ LGMSA Sec 26(c)

²³⁸ LGMSA Sec 26(e)

²³⁹ LGMSA Sec26(g)

²⁴⁰ LGMSA Sec26(i)

²⁴¹ LGMSA Sec 26(f)

²⁴² LGMSA Sec 26(d)

²⁴³ LGMSA Sec 35(a)

²⁴⁴ LGMSA Sec 35(b)

One such statutory instrument is the National Environmental Management: Integrated Coastal Management Act (NEMICMA),²⁴⁵ legislation that stems from the White Paper on Sustainable Coastal Development. This Act is useful for the mitigation of the effects of climate change as it aims to create a coordinated and integrated management system for the South African coast by placing the coastal zone in the state's care.²⁴⁶ The NEMICMA defines the coastal zone²⁴⁷ as the area stretching from the highwater mark²⁴⁸ to the end of the South African exclusive economic zone.²⁴⁹ The coastal zone is made up of several distinct components, most importantly, coastal public property, the coastal protection zone, coastal access land and coastal protected areas.²⁵⁰ Certain rules and regulations apply throughout the coastal zone whilst others apply only uniquely to a single component of the coastal zone.

The most direct reference to climate change in the Act is found in the section dealing with determining the boundaries of coastal areas.²⁵¹ When determining the inland coastal boundary of coastal public property,²⁵² the Minister must take into account, amongst other factors, 'the potential effects of the projected rises in sea-level.'²⁵³ Moreover, an MEC determining the inland boundary of the coastal protection zone²⁵⁴ must consider, inter alia, 'the need to avoid risks posed by natural hazards to people, biodiversity, coastal public property;'²⁵⁵ and 'the

²⁴⁵ National Environmental Management: Integrated Coastal Management Act 24 of 2008; henceforth NEMICMA

²⁴⁶ NEMICMA Sec 2(b) and (c)

²⁴⁷ NEMICMA sec 2(a) and 2(b)

²⁴⁸ NEMICMA sec 1 "seashore;" sec 14 stipulates the exact position of the high water mark

²⁴⁹ NEMICMA sec 1 "coastal zone"

²⁵⁰ NEMICMA sec 1 "coastal zone"

²⁵¹ NEMICMA Chapter 3

²⁵² NEMICMA Chapter 2 Part 1 Coastal public property makes up the vast majority of the coastal zone.

²⁵³ NEMICMA Sec 27(1)(d)

²⁵⁴ NEMICMA Chapter 2 Part 2 This component is sometimes also called the coastal buffer zone in other jurisdictions. Section 17 states that the coastal protection zone is established for enabling the use of land that is adjacent to coastal public property or that plays a significant role in a coastal ecosystem to be managed, regulated or restricted in order to, inter alia, protect people, property and economic activities from risks arising from dynamic coastal processes, including the risk of sea-level rise.

²⁵⁵ NEMICMA Sec 28(3)(c)

potential for the number and severity of natural disasters to increase due to the effects of global climate change and other impacts on the environment, and the importance of taking preventative measures to prevent these threats.²⁵⁶ It is clear that the establishment of these pivotal components of the coastal zone must be influenced by climate change projections. Integrating climate change knowledge into planning mechanisms is an effective adaptation method.

Another useful measure that potentially applies in the coastal zone is establishment of set-back lines. The basis for establishing such a line can, inter alia, be the protection of the coastal public property, private property and public safety.²⁵⁷ It may prohibit or restrict the building, erection, alteration or extension of structures that are seaward of the line.²⁵⁸ Significantly, set-back lines may be situated outside of the coastal zone.²⁵⁹ A coastal set-back line must appear on the map of a relevant municipality's zoning scheme.²⁶⁰ An MEC may well use available climate change predictions to inform the establishment of a set-back line in a low-lying area that will potentially be affected by sea level rise and coastal inundation to discourage or prohibit future development seaward of the line (especially where the inland boundary of the coastal zone proves inadequate to protect people and property from sea-level rise and related future disasters).

NEMICMA does not prescribe a management regime for the coastal zone; instead it makes provision for the drawing up of coastal management programmes on national,²⁶¹ provincial²⁶² and municipal²⁶³ level by the Minister, the MEC and the municipal council respectively within four years of the Act coming into force.²⁶⁴ They must contain a vision for the management of the coastal zone, contain coastal

²⁵⁶ NEMICMA Sec 28(3)(d)

²⁵⁷ NEMICMA Sec 25(1)(a)(i)

²⁵⁸ NEMICMA Sec 25(1)(b)

²⁵⁹ NEMICMA Sec 25(4)

²⁶⁰ NEMICMA Sec 25(3) Zoning schemes will be discussed below.

²⁶¹ NEMICMA sec 44

²⁶² NEMICMA sec 46

²⁶³ NEMICMA sec 48 This Section provides that the plans at this level may be adopted as part of the relevant municipality's IDP.

²⁶⁴ NEMICMA sec 44, 46, 48

management objectives, norms and standards; strategies aimed at achieving these objectives; and performance indicators to measure whether the objectives are being met.²⁶⁵ These plans may well thus include climate change adaptation as an objective and hence contain adaptation strategies, specific to the area in which it applies, modelled on those discussed in Chapter 2 above. Coastal management plans can potentially also contain standards relating to adaptation measures that must be upheld in the event of the coast being planned or developed. However, Coastal management plans are afforded the status of 'policy directives.'²⁶⁶ They are consequently not binding on planning authorities, but mere guidelines.

The NEMICMA's Coastal planning schemes, on the other hand, have a binding status. A coastal planning scheme is a scheme that facilitates the attainment of coastal management objectives by defining within the coastal zone or coastal management zone, which may be used exclusively for specified purposes or activities, or may not be used for specified purposes or activities;²⁶⁷ and by prohibiting or restricting uses of areas that do not comply with the rules of the scheme.²⁶⁸ A municipality may not adopt a planning scheme that is inconsistent with a coastal planning scheme.²⁶⁹ Activities that may place people or property in the way of sea-level rise or coastal inundation may thus be restricted or prohibited by the adoption of such a scheme, providing climate change adaptation is made a coastal management objective. A municipality's planning instruments, such as its IDP and its zoning schemes, will accordingly be affected.

Provision for zoning is made in provincial planning legislation. The Cape Land Use Planning Ordinance (or LUPO)²⁷⁰ for example, which applies in the provinces of the Northern Cape, the Western Cape and the Eastern Cape, makes provision for structure plans and zoning schemes. Structure plans are guidelines for future spatial planning of the area to which it relates (including urban renewal, urban design and

²⁶⁵ NEMICMA Sec 45, 47 and 49

²⁶⁶ NEMICMA Sec 45, 47, 49

²⁶⁷ NEMICMA Sec 56(1)(a)

²⁶⁸ NEMICMA Sec 56(1)(b)

²⁶⁹ NEMICMA Sec 57(2)(b)

²⁷⁰ Cape Land Use Planning Ordinance No.15 of 1985 or LUPO

the preparation of development plans) as well as the general welfare of the community concerned.²⁷¹ They do not confer or take away any rights in relation to land,²⁷² but they may authorise zoning in accordance with such structure plan.²⁷³ A structure plan can thus, for instance, potentially guide urban renewal and urban design programmes at municipal level to require that buildings are made resilient to the future effects of climate change; or that development in densely populated low-lying areas is restricted or prohibited in order to minimise exposure of people and property to sea-level rise and coastal inundation.

Zoning schemes on the other hand are drawn up by a municipal council to determine use rights and to provide for control over rights and over the utilisation of land in the area of jurisdiction of a local authority.²⁷⁴ The Draft City of Cape Town Zoning Scheme,²⁷⁵ for example makes provision for areas to be zoned 'open space zones.' Under this zoning category, 'environmental conservation zones,'²⁷⁶ which have the purpose of conserving environmental resources, are particularly useful for climate change adaptation planning. In Chapter Two it was said that proper management of coastal ecosystems is an effective adaptation mechanism. The zoning scheme document also provides for so-called overlay zones which can limit land use rights and stipulate more restrictive development rules for an area that may encompass more than one base zone. Overlay zones are useful to a municipality in that they can give effect to certain planning instruments that would be mere guidelines on their own. The use of overlay zones for specific management purposes can facilitate climate adaptation in the following ways. An environmental management overlay zone²⁷⁷ declared over the coast can provide for

²⁷¹ LUPO Sec 5(1)

²⁷² LUPO Sec 5(3)

²⁷³ LUPO Sec 5(2)

²⁷⁴ LUPO Sec 11

²⁷⁵ City of Cape Town Metropolitan Council City of Cape Town Zoning Scheme 4th Draft (2007) available at

http://www.capetown.gov.za/en/planningandbuilding/Publications/LandUseManagement/Documents/CoCT_Zoning_scheme_Executive_summary_4th_Draft_-_Nov_07_422008175036_447.pdf

(viewed on 15 February 2010); henceforth Cape Town Draft Zoning Scheme

²⁷⁶ Cape Town Draft Zoning Scheme

²⁷⁷ Cape Town Draft Zoning Scheme

the management of special natural and environmental characteristics of the coastal area. Low-lying, sandy erosion-prone areas are areas that warrant special management mechanisms to guard against the effects of future climate change. Zoning scheme documents must also be accompanied by zoning maps that show zones and land units in respect of land in its area of jurisdiction.²⁷⁸

The NEMA and the NEMICMA also provide for mechanisms that can be used to protect the coastal environment and its inhabitants from sea-level rise and coastal inundation. Firstly, environmental assessments are required for certain activities in the coastal zone. The chief provisions for environmental assessments can be found in section 24 of NEMA and related documents. The activities that may not commence without undergoing an environmental assessment have been identified in Government Regulations 386 and 387 of 2006. The list of activities in the former can only commence or continue subject to undergoing a basic environmental assessment and those activities listed in the latter require a full environmental impact assessment before such activities can commence or continue. Basic assessment activities relevant to the discussion include 'the construction of facilities or infrastructure...', the 'construction of earth moving activities in the sea or within hundred metres inland of the highwater mark of the sea...', including disturbing the natural vegetation and coastal processes in any way.²⁷⁹ If these activities take place on a larger scale, a full environmental impact assessment will be required for it to take place.²⁸⁰

Where environmental authorisations are required for coastal activities, the NEMICMA makes it compulsory for the competent authorities, typically the Provincial Department in charge of Environmental Affairs,²⁸¹ to consider, inter alia, the likely impact of the proposed activity on the coastal environment, including the cumulative effect of its impact together with those of existing activities; and the

²⁷⁸ LUPO Sec 10

²⁷⁹ GNR 386 in GG No. 28753 dated 21 April 2006

²⁸⁰ GNR 387 in GG No. 28753 dated 21 April 2006

²⁸¹ GNR 385 in GG No. 28753 dated 21 April 2006 Section 3, read together with GNR 386 in GG No. 28753 dated 21 April 2006 and GNR 387 in GG No. 28753 dated 21 April 2006

likely impact of coastal processes on the proposed activity.²⁸² Thus, not only must the impact of the proposed development on the coastal zone be taken into account, but also the impact of the coastal zone on the proposed development. It has already been said that the definition of 'coastal processes' must be understood as being inclusive of future sea-level rise and climate-related coastal hazards under the South African integrated coastal management regime. If such an interpretation is accepted, environmental assessments must necessarily contain references to climate change if they are to be granted.

3.4 A comparison between the two adaptation regimes

One can conclude that the various policies and legislation application in Queensland and South Africa lays a good groundwork for taking steps to adapt to future climate change. Principles and guidelines of international law climate change adaptation documents, such as ecologically sustainable development, the precautionary principle and intergenerational equity, also form the basis of both South African and Queensland environmental policies and legislation. In Australia the NSESD and the IGAE list these principles and guidelines and in South Africa, the Constitution, NEMA and the NSSD provide for the consideration of these principles. In both jurisdictions, these principles must inform decisions that impact on the environment. Any decision impacting on the coastal environment must therefore be taken in a risk-averse manner and having regard to the well-being of future generations. Scientific uncertainty on the impacts of climate change and the delayed nature on climate change impacts can therefore not be used as an excuse not to adopt climate change policy.

In both jurisdictions also, policies at national, commonwealth and state level are often broad statements of political will to adapt to climate change. Policies such as the National Climate Change Adaptation Framework, the Queensland ClimateSmart strategy and the South African White Paper for Sustainable Coastal Management states that climate change adaptation measures are necessary and that climate

²⁸² NEMICMA Section 63(1)

change considerations must be integrated into planning decisions impacting on the coastal zone. These policies, however, lack in specificity and are only semi-binding. They were designed to delegate adaptation responsibility in the coastal zone to government at local level, and in the South African situation, to provide the skeleton around which legislation may be drafted (the promulgation of the NEMICMA following the structure and recommendations of the White Paper for Sustainable Coastal Management is a prime example hereof). The adaptation policies in Queensland is submitted to be at a more advanced phase than in South Africa as certain climate change 'hotspots' have already been identified and declared in this jurisdiction.

The Queensland statutory planning regime is both comprehensive and cohesive. All relevant planning instruments spring from a single, modern, all-inclusive legislative instrument, the SPA. The SPA makes specific reference to climate change and climate change adaptation as an issue in modern planning matters at the outset and thus sets the tone for the rest of the Act. Planning schemes, the basic planning prototype at local level, is influenced by policies and regulations from state level, which may well make it obligatory for local governments to adapt to climate change. The CPMA, although devoid of any reference to climate change itself, makes provision for policies that contain coastal management directives for a state that will be affected by climate change. The RCMPs, however, can still be more specific about climate change hotspots and specific unique measures that will be taken to address the climate change problems in those areas.

Furthermore, planning instruments, generally are statutory instruments and authorities must consequently 'have regard to' them in their roles as assessment managers and planners. However, concern has been expressed as to the binding nature of planning instruments as they were oftentimes undermined in practice under the previous Integrated Planning Act²⁸³ regime.²⁸⁴ The courts have not been

²⁸³ Integrated Planning Act 1997 (Qld) is the SPA's predecessor.

²⁸⁴ Environmental Defenders Office (QLD) Inc 'Coastal Protection and Management' (2008) 6; available at

willing to accept responsibility for incorporating climate predictions into the planning process either. The Queensland Planning and Environmental Court (QPEC) upheld a decision by a local authority to approve development in an area subject to inundation at times of severe storm events. The court showed considerable deference to the assessment manager in its judgment that such a level of caution is neither reasonable nor reasonably required.²⁸⁵ Similarly, in *Mackay Conservation Group Inc v Mackay City Council*,²⁸⁶ the court was unwilling to set aside on review a decision to approve development despite the municipal council's decision to ignore a caveat from the Queensland Department of Resources and Mines that the development will be in danger of being damaged by a 1-in-500 year inundation event.²⁸⁷ McDonald²⁸⁸ believes that such a deferential approach is questionable in the light of the scientific strength of climate predictions.

By contrast, the South African statutory planning regime is more fragmentary. Planning instruments can be found in national, provincial and local legislation. Perhaps, however, this could be expected for a much larger and complex jurisdiction. The NEMICMA is crucial for influencing planning instruments to include climate change adaptation measures for the coastal zone. It is the only planning-related statutory instrument that makes direct reference to climate change (albeit only with regards to the establishment of the boundaries of the coastal zone) and if viewed against the background of its underlying policy, the White Paper for Sustainable Coastal Management, contains various planning and regulatory instruments useful to support South Africa's climate change adaptation efforts.

The binding nature of climate change statutes and policies in South Africa is also a moot point. The South African courts have emphasized the significant burden already carried by the government in its quest to provide poor communities with

<http://www.edo.org.au/edoqld/edoqld/new/coastal%20protection%20&%20mgmnt%200508.pdf>
(viewed on 12 November 2009)

²⁸⁵ *Daikyo (North Queensland Pty Ltd) v Cairns City Council* [2003] QPEC 022

²⁸⁶ [2005] QPEC

²⁸⁷ Climate predictions state that these events will become more frequent and severe.

²⁸⁸ McDonald J 'A risky climate for decision-making: the liability of development authorities for climate change impact' (2007) 24 *EPLJ* 405 at 410-411

socio-economic services in accordance with the Constitution and the problem of the polycentricity in socio-economic rights litigation.²⁸⁹ The same can be said of future climate-related hazards. As stated above, significant funds will have to be made available for adaptation in a developing country such as South Africa that host a large number of people that will be vulnerable to climate change effects. Furthermore, it is not certain whether South African authorities, especially at local government level, will have the necessary skill or capacity to implement climate change measures in the coastal zone.

An unambiguous duty in statutory law for governments to adapt to climate change can thus not be said to exist in either jurisdiction. Some might call the inability of the law to establish a clear duty a 'policy gap.'²⁹⁰ The climate change policy lacuna in both jurisdictions, however, does not necessarily mean that there is no duty on these governments to adapt to climate change. The ancient bodies of common law doctrines in either jurisdiction is yet to be explored and it may be revealed that these sets of rules are capable of coercing governments to adapt to climate change. The doctrines of tort and delict are of particular import for the purposes of this dissertation. It will, however, be appropriate to firstly say something about the usefulness and relevance of the common law, and in particular tort and delict, in environmental matters before the intricacies of the two bodies of common law are explored in more detail.

4. The relevance of the common law for climate change adaptation

4.1 The role of the common law in the environmental context

4.1.1 Limitations of the statutory frameworks

²⁸⁹ Soobramoney v Minister of Health (KwaZulu-Natal) 1998 (1) SA 765 (CC) at para 18 Judgments on socio-economic issues have, inter alia, budgetary implications and individuals who feel aggrieved as a result of not being afforded their socio-economic rights will not easily be granted judgment.

²⁹⁰ Supra note 148 at 24

Courts have been content to defer to the legislature and the executive and their law-making powers, especially regarding environmental issues.²⁹¹ Instead, public regulation or the ‘command and control’ approach²⁹² is often hailed as the panacea for environmental problems, from pollution to ecologically unfriendly land use practices.²⁹³ Yet, in its pre-eminence over the last few decades, various flaws and anomalies have been exposed in the so-called ‘stick’ approach. Murphy²⁹⁴ points out that policies and legislation do not always make sufficient provision for measures that ensure the effective enforcement of its aims and objectives. Vague definitions resulting from poor draftsmanship may also lead to anomalous situations in which responsibility is not attributed for environmentally deleterious activities.²⁹⁵ This general rigidity of legislation also created the “zero sum” mentality which assumes that environmental gains can only be achieved by sacrificing economic goals, and vice-versa.²⁹⁶ Moreover, mention must be made to time lags involved in the implementation of environmental legislation and policy. This is

²⁹¹ In the English case of *Cambridge Water Company v Eastern Counties Leather plc* [1994] 2 WLR 53, for example, the court declined to decide on whether a historic polluter could be held liable for damages. The court justified its decision with reference to a legislative initiative (not yet official at the time of the hearing) aimed at addressing the very same question. The American case of *Connecticut v American Electric Power Co.* 406 F. Supp. 2d 265 (S.D.N.Y. 2005) is also a good example of such deference by the courts to policy-makers. The case involved a complaint that the electricity companies involved contributed significantly to global warming. The judge held that the matter could not be resolved in the court without an initial policy determination (at 273).

²⁹² Cane P ‘Using tort law to enforce environmental regulations?’ (2002) 41 *Washburn Law Journal* 427 at 451 The command and control approach can be described as the establishment of duties, standards and prohibitions in an attempt to prescribe to role players how to act; and the creation of criminal penalties and administrative powers to punish those who disobey the duties, standards and prohibitions. Environmental regulation and protection is still underpinned by the command and control approach.

²⁹³ Rowan-Robinson J and McKenzie-Skene D ‘Environmental protection and the role of the common law: A Scottish perspective’ in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 239 at 265

²⁹⁴ Murphy J ‘Noxious substances and common law liability: tort in the shadow of regulation’ in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 51 at 55-56

²⁹⁵ *Ibid* at 55-56 The author uses the following example: a law that ill-defines the type of ‘noxious gases’ may lead regulators to ignore the emission of some noxious gases and to strictly regulate others; see also Aalders M and Wilthagen T “Moving beyond command-and-control: reflexivity in the regulation of occupational safety and health and the environment” (1997) 14 (4) *Law and Policy* 415 at 416

²⁹⁶ Stewart RB “Economics, environment, and the limits of legal control” (1984) 9(1) *Harvard Environmental Law Review* 1 at 2

particularly worrisome as irreparable harm is sometimes done to the environment before the executive remedies the situation.

The fact that administrators often do not have the political will and the administrative capacity to enforce laws and policies tends to exacerbate the above 'policy gaps'.²⁹⁷ It is often found that enforcement agencies, and Local Authorities in particular, intent on attracting inward industrial and development investment, tend to turn a blind eye to practices that objectively fall short of standards and prohibitions in environmental laws, for financial and political motives.²⁹⁸ In addition, the government's human resources and financial capacity is oft times found to be deficient for the purposes of environmental governance, especially in developing countries such as South Africa.²⁹⁹ Some authors even go as far as to say that a preference for the command-and-control strategy "has more to do with ensuring accountability to... the public... than with its ability to achieve compliance."

It is in this context that many jurists have in recent times looked to the common law to fill the 'policy gaps' in public environmental regulation. The common law can be useful to enforce government authorities to implement legislation or policy in order to prevent ecological harm when, for example, there is a time-lag between the promulgation of the legislation and the implementation thereof; or when environmental legislation is not enforced on account of lack of political will. The appropriate common law instrument in such a situation is the interdict or the injunction. When damage had already occurred and can be attributed to policies and legislation that are inadequate to achieve the government's environmental goals, or when the negligence of government authorities in performing their duty properly or at all is the source of damage, the law of delict or tort can be applied to claim for the damage suffered.

²⁹⁷ The anomalies in the regulatory approach shall be called 'policy gaps' for convenience sake.

²⁹⁸ Murphy J 'Noxious substances and common law liability: tort in the shadow of regulation' in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 51 at 58

²⁹⁹ See generally Kotzé LJ 'Chapter 5: Environmental governance perspectives on compliance and enforcement in South Africa' in Paterson AR and Kotzé LJ *Environmental Compliance and Enforcement in South Africa: Legal Perspectives* (2009); see also supra note 283 at page 48

The common law, however, is not a system of law designed for addressing the mischief of environmental wrongs per se. It will therefore be useful to track the development of the common law in environmental matters in the next section.

4.1.2 Rise and recognition of the role of the common law in the environmental context

It seems odd to search for a duty for government to guard against a novel risk in a system of law premised on (antiquated) Victorian foundations.³⁰⁰ As modernity heralded in the industrial era, the legal system and institutions of the day were gradually adapted to the then salient problems.³⁰¹ Industrial age laws were directly imposed on Australia and South Africa as colonies of European powers during and after the Industrial Revolution. Old English³⁰² and South African case law³⁰³ suggests that it was seen as appropriate for the law to protect merely proprietary interests and property rights in a society that suffered economic externalities springing from growing industrialisation and human populations. Modern societal values, such as the protection of the environment and poverty alleviation³⁰⁴ were not considered interests worthy of protection in this epoch. Although the common law was successfully invoked in this era against polluters and persons responsible for

³⁰⁰ Cocks R 'Victorian foundations?' in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) at 1

³⁰¹ Ibid 2; see also Lee RG 'From the individual to the environmental: tort law in turbulence' in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 77 at 82-85

³⁰² For example, in *Swindon Waterworks Co. v Wilts and Berks Canal Co.* [1875] LR 7 HL, the court applied a reasonableness test that ignored the effect of pollution on the surrounding environment; and in *Strickland v Lambert* 268 Ala. 580, 109 So. 2d 664 (1959) the court upheld the Victorian rule that the plaintiff must show special damage to have standing in a nuisance case.

³⁰³ In, for example, *Patz v Greene* 1907 TS 427, the special damage rule was also entrenched in South African law. In *Regal v African Superslate (Pty) Ltd* 1963 (1) SA 102 (A), a 'reasonableness' test was applied to the facts of the case. The appellant complained of water pollution emanating from the defendant's land, which was situated upstream from the appellant's land. The pollution, however, was no fault of the defendant's. The court applied a reasonableness test to establish if it would be fair for the defendant to take measures to prevent pollution spreading to the appellant's land in future. The impact of the pollution on the environment was not considered, even by one of the five judges giving judgement on the day. Preventing pollution was held to be too expensive and disproportionate to the damage suffered.

³⁰⁴ Cocks R 'Victorian foundations?' in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 1 at 2 The author suggests that the common law has never even been accessible to the poor, as litigation is expensive and due to illiteracy, many were unaware of their common law rights.

environmental degradation, protection afforded in these cases was on an ad hoc basis and merely incidental to its primary goal of protecting proprietary interests.³⁰⁵ It is thus no wonder that legal commentators are tepid about the role of the common law in environmental protection, even today.³⁰⁶

The common law has not been widely regarded as appropriate law to apply in environmental disputes, even after environmental degradation has come to be regarded as a societal evil in modern times. In modern South Africa and Australia, the status of the common law in the greater legal regime has also ensured that the common law take the back seat to environmental legislation in resolving environmental matters. In both the Australian and in the South African legal systems, the common law is binding only in as far as it does not conflict with the Commonwealth of Australia Constitution Act,³⁰⁷ applicable in Australia as a whole, and the Constitution of the Republic of South Africa³⁰⁸ respectively. In Australia, Commonwealth legislation³⁰⁹ as well as State and municipal laws are superior sources of law in relation to the common law.³¹⁰ In South Africa also, the Roman-Dutch law is seen as an inferior source of law when compared to legislative law.³¹¹ The common law in

³⁰⁵ Murphy J 'Noxious substances and common law liability: tort in the shadow of regulation' in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 51 at 73 In addition, securing a common law remedy does not ensure environmental remediation either.

³⁰⁶ Ibid at 75; Summers R 'Chapter 13: Common-law remedies for environmental protection' in Paterson AR and Kotzé LJ *Environmental Compliance and Enforcement in South Africa: Legal Perspectives* (2009) 339 at 369; Rowan-Robinson J and McKenzie-Skene D 'Environmental protection and the role of the common law: A Scottish perspective' in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 239 at 265; Juergensmeyer JC 'Common law remedies and protection of the environment' (1971) 6 *University of British Columbia Law Review* 215 at 232

³⁰⁷ Commonwealth of Australia Constitution Act of 9th July 1900 (CACA) Sec 5 "This Act and all laws made by the Parliament of the Commonwealth under the Constitution shall be binding on the courts, judges and people of every State and of every part of the Commonwealth..."

³⁰⁸ The Constitution Sec 2 "This Constitution is the supreme law of the Republic; law or conduct inconsistent with it is invalid..." and Sec 39(3) "The Bill [of Rights] does not deny the existence of any other rights or freedoms that are recognized or conferred by the common law, customary law or legislation, to the extent that they are consistent with the Bill [of Rights]."

³⁰⁹ Supra note 306 at 53

³¹⁰ Hedley S 'How has the common law survived the 20th century?' (1999) 50 *Northern Ireland Legal Quarterly* 283 at 283-284 This article focuses on the status of the common law in the UK. It is, however, relevant to the Australian situation owing to the similarity in institutional and legal design. The author questions why the common law has not yet been codified, insinuating that the common law is inferior in status to legislative law.

³¹¹ Van Reenan TP 'The relevance of Roman (-Dutch) Law for legal integration in South Africa' (1995) 112 SALJ 276 at 288

both jurisdictions therefore are meant to complement and supplement the laws of parliament. The legislatures in each jurisdiction accordingly have the power to codify or amend the common law as it sees fit.

4.1.3 Problems with the role of the common law in the environmental context

The usefulness of common law in the environmental context is, however, still limited. The problems usually sprout from the evolutionary roots of the common law. The ineptness of the common law to deal with environmental issues such as climate change adaptation is partly offset by its inherent flexibility, but there are limits to this characteristic. Moreover, as stated above, climate change adaptation is a polycentric issue with budgetary and political implications; and courts are typically unwilling to enter the realm of the policy-maker by pronouncing judgment on such matters. Whilst acknowledging that these issues are not the only problems associated with the application of the common law, only they will be explored below to lay the proper groundwork for the consequent discussion on specific English law and Roman-Dutch law doctrines.

It is plain that feudal laws were gradually developed in the European courts in order to reflect changing notions of what is 'just' and 'reasonable' in an industrialised society.³¹² The courts upheld the interests of individuals vying for short-term economic gain at all costs, whilst rejecting conflicting interests of society at large desiring a better standard of living and a sense of environmental well-being.³¹³ This tendency hardened into the law that is applied in our courts today. However, it is in this inherent flexibility of the common law³¹⁴ that some authors see an opportunity for the judiciary to shape the common law into a legal instrument that imposes

³¹² Ibid at 77-79

³¹³ Van Niekerk B 'The ecological norm in law or the jurisprudence in the fight against pollution' (1975) *SALJ* 78 at 78-79 The author uses Pound's sociological jurisprudential framework to explain this shift – see Pound R 'A survey of social interests' (1943) 57 *Harvard Law Review* 1 at 32-33

³¹⁴ Summers R 'Chapter 13: Common-law remedies for environmental protection' in Paterson AR and Kotzé LJ *Environmental Compliance and Enforcement in South Africa: Legal Perspectives* (2009) 339 at 340

liability on those responsible for environmental impairment.³¹⁵ This, it is argued, would be in line with the new public awareness of environmental issues and would accordingly ensure that the tort/delict systems reflect this popular mood of the time.³¹⁶ The need for the common law to embody the popular sentiment of the society at a particular time is well known in both South African and Australian common law. In *Pearl Assurance Co Ltd v Union Government*³¹⁷ it was said that the Roman-Dutch legal system:

‘is a virile living system of law, ever seeking, as every system must, to adapt itself consistently with its inherent basic principles to deal effectively with the increasing complexities of modern organised society.’

The landmark English decision, *Donoghue v Stevenson*,³¹⁸ also ensured that English tort law is malleable enough for a judge to shape it into a modern system of law.³¹⁹

The development of the common law has, however, post *Donoghue v Stevenson*, been conservative in nature, with judges opting for a ‘coherent and logical’ legal development³²⁰ over an activist approach to achieving social relevancy for the common law. Development of the law of delict was similarly conservative in nature in the pre-Constitutional era. The dominant theme in the law of delict was to let the invisible hand of the market regulate issues between individuals – judgments from this era are almost devoid of notions of social justice³²¹ and environmental

³¹⁵ Cocks R ‘Victorian foundations?’ in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 1 at 2; Lee RG ‘From the individual to the environmental: tort law in turbulence’ in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 77

³¹⁶ Maloney FE ‘Judicial protection of the environment: a new role for common-law remedies’ (1972) 145 at 160

³¹⁷ 1934 AD 560 (Privy Council) 563

³¹⁸ [1932] AC 562

³¹⁹ Giliker P ‘Marking the boundary: the relationship between private nuisance, negligence and fault’ in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 161 at 162

³²⁰ Lee RG ‘From the individual to the environmental: tort law in turbulence’ in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 77 85-89

³²¹ Roederer CJ ‘Working the common law pure: developing the law of delict (tort) in light of the spirit, purport and objects of South Africa’s Bill of Rights’ (2009) 26(2) *Arizona Journal of International and Comparative Law* 427 at 455; the author also brings up the courts’ belief that the South African delict system is more conservative than the English tort system in imposing legal duties.

considerations.³²² This is in part owing to the philosophical basis of the law of delict; that in the normal course of events, damage will rest where it falls. It is only in exceptional cases that the burden of the damage is to be shifted to the person responsible for such damage. And this highly individualistic notion of delict was emphasized by the courts in this era, much to the agony of those less fortunate South African citizens.³²³

The exact factors that sway courts to boldly develop the common law will be explored later in the chapter for both jurisdictions. Suffice it to say, for the purposes of this section, judges therefore always tread a fine line between exercising its traditional role³²⁴ in applying the law, and entering the realm of the legislature or the executive in making new laws when deciding on the appropriateness or ripeness of law reform. In jurisdictions premised in the separation of powers, the judiciary is prohibited from performing the law- and policy-making tasks reserved for the executive and the legislature respectively.³²⁵ It is well-known that judicial deference is also applied in tort law. The deterrent function of imposing retrospective liability on State authorities means that courts are in effect making policy that governs future government conduct.³²⁶ The role of judicial deference in the law of delict is a moot issue and is not well documented in case law or by legal academics.

³²² See Van Niekerk B 'The ecological norm in law or the jurisprudence of the fight against pollution' (1975) *SALJ* 78; for an exception to this trend, see *King v Dykes* 1971 (3) SA 540 (RA)

³²³ Roederer CJ 'Working the common law pure: developing the law of delict (tort) in light of the spirit, purport and objects of South Africa's Bill of Rights' (2009) 26(2) *Arizona Journal of International and Comparative Law* 427 at 469

³²⁴ The separation of powers is a well established doctrine in the English and South African political and legal systems. The notion that the judiciary, executive and legislative arms of government must perform only their allocated duties (applying, implementing and making the law respectively) is a fundamental principle of the South African Constitution and an integral part of the English political system. See Currie I and de Waal J et al *The New Constitutional and Administrative Law* (2001) 91-95 for the South African perspective and Mahler GS *Comparative Politics: An Institutional and Cross National Approach* (2003) 183-212 for the English perspective.

³²⁵ Thorpe A 'Tort-based climate change litigation and the political question doctrine' (2008-2009) 24 *Journal of Land use and Environmental Law* 79 at 80. See also Aronson M and Whitmore S *Public Torts and Contracts* (1982) for a good overview of how this doctrine in various common law jurisdictions.

³²⁶ Posner EA 'Tobacco Regulation or Litigation?' [Book Review] (2003) 70 *Chicago Law Review* 1141 at 1155

Owing to the biased foundations of the common law, it is naive to think that the tort/delict systems can entirely fill those policy gaps pointed out by Murphy.³²⁷ Nor should it attempt to do so. Lawyers should rather take advantage of these common law doctrines only when the problem warrants corrective justice to take its course.³²⁸ The law of delict and tort law thus potentially find application in future claims for climate related damage to coastal property. However, as will be shown below, there are still conceptual difficulties in attributing such damage to the State.³²⁹ It is submitted that there is still hope to overcoming these difficulties and it lies in the common law's inherent adaptability to social changes. But has the world changed so much that the common law's 'industrial age' logic has become obsolete?

4.1.4 Manner in which common law sought to overcome these problems

Beck³³⁰ and his adherents³³¹ argue that the common law is ripe for radical reform. According to them, the narrow scope of the common law must be expanded if it is to keep up with the consequences of modernity. Modernisation brings with it new dangers and risks which the common law, owing to its established rules of attribution and liability, cannot adequately address. The consequences of these dangers and risks are often unknown and are therefore tentatively regulated or remain unregulated by State agencies, laws and policies. Although the relevant theory is discussed only in the light of modern risks such as genetically modified

³²⁷ Ibid at 75

³²⁸ Ibid; Juergensmeyer JC 'Common law remedies and protection of the environment' (1971) 6 *University of British Columbia Law Review* 215 at 234

³²⁹ See McDonald J 'The adaptation imperative: managing the legal risks of climate change impacts' in Bonyhady T and Christoff P *Climate Law in Australia* (2007) 124 at 135-137 for a general overview

³³⁰ Beck U *Ecological Politics in an Age of Risk* (1995)

³³¹ See for example Lee RG 'From the individual to the environmental: tort law in turbulence' in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 77 at 82-91 and Giddens A *The Consequences of Modernity* (1990)

organisms and nuclear waste,³³² it can be argued that climate change should be incorporated as a 'hazard' that warrants management by the State.³³³

State intervention and scientific 'solutions' no longer suffice in an epoch where 'the least likely event occurs in the long run.'³³⁴ The force of state regulation is often compromised by prior negotiations between the regulators and the regulated and hence ineffectively allocates the risks that modern society holds. The following can also be said of scientific authority on safety matters:

*'... a science that extends its claims of accuracy to the investigation of repercussions, turns in fact into a theatre of the absurd: precisions refutes precision. Risk calculators can be variously interpreted, and so they return full of mathematics and contradictory recommendations...'*³³⁵

It is for this reason that 'risk society' is no longer content to defer to scientific authority when it comes to exposure to risk.³³⁶ Claims that society informally mistrusts public institutions are also hardly surprising.³³⁷ Against the background of the alienation of society from government and the scientific community, society itself now determines the level of risk it is prepared to tolerate.³³⁸ This requires 'inclusiveness, transparency and candid acknowledgement that unavoidably moral choices are being undertaken'³³⁹ – a standpoint often associated with the precautionary principle.³⁴⁰

³³² Beck argues that these risks no longer solely affect the individual in her workplace or the consumer who has a choice to expose himself to a risk, but the public as a whole.

³³³ Beck's book was published in 1995 when the effects and severity of climate change were still largely unknown to scientists. Perhaps, if the book had been published today, climate change would have been discussed more comprehensively. The 'public' nature of climate change is also obvious – it affects not only a small group of individuals, but the public at large.

³³⁴ Beck U *Ecological Politics in an Age of Risk* (1995) 1

³³⁵ Beck U *Ecological Politics in an Age of Risk* (1995) 9

³³⁶ Lee RG 'From the individual to the environmental: tort law in turbulence' in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 77 at 84-85

³³⁷ *Ibid* at 84

³³⁸ *Ibid* at 84-85

³³⁹ Kyasar DA 'It might have been: risk, precaution and opportunity costs' (2006) 22 1 *Journal of Land Use* 1 at 19

³⁴⁰ *Ibid* 4 The author uses the oft-cited passage, 'when an activity raises threats to human health or the environment, precaution should be taken even if some cause and effect relationships are not fully established scientifically' to describe the precautionary principle. These values are also

Proponents of the latter principle recognise that uncertainty itself is a subject of control, power and influence in society. It can be used in an ‘agent-neutral’ way or in an ‘agent-relative’ way.³⁴¹ It conveniently places government in a position whereby it may, for example, discount a quantitative assessment of potential climate-related damage both for time and likelihood when weighing it up against potential expenditure that may be incurred when taking adaptive measures.³⁴² In this way, decision-makers are removed from the consequences of ‘omission’ if the worst-case scenario, or extensive damage to inappropriately placed or built coastal private property, eventuates (‘agent-neutral’).³⁴³ Risk society would find such a ‘cost-benefit’ analysis unacceptable. Instead, it would find it desirable for governments to act in accordance with new established norms such as intergenerational equity and sustainable development.³⁴⁴ In other words, preventative action must be taken by government, allowing the public to participate in the decision-making process, if future claims against State agencies for climate-related damage to coastal private property are to be avoided (‘agent-relative’).

Unfortunately, as Lee³⁴⁵ points out, the English courts (for instance) have not explored what level of risk society is willing to endure in the light of modern environmental norms, such as the precautionary principle; or whether government regulation is sufficiently transparent and accounts for the interests of all affected parties.³⁴⁶ Their first instinct in environmental risk cases has been to ‘stand aside’ and place its trust in the government’s approach to dealing with the risk. This is

enshrined in The Constitution of the Republic of South Africa 108 of 1996. Section 1 provides that ‘accountability, responsiveness and openness’ are founding values. This is significant since the Constitutional Court has held that it is not influenced by the clamour of public opinion, but rather the values and rights enshrined in the Constitution (*S v Makwanyane and Another* [1994] ZASCA 76; 1994 (3) SA 868 (A)). More will be said on the issue below. It is sufficient to note at this point that the precautionary principle is now also a Constitutional Value in South Africa.

³⁴¹ *Ibid* at 42-44

³⁴² *Ibid* at 21

³⁴³ *Ibid* at 42-44

³⁴⁴ *Ibid* at 44

³⁴⁵ *Ibid* at 85-89

³⁴⁶ Thorpe A ‘Tort-based climate change litigation and the political question doctrine’ (2008-2009) 24 *Journal of Land Use and Environmental Law* 79 at 83 This also seems to be the position in the USA. The courts have noted that many states are adopting legislation to deal with global warming issues and therefore that this is the appropriate venue for the issue.

often justified by the notion that courts must avoid making pronouncements on controversial political matters.³⁴⁷ Its second instinct is to uphold the logic of the common law rigidly for the sake of coherency and logic, even when such a practice results in obvious injustice towards a person or group of persons (often the applicant). Such an approach has prompted some serious debate over the extent to which the English common law is flexible. In South Africa, an environmental right can now be found amongst the list of basic human rights in the Constitution.³⁴⁸ This right has the potential to influence the operation of the law of delict in ways that is beneficial to the environment. The application of this right in the private law sphere will be explored below in more detail.³⁴⁹ However, the judiciary is yet to hear a case involving the application of the Aquilian action (the common law instrument that provides for a claim in damages) in an environmental matter. Only time will tell whether this right can shape the law of delict into a useful tool in the fight against climate change and other environmental hazards.³⁵⁰

While it recognised that the common law must develop in a coherent and logical manner, this must not be overemphasized by judges. The point of tort law and the law of delict is to draw boundaries between what is acceptable and what is unacceptable, or between what is normal and what is abnormal.³⁵¹ If we accept Beck's risk theory, society's perception of what is normal and what is abnormal is rapidly shifting in our modern era marked by environmental risk. It has become unacceptable for government not to manage and regulate public risks, such as climate change, as far as their human and financial capital allows; and to manage risks in isolation from those who stand to lose if the risk eventuates. Not even the

³⁴⁷ Ibid at 80

³⁴⁸ The Constitution of the Republic of South Africa 108 of 1996 Section 24

³⁴⁹ See the discussion of South Africa's new Constitutional paradigm in section 2.3.2 above and its application in the private sphere in section 4.3.3 below.

³⁵⁰ See a recent article of Summers R 'Common law remedies for environmental protection' in Paterson A and Kotzé LJ *Environmental Compliance and Enforcement in South Africa: Legal Perspectives* (2009) 339 at 358-360 – the author is hopeful that the 'wrongfulness' element in delict will be influenced by this right.

³⁵¹ Cane P *The Anatomy of Tort Law* (1997) 170-178

smallest risk must be unaccounted for; especially against the backdrop of these values and rights now being enshrined in the South African Constitution.

Furthermore, the common law's evolution must be inextricable from advances in regulatory policies and laws so that the latter are complemented and supplemented by the common law. It will be recalled that tort law and the law of delict are founded on theories of corrective justice and it often offers the only means whereby an aggrieved party may recover damages suffered as a result of the eventuation of a risk. It remains the only remedy for those affected by past wrongs. If the common law is allowed to fall behind, two divergent systems of law might emerge and confidence in the legal system could be undermined.³⁵²

Environmental lawyers are well aware of the limitations of tort law in environmental cases – it will only be of use where a culprit can be identified and where proprietary damage was suffered or will be suffered. Such a system has been shown to be antiquated in an age when it is expected of regulators to manage public risks. The Australian and South African governments are not directly to blame for climate change and its consequences, but will they be to blame for not managing the risks to the best of their abilities, by adapting to future climate related sea level rise, storm tide inundation and floods in coastal regions? It was shown above that neither government has yet undertaken serious commitments toward this goal. Perhaps a future claim in tort (or delict) against the State for damage to coastal private property that is attributable to a failure by government to fulfil a duty to protect its citizens against climate related coastal hazards today, will offer a good platform for the discussion of the common law's limitations in environmental law cases. The following sections will explore the possibility of such a claim against the State being successful, keeping in mind the paradigm confusion of the common law.

4.2 A duty to adapt to climate change under tort law

³⁵² Lee RG 'From the individual to the environmental: tort law in turbulence' in Lowry J and Edmunds R *Environmental Protection and the Common Law* (2000) 77 at 85-89

4.2.1 General principles of the tort of negligence

Negligence emerged in English law as a separate tort only in the early 19th century. Before the emergence of this tort, only a numerus clausus of situations where the respondent had been careless evoked the victims' right to claim damages. Today it is understood as a distinct set of principles that generally find application when as a result of a person's negligence, another had suffered damage.³⁵³ These principles are now well-established and are coherently summarised in the words of Lord Wright:³⁵⁴

'in a strict legal analysis, negligence means more than heedless or careless conduct, whether in omission or commission: it properly connotes the complex concept of duty, breach, and damage thereby suffered by the person to whom the duty was owing.'

We thus see that 'negligence' as understood in this doctrine is composed of four elements: the wrongdoer must have owed a duty of care to the victim at the time of the conduct;³⁵⁵ the wrongdoer must have acted negligently toward the victim; the conduct must have caused the victim damage;³⁵⁶ and a sufficiently strong causal link between the conduct and the damage involved is also required.³⁵⁷

The first requirement, or the duty of care requirement, is submitted to be the most problematic requirement of the four in establishing negligence in a claim for climate-related damage.³⁵⁸ As stated above, it shall be the focus of this enquiry. Issues that may impact on the duty of care concept will subsequently be covered.

³⁵³ Balkin RP and Davis JLR *Law of Torts* (2004) 3rd ed 199; Trindade F et al *The Law of Torts in Australia* (2007) 465

³⁵⁴ *Lochgelly Iron & Coal Co v M'Mullan* [1934] AC 1 at 25 (HL)

³⁵⁵ Trindade F et al *The Law of Torts in Australia* (2007) 427; other authors such as Balkin RP and Davis JLR *Law of Torts* 3ed (2004) 200 refer to this element as 'breach of duty of care.'

³⁵⁶ Trindade F et al *The Law of Torts in Australia* (2007) 427; other authors such as Balkin RP and Davis JLR *Law of Torts* 3ed (2004) 200 refer to this element as 'breach of duty of care.'

³⁵⁷ Trindade F et al *The Law of Torts in Australia* (2007) 427

³⁵⁸ McDonald J 'The adaptation imperative: managing the legal risks of climate change impacts' in Bonyhady T and Christoff P *Climate Law in Australia* (2007) 124 at 134 The author opines that an omission by planning authority to guard against the effects of climate change can easily be linked with climate related damage when it occurs in future. The damage component is also obvious in such a situation – material property damage.

Firstly, the application of the political question doctrine³⁵⁹ in tort law will be explored. It requires the courts not to violate the separation of powers by unduly encroaching on the policy-making powers of the executive and the law-making powers of the legislature. Secondly, the impact of ‘tort reforms’³⁶⁰ or legislative Acts limiting the court’s discretion in tort matters will be discussed in the climate change context.

4.2.2 Basic requirements for establishing duty under tort law

The ‘duty’ element has been held to be the common law’s own limitation device on conceivably limitless liability.³⁶¹ A duty of care can only be imposed in law on a legal person under prescribed circumstances and when certain prescribed interests have been injured or damaged.³⁶² As in any legal system based on consistency and fairness, these circumstances and interests are prescribed in legal precedent. In other words, a set of well-established principles must apply equally in a case before the court as it did in a previous case with similar facts. In this way, certain interests are always protected by the tort of negligence whilst others remain unprotected. However, there are cases in which principles for a particular set of facts have not yet been developed. These are called ‘novel cases.’ Climate change adaptation falls into this category as the Australian courts are yet to develop set principles on the subject.

The Australian High Court has realised the futility of attempting to devise a fixed formula which would serve as a general test of duty in novel cases³⁶³ and have of late opted for the so-called multi-factorial approach in dealing with these cases.³⁶⁴

³⁵⁹ Thorpe A ‘Tort-based climate change litigation and the political question doctrine’ (2008-2009) 24 *Land Use and Environmental Law Journal* 79 79-80

³⁶⁰ McDonald J ‘A risky climate for decision-making: the liability of development authorities for climate change impact’ (2007) 24 *EPLJ* 405 at 412

³⁶¹ Balkin RP and Davis JLR *Law of Torts* 3ed (2004) 201

³⁶² Trindade F et al *The Law of Torts in Australia* (2007) 463

³⁶³ See for example *Perre v Apand Pty Ltd* (1999) 198 CLR 180. The High Court also acknowledged its failure to provide a clear and precise formula to ascertain the existence of this duty in *Graham Barclay Oysters Pty Ltd v Ryan* (2002) 211 CLR 540 and in *Sullivan v Moody* (2001) 207 CLR 562

³⁶⁴ Trindade F et al *The Law of Torts in Australia* (2007) 473; it must be noted that the Australian courts are still skeptical of using ‘policy considerations’ to expand duty relationships – see *Sullivan v Moody* (2001) 207 CLR 562 at para 49 and *Perre v Aspand Pty Ltd* (1999) 198 CLR 180

According to this approach, 'reasonable foresight' is the only fixed prerequisite for ascertaining a duty. In environmental tort cases, the foreseeability enquiry is often one that revolves around the human understanding of how the world works.³⁶⁵ The current scientific consensus suggests that coastal regions inhabited by man will be affected by global warming in the future. If one accepts that the courts have developed and is still developing the concept of 'reasonableness' with the aid of scientific evidence,³⁶⁶ it can thus also be accepted that climate-related damage to coastal private property is at least reasonably foreseeable in the light of several reports released and scientific investigations conducted by the Queensland government itself.³⁶⁷ This is especially so since cases have been decided on much less compelling scientific evidence than the evidence on future climate change impacts.³⁶⁸

However, it is not in itself sufficient; it sets in motion additional inquiries,³⁶⁹ the content and nature of which depends on the facts of each case.³⁷⁰ These enquiries are known in Australian tort law as the 'salient factors'³⁷¹ and are taken into account when establishing a duty of care in a particular instance. Only those traditional factors that are appropriate to the facts of the case are applied by the courts. Salient factors particularly apposite to climate change adaptation include the degree of control the authority had over the situation eventually causing

³⁶⁵ Trindade F et al *The Law of Torts in Australia* (2007) 429

³⁶⁶ Thorpe A 'Tort-based climate change litigation and the political question doctrine' (2008-2009) 24 *Journal of Land Use and Environmental Law* 79 at 101

³⁶⁷ See the discussion above

³⁶⁸ Thorpe A 'Tort-based climate change litigation and the political question doctrine' (2008-2009) 24 *Journal of Land Use and Environmental Law* 79 at 101

³⁶⁹ *Crimmins v Stevedoring Industry Finance Committee* (1999) 200 CLR 1; *Brodie v Singleton Shire Council* (2001) 206 CLR 512

³⁷⁰ There are certain factors the courts often use as 'judicial aids' when determining the duty requirement. In *Sullivan v Moody* (2001) 207 CLR 562 at para 49, the court referred to certain 'legal policies' and 'principles' in its inquiry into whether a legal duty existed in the case. These will be explored in more detail below.

³⁷¹ McDonald J 'A risky climate for decision-making: the liability of development authorities for climate change impact' (2007) 24 *EPLJ* 405 at 412; also set out concisely in *Crimmins v Stevedoring Industry Finance Committee* (1999) 200 CLR 1

damage;³⁷² the ‘proximity’ of the relationship between the plaintiff and the defendant;³⁷³ the vulnerability and specificity of the group who feel that their loss should be attributed to the negligence of the State;³⁷⁴ and the knowledge of the risk involved.³⁷⁵ This area of the common law is typically developed by the inclusion of novel factors.

Whereas ‘reasonable foresight’ and the various ‘salient factors’ constitute the general principles that are applied in all cases, additional considerations apply in specific torts. Torts involving ‘statutory duties or powers’ and ‘omissions’ are forms of specific torts relevant to this discussion. Considerations relevant to ‘statutory’ torts and ‘omission’ torts must be applied if a plaintiff contends that state or local authorities failed to make (effective) climate change adaptation policy or that these authorities failed to implement existing policies and legislation (properly). What follows is the application of the general and specific ‘duty of care’ principles to the climate change scenario set out in the introduction of this dissertation.

At common law, even a public authority may be subjected, under appropriate circumstances, to a duty of care in the exercise of statutory powers.³⁷⁶ Thus the duty of care principle is also applied in negligence cases involving a public authority,³⁷⁷ despite this doctrine perhaps sitting uncomfortably in the public sphere.³⁷⁸ If a state or local authority omits to fulfil its ‘target duty’³⁷⁹ of protecting

³⁷² *Graham Barclay Oysters Pty Ltd v Ryan* (2002) 211 CLR 540; *Perre v Apand Pty Ltd* (1999) 198 CLR 180

³⁷³ *Sullivan v Moody* (2001) 207 CLR 562 at para 46-47; *Perre v Apand Pty Ltd* (1999) 198 CLR 180

³⁷⁴ *Sullivan v Moody* (2001) 207 CLR 562 at para 63

³⁷⁵ *Graham Barclay Oysters Pty Ltd v Ryan* (2002) 211 CLR 540 at para 91; *Perre v Apand Pty Ltd* (1999) 198 CLR at 180

³⁷⁶ Balkin RP and Davis JLR *Law of Torts* 3ed (2004) at 230. The author states that this has been so for over a century. *Geddis v Proprietors of Bann Reservoir* (1878) 3 App Cas 430 at 455-456 is a good early example of the application of the duty of care in the public realm.

³⁷⁷ *Sutherland Shire Council v Heyman* (1985) 157 CLR 424 at 457-458 is one of the most significant Australian decisions on this point.

³⁷⁸ Trindade F et al *The Law of Torts in Australia* (2007) at 608. Negligence law is characterized by correlativity and individualism. These characteristics are stretched when this concept is applied where communitarianism or societal interests are at stake. Special problems arise out of the fact that public authorities are entrusted with statutory functions that are to be applied in the public interest or for the greater good. The imposition of a common law duty of care will for this reason impact on the resources, financial and otherwise, of the public functionary. The law regulating under

coastal dwellers from the future effects of climate change by making use of one of its various statutory powers to implement adaptation measures (or attempts to do so, but does so ineffectively), a claim in negligence is not inconceivable where damage is suffered as a result. Although all the above factors are relevant, the 'control' factor is of particular importance to the application of the duty concept in these cases.³⁸⁰

Road authorities in Australia, for example, have a high measure of control over the condition of roads in the country and therefore owe a duty of care to road users.³⁸¹ Similarly, prison authorities are often burdened with a duty of care to the public not to let prisoners escape and cause damage, owing to the high degree of control over prisoners.³⁸² It is submitted that local and state authorities have a large degree of control over the condition of the Queensland coast. They are afforded custodianship over the Queensland coast and have a myriad of devices that allow them to take adaptation measures, such as building lines, under the CPMA, reflecting the projected sea-level rise and shifts in coastal flood plains.

Similarly, the state agencies have a large measure of control over the IDAS framework. The Minister can, for instance, declare development in the coastal zone assessable development or prohibited development to ensure that climate change considerations are not neglected in coastal development. Assessment managers and concurrence agencies also have control over assessing development applications and therefore ensuring that climate change considerations are taken into account. They also have control over appending conditions to development approvals to ensure that buildings are resilient to projected climate-related hazards. The degree of control in this regard is perhaps analogous to the measure of control

which circumstances the duty of care doctrine must be excluded is now contained in 'tort reforms.' The latter will be discussed in more detail below.

³⁷⁹ Trindade F et al *The Law of Torts in Australia* (2007) at 620. The terminology is used to describe a duty that is not an absolute duty, but one that is abstract or aspirational. Typically, the authority changed with fulfilling such a statutory duty is afforded discretion in the manner in which it is to be fulfilled. Such a duty is therefore not an absolute duty.

³⁸⁰ See for instance *Graham Barclay Oysters Pty Ltd v Ryan* (2002) 211 CLR 1

³⁸¹ *Brodie v Singleton Shire Council* (2001) 206 CLR 512

³⁸² *Dorset Yacht Club Co Ltd v Home Office* [1970] AC 1004; *S(J) v Clement* (1995) 122 DLR (4th) at 449

building authorities have over building-supervision functions. The courts have on many occasions held that building authorities owe certain members of the public a duty of care not to be negligent in performing their building-supervision functions when, for example a building authority failed to notice a defect in the building plan;³⁸³ when the plans did not comply with building regulations;³⁸⁴ and when the building authorities failed to issue the owner of a building with a warning that his building is subject to slipping.³⁸⁵

The relationship of proximity between the relevant state or local authorities and those that have suffered climate-related damage is another guiding principle³⁸⁶ that may well assist a court in its decision-making process relating to the relevant facts at hand. The courts have held that a stevedoring authority's relationship in proximity to waterside workers was sufficiently close for there to be a duty of care on the former to protect the latter from exposure to asbestos, even those not permanently employed by the authority.³⁸⁷ The authority was given statutory powers to enter into a contract of temporary employment with workers, but was required by the same statute to ensure the safe performance of stevedoring operations. The vulnerability of the workers was also taken into account.³⁸⁸ It is submitted that there is a similar duty of care on planning authorities to protect people from exposure to future coastal hazards. The SPA as well as the SPP 1/03 and the SCMP require planning authorities to take into account the future effects of climate change in planning decisions and therewith ensuring the safety of coastal dwellers. Those with property in the coastal zone, especially those without adaptive capacity such as the Torres Strait Islanders, are vulnerable to the effects of climate change and therefore rely on government to ensure that buildings are made resilient to water-related hazards or their expeditious relocation to safer land.

³⁸³ *Carosella v Ginos & Gilbert Pty Ltd* (1981) 27 SASR 515

³⁸⁴ *Voli v Inglewood SC* (1962-3) 110 CLR 74

³⁸⁵ *Wollongong CC v Fregnan* [1982] 1 NSWLR 244

³⁸⁶ *Perre v Appand Pty Ltd* 198 CLR 180 at 75

³⁸⁷ *Crimmins v Stevedoring Industry Financing Committee* (1999) 200 CLR 1 at 226-229

³⁸⁸ *Ibid* at 44

The relationship of proximity between assessment managers or concurrency agencies and coastal property owners is also submitted to be sufficiently close for the former to owe a duty of care to the latter when assessing development. Such a duty of care would be to take into consideration the future effect of climate change when assessing development application or to prescribe appropriate conditions to development permits in the coastal zone. Thus an owner of property in the coastal zone aggrieved as a result of climate-related damage to the said property may well argue in future legal proceedings that a past decision (our present day) to grant a development permit over his property was negligent because it did not account for projected levels of sea-level rise or require the property owner to adapt her property to future sea-level rise and violent storms by means of, for example, innovative drainage systems. After all, state and local authorities are responsible for land use planning mechanisms such as IDAS and for climate change adaptation, making applicants and other members of the public reliant on their decisions. Such a decision would be in line with past decisions to, for example, hold manufacturers liable for damage caused by defective products.³⁸⁹ The fact that the effects of global warming will only occur much later or that present decisions do not influence present property owners is not inimical to the imposition of a duty of care on state and local authorities. That is to say, proximity need not be either physical or temporal for it to be conducive to a court's finding a duty of care.³⁹⁰

Knowledge,³⁹¹ vulnerability and specificity³⁹² are factors that might also impact on a negligence ruling. Current human knowledge of these coastal threats driven by climate change might well be crucial in a future case such as the one being discussed. The potential effects of climate change have only in recent times been the subject of scientific study and the results that these studies have yielded suggest that projections are more accurate on a macro scale, but it still leaves much to be desired on a local or micro scale. It is worth noting that limited and novel

³⁸⁹ See *Donoghue v Stevenson* [1932] AC 562 and *Hawkins v Clayton* (1988)164 CLR at 577-578

³⁹⁰ *Jaensch v Coffey* (1984) 155 CLR at 584-585

³⁹¹ *Graham Barclay Oysters Pty Ltd v Ryan* 211 CLR 540 at para 91

³⁹² *Ibid* at 91

knowledge on future possible harm-causing omissions has two implications. Firstly, only planning instruments adopted or altered and development applications assessed of late can be the subject of complaint in the future. Planning and development decisions taken in past years may not be considered to be negligent on account of the limited knowledge and understanding of climate change at the disposal of an authority responsible for taking them. Secondly, it is only when the power provided by a statutory provision is so specific as to require the local authority charged with the implementation thereof to protect individuals in the position of the complainant against harm that a duty of care on behalf of a statutory body can be said to exist. In other words, the complainant must be reliant on government intervention before there can be said to be a duty of care in such an instance.³⁹³ Therefore, the fact that climate change 'losers' have not yet been identified in great specificity (other than the Torres Strait Islanders) by Australian and Queensland policy can be detrimental to an contention that government has a duty in law to adapt to climate change.

In the English tradition a duty is more easily established in the case of a misfeasance than in the case of a nonfeasance. This is an important distinction in the context of this dissertation, which focuses on an omission by government to take adequate adaptation measures to guard against the ills of climate change. A mere omission can never give rise to a duty of care;³⁹⁴ a plaintiff must show that there was a 'legally recognised pre-existing' duty on the part of the defendant to act for a new duty of care to be established at common law.³⁹⁵ The relationship between the plaintiff and the defendant (an aggrieved owner of property, which was damaged by climate-related hazards, and the State) will play an important role in establishing a duty to act and therefore a new duty of care at common law.³⁹⁶ The nature of the

³⁹³ *Graham Barclay Oysters Pty Ltd v Ryan* (2002) 211 CLR 540 at para 91

³⁹⁴ *Trindade F et al The Law of Torts in Australia* (2007) at 517; Balkin RP and Davis JLR *Law of Torts* 3ed (2004) at 217

³⁹⁵ *Ibid*

³⁹⁶ See for example *Graham Barclay Oysters Pty Ltd v Ryan* (2002) 211 CLR 540 at para 95 where it was held that the State had no special relationship with the consumers of oysters that affirmed a

relationship between planning authorities and coastal property owners has already been discussed. The former is in control of the future spatial planning and land use in the state of Queensland, whereas the latter is reliant on the proper performance of these functions, which means that planning policy-decisions and assessment decisions must reflect projections on how climate change is going to affect the coast. Just as employers have a duty to create and maintain a safe working environment for employees,³⁹⁷ planning authorities have a duty to create and maintain safe habitats for inhabitants of towns and cities in Queensland. Inhabitants and employees alike, have little or no control over the general conditions of their towns and workplaces respectively.

Australian judgments imposing a 'legally recognised pre-existing' duty to act on the defendant³⁹⁸ on account of a preceding undertaking of a task which leads another to rely on its being performed, is not out of the ordinary. Claims by state and Commonwealth government to take the lead in climate change adaptation efforts may well be found to constitute such an undertaking, contributing to the likelihood of the existence of a duty to act under the circumstances. Furthermore, if the danger or risk eventually causing harm is attributable to the defendant, the likelihood of there being a duty to act in law is substantially heightened.³⁹⁹ Granting a development authorisation unconditionally in parts of the coastal zone that is predicted to be affected by climate change may well be interpreted as an action that exposed the hypothetical plaintiff to climate change risk and thereby 'creating a danger.'

Finally, the court has discretion to set precedent by considering a novel factor unique to the facts of the case. Australian courts may in the future consider the precautionary approach and public participation as a 'salient factor' in climate change litigation. The inclusion of such an ad hoc factor may well be justified on the

positive duty to protect those consumers from harm created by the growers and distributors of oysters.

³⁹⁷ Trindade F et al *The Law of Torts in Australia* (2007) at 522; see also *Crimmins v Stevedoring Industry Financing Committee* (1999) 200 CLR 1 at 226-229

³⁹⁸ *Sutherland Shire Council v Heyman* (1985) 157 CLR 424 at 479

³⁹⁹ See for example *McKinnon v Burtatowski* [1969] VR 899 at 906

grounds that corrective justice demands that the authorities responsible for the tentative regulation and management of the risk of climate change be held accountable for the resulting damage, under certain circumstances.

The sooner the courts realise their roles in the climate change debate, the smoother our transition into the 'risk' era would be. The amount of faith placed in the regulatory authorities in the level of caution adopted in development decisions in recent cases⁴⁰⁰ in Queensland is unacceptable. Conveniently deferring to the wisdom of local authorities in development decisions can vitiate the 'deterrent effect' of the law.⁴⁰¹ Developing the common law at an early stage in the advancement of climate change, can galvanise local authorities into a determined effort to effectively adapt to climate change to avoid future claims.

4.2.3 Factors impacting on the application of duty

The law of 'duty of care' is in reality even more complex than its depiction in the above section. In its application in the 'public sphere,' it is influenced by the doctrine of the separation of powers and certain 'tort reform' laws. These two limitations may exclude the justiciability of a claim against an authority charged with performing public duties. The dissertation now turns to discuss these issues in the context of climate change adaptation.

Legal equality, or the universal subjection of all classes to one legal system administered by the court, is an important democratic value. Deviation from this rule cannot occur without some sort of legal justification. A well-known deviation in English common law is the exclusion of policy decisions by public bodies from judicial scrutiny. In other words, the courts may not impose a duty of care on public bodies when undertaking political tasks.⁴⁰² In Australian law, this is often called the political question doctrine. It asks whether the court, in its evaluation of the reasonableness of conduct (whether or not conduct was 'negligent'), is asked to

⁴⁰⁰ *Daikyo (North Queensland Pty Ltd) v Cairns City Council* [2003] QPEC 022; *Mackay Conservation Group Inc v Mackay City Council* [2005] QPEC

⁴⁰¹ Thorpe A 'Tort-based climate change litigation and the political question doctrine' (2008-2009) 24 *Journal of Land Use and Environmental Law* 79 at 103

⁴⁰² Aronson M and Whitmore S *Public Torts and Contracts* (1982) 35

make an essentially ‘political’ pronouncement, one that would best be left for the executive or the legislature. Strict separation of powers is regularly justified by the fact that courts lack the necessary technical expertise, possessed by the executive and the legislature in their specialist roles, to make or amend policy.⁴⁰³ However, there are no hard and fast rules to deciding this question; it is always evaluated on the facts of each case.⁴⁰⁴

This doctrine is often also referred to as the planning/operational dichotomy because ‘planning’ decisions⁴⁰⁵ are to be avoided by the courts whereas the judiciary feels comfortable pronouncing on ‘operational decisions.’ In making ‘planning decisions,’ or those that are based on the exercise of policy options or discretions, and involving or dictated by social, political, financial or economic considerations,⁴⁰⁶ a public body owes no duty of care to anyone who has, as a result suffered loss or injury.⁴⁰⁷ Immunity, however, is only valid in so far as the decision is not ‘ultra vires.’ If a discretionary function is so unreasonably exercised that no reasonable public entity in the position of that public entity exercising the function would come to the same decision;⁴⁰⁸ and the discretionary function so exercised causes loss or injury to another, then the ‘planning’ defence will be unavailable to that public entity.⁴⁰⁹ On the other hand, the courts must be careful not to

⁴⁰³ Ibid 36

⁴⁰⁴ Thorpe A ‘Tort-based climate change litigation and the political question doctrine’ (2008-2009) 24 *Journal of Land use and Environmental Law* 79 at 80 The author claims that references to the political doctrine in American jurisprudence has been inconsistent and that its application has been varied. This is significant since the political question doctrine finds its origin in American tort law. English and Australian courts often rely on American case law to justify not pronouncing on ‘political’ questions – See Aronson M and Whitmore S *Public Torts and Contracts* (1982) 36 as well as Balkin RP and Davis JLR *Law of Torts* (2004) 3rd ed 232

⁴⁰⁵ The term has been borrowed by other English Law jurisdictions, including Australia – see *L v Commonwealth* (1976) 10 A.L.R. 269, from the landmark American case, *Dalehite v United States* (1953) 346 US 15

⁴⁰⁶ *Sutherland Shire Council v Heyman* (1985) 157 CLR 424 at 469

⁴⁰⁷ *L v Commonwealth* (1976) 10 A.L.R. 269

⁴⁰⁸ *Brodie v Singleton Shire Council* (2001) 206 CLR 512

⁴⁰⁹ Aronson M and Whitmore S *Public Torts and Contracts* (1982) 100-103 The authors warn that this ‘reply’ must not be equated with the ‘ultra vires’ concept in administrative law. See also *Dorset Yacht Co. Ltd v Home Office* [1970] A.C. 1004 at 1031 and *Anns v Merton London Borough Council* [1978] A.C. 728 at 755 for an overview of how it is understood in the English courts. Also, if the public body took into account factors irrelevant (or failed to take into account significant relevant factors) to the matter at hand or factors that fell outside of her range of power, this ‘reply’ to the

emasculate the defence and to assess the policy's merits, and will therefore naturally be reluctant to uphold the 'ultra vires' reply.⁴¹⁰

'Operational' decisions, by contrast, are reviewable by courts in a suit for negligence. These decisions entail the implementation of policy and thus merely amount to the product of administrative direction or expert opinion.⁴¹¹ Such a decision need not be invalid from a public law perspective for it to be actionable; negligence and invalidity are two very different, yet confusable concepts. In practice, it is not always easy to discern planning decisions from policy decisions, but the distinction remains crucial.⁴¹²

The content of broad national and state climate change adaptation policies applying in Queensland probably fall within the 'planning' category. The COAG's *National Climate Change Adaptation Framework*, the *State Greenhouse Policy*⁴¹³ and the *ClimateSmart Adaptation Strategy* are broad statements of policy resultant from a policy discretion exercised by the executive arms of government, and influenced by environmental and socio-economic conditions in the country and the state. The planning/operational dichotomy will thus prove to be an insuperable obstacle to challenging these decisions on merit. These policies may be lacking in specificity, but those responsible for drafting them cannot be said to have erred by considering irrelevant factors or overstepping the limit of their mandates. They are after all general policy statements that need to be fleshed out⁴¹⁴ and implemented⁴¹⁵ at state and local level.

'discretion' defence becomes relevant – see Aronson M and Whitmore S *Public Torts and Contracts* (1982) at 12

⁴¹⁰ Aronson M and Whitmore S *Public Torts and Contracts* (1982) at 102-103; *Graham Barclay Oysters Pty Ltd v Ryan* (2002) 211 CLR 540 at para 7 (per Gleeson J)

⁴¹¹ *Ibid*

⁴¹² The 'planning/operational' dichotomy is still an operational principle in Australian law, although the nomenclature of this phenomenon has been mooted in recent years. In *Brodie v Singleton Shire Council* (2001) 206 CLR 512, for example, the court was reluctant to make use of this terminology; instead it preferred 'the political nature' as more desirable terminology for these cases.

⁴¹³ Queensland Government *Queensland Greenhouse Strategy* (2004)

⁴¹⁴ The national policies generally require state and local governments to identify specific areas and groups of people that will be affected by climate change ills in the future.

The more specific Queensland policies and legislation may also enjoy the protection of the political doctrine. According to the political question doctrine, the courts are prohibited from deciding on the efficacy of these policy statements. The SCMP, the two mentioned RCMPs and the SPP 1/03 were all drafted to influence decisions and action by local government in accordance with the Sustainable Planning Act. These decisions and action by local government, in accordance with Commonwealth and state policy, will therefore likely not be protected by the political doctrine. Local authorities are strictly bound by these statutory instruments in all that they do; and it is therefore essential for them to incorporate these policy considerations into decisions taken in regard to coastal planning and development. Any negligent omission being the source of harm to another will be actionable.⁴¹⁶

But what of unreasonably exercised policy powers? Much has been written on the desirability of the planning/operational dichotomy, but the comments of Thorpe⁴¹⁷ in a recent article contextualise this debate within the realm of climate change litigation. She emphasises that the legislative and policy-formation processes are often flawed by a lack of participation, accountability and transparency; leading to public mistrust of government institutions. Big business, often the biggest polluters, is also often more influential in these processes than those that will ultimately be affected by them owing to the large amount of money paid for political lobbying.⁴¹⁸ If the judicial participation in policy-making is eliminated by the 'political question doctrine,' then the administrative and law-making powers would enjoy unchecked

⁴¹⁵ National and state policies generally state that climate change considerations must infiltrate decisions taken at local level, such as development applications and the drafting of planning schemes.

⁴¹⁶ Aronson M and Whitmore S *Public Torts and Contracts* (1982). Although relevant to the ultimate negligence enquiry, invalidity is not a necessary precursor for a negligence action. *Any* negligence on the part of local authorities is actionable.

⁴¹⁷ Thorpe A 'Tort-based climate change litigation and the political question doctrine' (2008-2009) 24 *Journal of Land Use and Environmental Law* 79

⁴¹⁸ *Ibid* at 92; some claim that it is decisions by courts are therefore less ideologically motivated and therefore more unbiased and realistic.

power.⁴¹⁹ The role of the courts can thus be argued to be a valuable complement to policy-making powers,⁴²⁰ and particularly those associated with climate change.

And the judicial influence in policy-making is apparently not uncommon, at least in the USA, also an English common law jurisdiction. The courts are known to 'stray' into the realm of the political from time to time especially in the field of administrative law. Thorpe points out that where this has happened, court-made policy was not found to be necessarily inferior to legislative or executive laws and policies. On the contrary, the courts' ability to pronounce on complex social issues has been applauded in recent studies. It was shown that courts make use of 'social science data and public policy analysis; grant injunctive remedies; hear multi-party litigation; actively supervise the implementation of decisions after disputes are declared resolved and apply broad principles prospectively with potential impacts on individuals not involved in litigation.'⁴²¹ Therefore, it has been argued that the critique to the effect that the courts lack the necessary expertise to make policy decisions applies equally to the other two arms of government.⁴²²

It is at this point also useful to illuminate the proposition that 'tort law is a form of regulation and always has been.'⁴²³ Tort law, though ex ante in application, has the ability to change prospective behaviour.⁴²⁴ For instance, if local authorities were aware of their potential liability in tort for not taking effective climate change adaptation measures, they would do everything in their power and resources to avoid such liability, particularly since coastal property is highly valued. Its historical and future usefulness in 'unregulated areas' and 'partly regulated areas' should therefore come as no surprise. It must be reiterated that tort law is ultimately and inextricably linked to social conditions and convictions. It also changes according to

⁴¹⁹ Ibid at 89-90; 92

⁴²⁰ Ibid at 94

⁴²¹ Ibid at 93-94

⁴²² Ibid at 89-90

⁴²³ Posner EA 'Tobacco Regulation or Litigation?' [Book Review] (2003) 70 *Chicago Law Review* 1141 at 1155

⁴²⁴ Thorpe A 'Tort-based climate change litigation and the political question doctrine' (2008-2009) 24 *Journal of Land Use and Environmental Law* 79 at 91

the changes in social opinion.⁴²⁵ It was argued above that climate change is a public risk well-known to most people in Queensland. If a court finds that 'social science data' indicates that the public finds it unacceptable for government not to adapt to climate change, it should be able to intervene and not to be tied down by inflexible boundaries to the exercise of its powers.

If such an argument is taken seriously by the legislature, it is free to intervene by overriding court discretion in climate change matters by passing tort reforms, such as the Civil Liability Act⁴²⁶ (CLA) in Queensland. The CLA is the source of another significant factor that will count against a future climate change litigant in a negligence action. Sections 13-16 of this Act state that Councils will not be liable for 'obvious risks' or for the materialisation of 'inherent risks.' An obvious risk is a risk where the type or kind of risk is patent or a matter of common knowledge.⁴²⁷ This is worrisome since a presumption of the vulnerability of coastal property to sea level rise, coastal inundation and coastal erosion, might arise in the light of greater media coverage of the risks created by climate change to coastal property.⁴²⁸ However, will the courts require that coastal property owners carry the same degree of knowledge as local authorities on the effects of climate change on coastal areas? Those employed by a local authority in the position of a town planner, presumably have expert knowledge on hazards that may affect the built environment, including future hazards.

An inherent risk, on the other hand, is a risk that cannot be avoided with the exercise of reasonable care.⁴²⁹ The cost of a particular climate change adaptation measure is pivotal in a determination of the reasonableness of such a measure. Costly engineering and demolition works necessary to minimise the exposure of coastal property to erosion or storm tide inundation can be argued to fall in the

⁴²⁵ Ibid at 100

⁴²⁶ Civil Liability Act 2003 (Qld); henceforth the CLA

⁴²⁷ CLA Section 13

⁴²⁸ McDonald J 'A risky climate for decision-making: the liability of development authorities for climate change impact' (2007) 24 *EPLJ* 405 at 414

⁴²⁹ CLA Section 17

‘unreasonable’ bracket.⁴³⁰ But one should keep in mind that parts of coastal Queensland will be subjected to potentially huge climate-related losses; this may justify the high cost of adaptation. Nevertheless, we are still awaiting judicial pronouncement on the construction of these statutory phrases.

4.3 A duty to adapt to climate change under the law of delict

4.3.1 General principles of the law of delict

The law of delict has been said to be a ‘detailed body of principles, rules and concepts founded on historically-developed broad bases of liability.’⁴³¹ To found liability in each case, there must be wrongful, negligent (or intentional) conduct that caused the defendant damage.⁴³² We therefore see that there are five elements to a delictual act: conduct, unlawfulness, fault and damage. ‘Unlawfulness’ means that conduct must be legally reprehensible, or wrongful, to found liability in each case. In other words, there must be a legal duty on a person to act or to refrain from acting in a certain manner.⁴³³

4.3.2 Basic requirements for establishing unlawfulness under delict

The standard for unlawfulness in novel cases such as the one being discussed,⁴³⁴ is generally the legal convictions of the community or the *boni mores*.⁴³⁵ The test for establishing a ‘legal duty’ can be formulated as follows:

‘In any given situation the question is asked whether the defendant’s conduct was reasonable according to the legal convictions of the community.’⁴³⁶

⁴³⁰ ⁴³⁰ McDonald J ‘A risky climate for decision-making: the liability of development authorities for climate change impact’ (2007) 24 *EPLJ* 405 at 414

⁴³¹ Midgley JR and Van der Walt JC ‘Volume 8: Delict’ in *LAWSA* (2005) 2nd ed 3 at 37 para 23

⁴³² Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) 3

⁴³³ Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) 33-34. The English ‘duty of care’ concept is often used as a synonym for this legal duty concept in the context of wrongfulness, while it is acknowledged that the two are conceptionally distant (*Administrateur, Natal v Trust Bank van Afrika Bpk* 1979 3 SA 824 (A)). The effectiveness in the synonym is found in the fact that both ‘duty’ concepts serve the purpose of limiting liability or preventing the ‘floodgates’ of litigation to be opened.

⁴³⁴ *Universiteit van Pretoria v Tommie Meyer Films (Edms) Bpk* 1977 4 SA 376 (T) at 383 If a court is dealing with a novel case; in other words, where there no clear legal norm involved, the *boni mores* criterion will be applied by the court in that particular case.

⁴³⁵ *Cape Town Municipality v Bakkerud* 2000 3 SA 1049 (SCA); *Minister van Polisie v Ewels* 1975 3 SA 590 (A) 597; *Administrateur, Natal v trust Bank van Afrika Bpk* 1979 3 SA 824 (A) at 833-834

The test is objective and one based on reasonableness.⁴³⁷ Generally speaking, the test involves the balancing of the interests ‘promoted’ by the defendant’s act or omission and those interests infringed by the same conduct.⁴³⁸ Factors that play an important role in the balancing process are, amongst others, the probable or potential extent of the harm suffered by others; the degree of risk of the materialisation of such harm; the nature of the interests that the defendant or society or both had in the relevant conduct; whether there are measures available to the defendant to avoid the harm; the chances of these measure being successful; and whether the costs associated with such measure would be proportional to the possible harm caused.⁴³⁹ Considerations of public policy or public interest will influence this balancing process.⁴⁴⁰

Furthermore, when the conduct takes the form of an omission, the unlawfulness or otherwise of that conduct depends on the presence of a legal duty to act in order to avoid the harm under the circumstances.⁴⁴¹ In applying the standard of the *boni mores*, the courts have been assisted by certain factors. There is a strong indication of the presence of a legal duty is if there was prior conduct by the defendant that created a new source of danger which was not subsequently eliminated.⁴⁴² The degree of control exercised by the defendant over the situation will also play an important role in establishing such a duty.⁴⁴³ Rules of law can also be interpreted as

⁴³⁶ *Coronation Brick (Pty) Ltd v Strachan Construction Co Ltd* 1982 4 SA 371 (D) at 380

⁴³⁷ Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) 33-34

⁴³⁸ *Ibid* 34; *Natal Fresh Produce Growers’ Association v Agrosolve (Pty) Ltd* 1990 4 SA 749 (N) at 753-754; *Administrateur, Natal v Trust Bank van Afrika Bpk* 1979 3 SA 824 (A) at 361

⁴³⁹ *Administrateur, Transvaal v Van der Merwe* 1994 4 SA 347 (A) at 361-362

⁴⁴⁰ *Mpongwana v Minister of Safety and Security* 1999 2 SA 794 (C); Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) at 35-36

⁴⁴¹ In *Minister van Polisie v Ewels* 1975 3 SA 590 (A) at 597 it was first said that an omission can also be regarded as wrongful if such a decision reflects the legal convictions of the community. Of late, the Bill of Rights in the South African Constitution has started to influence the ‘reasonableness criterion’ in delict. This influence will be explored later as a factor that impacts on unlawfulness’ in delict. See also *Minister of Safety and Security v Hamilton* (2004) 2 SA 216 (SCA) at para 16

⁴⁴² *Van Der Merwe NJ & Olivier PJJ Die Onregmatige Daad in the Suid-Afrikaanse Reg* (1989) 31; take note, however, that prior conduct is no longer a prerequisite for establishing wrongfulness in ‘omission’ cases – see Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) 53 and *Minister van Polisie v Ewels* 1975 3 SA 590 (A) at 597 for an example of the new ‘flexible’ approach.

⁴⁴³ *Van Eden v Minister of Safety and Security (Women’s Legal Centre Trust as amicus curiae)* 2003 1 SA 389 (SCA) at 400 – the police was deemed to be in control of dangerous criminals in their custody.

being indicative of a legal duty on the plaintiff to act to avoid harm.⁴⁴⁴ Moreover, the relationship between the parties as well as the reliance by the plaintiff on the defendant may also be weighted into the court's decision-making process.⁴⁴⁵

Delictual action against government on account of its failure to adapt to the adverse impacts of climate change can take at least two forms. Firstly, a claim that national and provincial policy and statutory frameworks were inadequate at addressing climate-related coastal hazards; or that they were not properly implemented is conceivable.⁴⁴⁶ Secondly, one can envisage delictual proceedings to be based on a failure to take into consideration climate change when assessing environmental impact assessments for development in the coastal zone.⁴⁴⁷ These two possible claims will now be applied to the standard of the *boni mores*. It must also be noted that conduct in these cases take the form of omissions and that the principles and factors specific and unique to this form of conduct, as listed above, will then be explicated in the context of the two possible claims.

Generally, the 'boni mores' test means weighing up the harm caused to the plaintiff and the benefits of the harm causing conduct. In the case at hand, total damages calculated to be suffered as a result of climate change may well be compared to the total expenses that would have been incurred had effective adaptation measures been taken (these savings will be assumed to be a benefit to society).⁴⁴⁸ Furthermore, if one accepts that courts act, like other government agencies, and discount the quantum of damages for time and likelihood,⁴⁴⁹ then our present knowledge of future climate change and its effects will be crucial. It will be recalled

⁴⁴⁴ *Administrateur, Transvaal v Van der Merwe* 1994 4 SA 347 (A) at 359 – all roads in Transvaal were deemed to be under control of the Administrator.

⁴⁴⁵ Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) 62-64. It must be mentioned at this early stage also that the Constitution also has an influence on this balancing act of the courts (see, for instance, *Minister of Safety and security v Van Duivenboden* 2002 6 SA 431 (SCA) at 446-447)

⁴⁴⁶ Such a claim can be directed at national, provincial or local government, but most likely the last-mentioned.

⁴⁴⁷ Such a claim, on the other hand, would typically be directed at the provincial executive body in charge of the environment. It is this body's mandate to assess environmental impact assessments and basic assessments.

⁴⁴⁸ *Administrateur, Transvaal v Van der Merwe* 1994 4 SA 347 (A) at 361-362

⁴⁴⁹ *Supra* notes 336 and 337 at 58

that IPCC's classification of the effects being 'highly likely' and 'likely' to materialise⁴⁵⁰ makes it more probable than not that the risk of sea-level rise and coastal inundation will occur in the long run. However, the time lag between the omission to adapt the coastal zone to climate change and the future damage may be as long as a century, thus tipping the scales of the justice in favour of the defendant. Such arguments hold for both alleged defective planning policies and alleged defecting environmental authorisations.

In omission cases involving a public body, whether there was a duty to act or not was very strongly affected by whether there was prior conduct of that government body. Although it is no longer a requirement, it still plays an important role in establishing a duty in 'municipality cases.'⁴⁵¹ If planning policies, such as IDPs and spatial development plans, authorise and plan for urban development in areas predicted to be affected by climate change, it may well be contended that this amounts to 'prior conduct' as currently understood in South African delictual law. Planning that does not take into account future sea-level rise and changes to the flood plains, places people and property in danger of being injured and damaged respectively. Similarly, if provincial environmental authorities grant an environmental authorisation for coastal development whilst not being mindful of future climate change in an area, then it may be said a municipality created a new danger not only for those who applied for the property to be developed, but also future owners of the said property.⁴⁵²

⁴⁵⁰ Supra note 19 at 7

⁴⁵¹ Van der Merwe *Burger v Munisipaliteit van Warrenton* 1987 (1) SA 899 (NC) at 908; see also *Cape Town Municipality v Butters* 1996 (1) SA 473 (C); *Cape Town Municipality v Bakkerud* 2000 (3) SA 1049 (SCA)

⁴⁵² Prior conduct plays a big role in cases where there is a lack of policy mitigating the new danger created by such prior conduct. In *Cape Town Metropolitan Council v Graham* 2001 (1) SA 1197 (SCA), the way in which the road was constructed in Chapman's Peak was found to make it conducive to rock falls which endangers road users. The Council omitted to make policy that governs when the road should be closed on account of rock falls being imminent. Expert evidence indicated that there is a strong correlation between rainy weather and rock falls and that incidences of serious rock falls could have been predicted.

It is well known that the coastal zone is the responsibility of the government. The environment is placed under the trusteeship of the South African State in NEMA⁴⁵³ and the coastal zone is also to be managed by the government on behalf of the public of South Africa.⁴⁵⁴ It is therefore contended that the government has control over the state of coastal human environment, much as it has control over the state of the roads in South Africa.⁴⁵⁵ This relationship of control may warrant a general reliance on provincial government or municipal councils to make and implement climate change adaptation policy. The reliance will be even stronger for those who do not have the financial or other means to guard against the future climate ills.⁴⁵⁶

Closely related to the control and reliance factors is the question whether a rule of law⁴⁵⁷ was indicative of a legal duty under the circumstances.⁴⁵⁸ This relevance of this factor the dissertation is high, owing to a 'strong vertical dimension' to 'omission jurisprudence' in post-apartheid South Africa.⁴⁵⁹ The interpretation of a particular statutory provision or policy statement is often crucial to the significance of this factor. In interpreting a statute for the purposes of delictual law, the courts consider the context in which a statutory provision must be read. It is also clear that non-compliance with a rule so interpreted is not necessarily unlawful; it must still be fair and equitable under the circumstances to compensate the person wronged.⁴⁶⁰ This is determined with reference to the boni mores and legal policy.⁴⁶¹

⁴⁵³ NEMA Sec 2(4)(o)

⁴⁵⁴ NEMICMA Sec 2(c)

⁴⁵⁵ *Administrateur, Transvaal v Van der Merwe* 1994 4 SA 347 (A)

⁴⁵⁶ This reliance is similar to the reliance on government for services delivery and housing. It is to be noted that the right to access to housing is a Constitutional obligation – see Sec 26(2) of the Constitution and *Minister of Public Works and Others v Kyalami Ridge Environmental Association and Another (Mukhwevho Intervening)* 2001 (3) SA 1151 (CC) at para 37. Government is also obliged to fulfill its duty to ensure an environment that is not harmful to health or well-being – see Section 24 of the Constitution.

⁴⁵⁷ This must not be confused with a statutory duty. The latter is an unambiguous conferral of a duty on a government body to act under the circumstances. Since the conclusion of this dissertation was there is no clear duty to adapt to climate change, this concept has no role to play under the circumstances.

⁴⁵⁸ *Administrateur, Transvaal v Van der Merwe* 1994 4 SA 347 (A) at 359

⁴⁵⁹ MacQueen HL 'Delict, contract and the Bill of Rights: a perspective from the United Kingdom' (2004) 121 *SA Law Journal* 359 at 368 and 372

⁴⁶⁰ *Premier, Western Cape v Faircape Property Developers (Pty) Ltd* 2003 (6) SA 13 (SCA) at 30

Lastly, a statute can also be an aid to establish other relevant factors. For instance, it has been said that a statute that is interpreted as conferring a power on an authority to act, is indicative of control over a situation.⁴⁶² 'Control' as a factor is discussed in the above paragraph.

The South African environmental law regime, as described in section 3.3 above is at least indicative of control over the human environment and the coastal zone. The public trust doctrine is a principle of both NEMA and the environmental right. Furthermore, it is explicitly stated in the NEMICMA and White Paper on Sustainable Coastal Development that the government shall hold the coastal zone in trust for present and future generations of all citizens (owners of the coastal zone). Moreover, the Constitution places the provincial and municipal tiers of government in control of provincial⁴⁶³ and municipal⁴⁶⁴ planning respectively. A myriad of devices that can be used to justify adaptation policy and ensure adaptation implementation were also enumerated in section 3.3. There can thus be little doubt that the government has control over climate change adaptation policy and implementation thereof. Similarly, the NEMA places provincial environmental authorities in complete control over the environmental authorisation process, just as it has been said that this body has control over building and development authorisation (so long as there is a close relationship between the plaintiff and the provincial authority).⁴⁶⁵

The interplay of various other factors peculiar to the facts of the case will also be determinative of the presence of a legal duty in omission cases.⁴⁶⁶ In *Cape Town Municipality v Bakkerud*,⁴⁶⁷ for instance, the court sought to strike a balance of

⁴⁶¹ Ibid at 30; take note also that the Constitutional influence of such a determination can be significant.

⁴⁶² *Administrateur, Transvaal v Van der Merwe* 1994 4 SA 347 (A) at 359 In this case, section 4 of the Transvaal Road Ordinance was interpreted as putting the appellant in control of the roads in this former province of South Africa.

⁴⁶³ The Constitution Schedule 5 Part A

⁴⁶⁴ The Constitution Schedule 4 Part B

⁴⁶⁵ *Premier, Western Cape v Faircape Property Developers (Pty) Ltd* 2003 (6) SA 13 (SCA) at 30

⁴⁶⁶ Neethling J, Potgieter JM and Visser PJ *The Law of Delict* (2006) at 65-68

⁴⁶⁷ 2000 (3) SA 1049 (SCA)

proportionality between a person's responsibility to use the roads in a prudent manner and the municipality's responsibility to maintain the roads. The unacceptable state of the road and the extended period of time since the last repair work was done on the roads in the area influenced the court to hold that there was a legal duty on the municipality to fill a pothole in a sidewalk in its jurisdiction, leading to personal injury to the plaintiff. In *Cape Town Metropolitan Council v Graham*,⁴⁶⁸ the court was mindful that the municipality was in a better position than the ordinary road user to predict rock falls and therefore better able to warn road users of the potential danger or closing the road. As a result, the court found that the municipality owed a duty of care to road users in Chapman's Peak to prevent injury as a result of falling rocks.

The courts will thus have regard to legal convictions of the community regarding climate change adaptation in South Africa in the present day. The future effect of climate change is submitted to be a societal concern in South Africa. There is thus a growing expectation for government to protect people from these future ills. People perceive government to be in a better position to take the lead in adaptation initiatives owing to a better understanding and greater information on the future climate-related damage than the average South African. Furthermore, it is expected of government to provide indigent communities with essential services, such as safe housing. It might therefore be held that society regards it as imperative for government to, at least, assist those without adaptive capacity to adapt to climate change. Inaction on climate change adaptation may well be held to be unacceptable.

4.3.3 Factors impacting on application of duty

In the South African delictual system, there are factors that can exclude a claim against government and others that may make a claim more likely. The doctrine of the separation of powers is an example of the former and the Constitution an example of the latter. These are submitted to be the most significant factors that

⁴⁶⁸ 2001 (3) SA 1197 (SCA)

impact on the hypothetical future delictual claim against the government of the Republic of South Africa on account of it not taking climate change adaptation measures and will be explored below.

The South African Constitution is founded on the doctrine of the separation of powers.⁴⁶⁹ It is therefore usually the case that the courts are prohibited from performing the law-making and policy-making duties of the legislature and the executive respectively. The Roman-Dutch Law in South Africa, however, is yet to develop clear rules or guidelines governing the limitation of claims in delict against the state under the Constitutional dispensation. Clues as to the application of the doctrine of the separation of powers in the law of delict can be found in statutory law and in case law. The State Liability Act,⁴⁷⁰ for instance, provides that '[c]laims against the State which would, if that claim had arisen against a person, be the ground of an action in any competent court, shall be cognizable by such court...' We thus notice a broad policy-making power of the judiciary in South Africa.⁴⁷¹ However, it is often said in obiter that the courts must not radically reform the law in its development of the common law.⁴⁷² Judges have a duty to develop the common law, but only to the extent that the legal convictions of the community demand it. The boni mores will determine whether the imposition of a legal duty on government amounts to overstepping its mandate under the Constitution. This principle was applied in *Cape Town Municipality v Bakkerud*.⁴⁷³ The judge in the matter firstly admitted that if it were to award damages in the instant case, it would be performing a policy-making role. Therefore a court will be overstepping the boundaries of its policy-making powers if it finds a duty to exist contrary to the legal

⁴⁶⁹ Currie I and De Waal J *The New Constitutional and Administrative Law: Volume 1 Constitutional Law* (2001) 92-119

⁴⁷⁰ The State Liability Act 20 of 1957 Sec 1

⁴⁷¹ It is also significant to note that there are no significant 'delict reforms' that limit claims against public bodies. On the contrary, Sec 3 of the State Liability Act prohibiting the 'execution, attachment or like process' against the property of the state has recently been declared unconstitutional – see *Nyathi v MEC for Department of Health Gauteng and Another* 2008 (5) SA 94 (CC) at para 92.

⁴⁷² See for instance *Carmichele v Minister of Safety and Security* 2001 (10) BCLR 995 (CC) at para 36; *Du Plessis v De Klerk and Another* 1996 (5) BCLR 658 (CC); Harms LTC 'Ontwikeling van die gemeneereg in die lig van artikels 39(2) en 173 van die Grondwet' (2004) 2 Potchefstroom Electronic Law Journal 1 at 4

⁴⁷³ 2000 (3) SA 1049 (SCA)

convictions of the community. In *Soobramoney v Minister of Health (KwaZulu-Natal)*,⁴⁷⁴ on the other hand, the court was loath to decide on a 'polycentric' issue that has wide budgetary implications for the other spheres of government. The abstinence of the court to decide on such an issue was made in the context of an attempt to hold government liable for not fulfilling its socio-economic duties under the Constitution.

The public nature of a defendant in a future case involving the lack of policy on climate change adaptation (or the implementation thereof) may be found to have little impact on the justiciability of a claim if it is found that the legal convictions of the community is such that there must be a legal duty on government to take adaptation measures against climate change. Wide policy and planning decisions relating to climate change adaptation, on the other hand, may thus well be found to be non-justiciable on the grounds that courts cannot prescribe how the fiscal purse is to be spent. It is submitted that expensive climate change adaptation measures such as the relocation of poor households to higher and safer grounds should have been taken, may well be excluded on the grounds of separation of powers; whilst a claim that an inexpensive preventative measure (such as the present prohibition of ribbon development in coastal zone that is projected to be affected by climate change by proscribing it in planning instruments such as an IDP) should have been taken may well be found to be justiciable. An environmental authorization of development in the coastal zone today that does not take into account the projected levels of sea-level rise and coastal inundation may also not be protected by the doctrine of the separation of the powers.

If the claim is found to be justiciable, the extent to which the court is willing to develop the common law may well be crucial. In novel delictual cases such as the one being discussed, the common law is developed and shaped into an instrument capable of addressing new concerns. It must be noted that the development of the common law is not a novel idea that finds its origin in the new Constitutional

⁴⁷⁴ 1998 (1) SA 765 (CC) at para 18

paradigm. The judiciary has always had the power to develop the common law in order for it to reflect the changing norms and values of the South African society, or the *boni mores*.⁴⁷⁵ This general power of the High Courts and the Appeal Courts to mould the common law into a set of rules that is more appropriate for modern society, however, is now no longer a mere power,⁴⁷⁶ but a constitutional duty.⁴⁷⁷ This is clear from section 39(2) of the Constitution which provides that the courts must promote the 'spirit, purport and objects of the Bill of Rights' when developing the common law. In *Du Plessis v De Klerk*,⁴⁷⁸ Kriegler J explained that the Bill of Rights influences all that the three arms of the South African state does, including the judiciary's application of the common to a set of facts before it. This statement can be taken to mean that the court must, *mero motu*, take into account the relevant provisions of the Bill of Rights when applying the law of delict to a particular set of facts.⁴⁷⁹

The application of Constitutional norms in this way is known as the 'indirect horizontal application.' This term describes the way in which Constitutional norms seep into the existing common law.⁴⁸⁰ The purpose of indirect horizontal application is to interpret the law and the 'spirit' of the Bill of Rights in such a way as to avert any inconsistency between such an existing legal provision and constitutional

⁴⁷⁵ H Cheadle and D Davis 'The application of the 1996 Constitution in the private sphere' SAJHR (1997) 44 at 64-65; and Harms LTC 'Ontwikeling van die gemene reg in die lig van artikels 39(2) en 173 van die Grondwet' (2004) 2 Potchefstroom Electronic Law Journal 1 at 2; see also the cases of *Pearl Assurance Co v Union Government* 1934 AD 560 at 563 and *Minister van Justisie v Ewels* 1975 (3) SA 590 (A) at 597A-B

⁴⁷⁶ This power is also now enshrined in the Constitution – see Section 173

⁴⁷⁷ Cheadle H and Davis D 'The application of the 1996 Constitution in the private sphere' (1997) SAJHR 44 at 64-65; and *Du Plessis v De Klerk and Another* 1996 (5) BCLR 658 (CC) at para 141-142; Roederer CJ 'Working the common law pure: developing the law of delict (tort) in light of the spirit, purport and objects of South Africa's Bill of Rights' (2009) 26(2) *Arizona Journal of International and Comparative Law* 427 at 481

⁴⁷⁸ *Du Plessis v De Klerk and Another* 1996 (5) BCLR 658 (CC) at para 141-142

⁴⁷⁹ Roederer CJ 'Working the common law pure: developing the law of delict (tort) in light of the spirit, purport and objects of South Africa's Bill of Rights' (2009) 26(2) *Arizona Journal of International and Comparative Law* 427 at 481

⁴⁸⁰ Currie I and De Waal J *The Bill of Rights Handbook* (2005) 64; although Cheadle MH, Davis DM and Haysom NRL *South African Constitutional Law: the Bill of Rights* (2002) at 749 believes that the term 'indirect application' should only be used to describe those instances where 'the way the Constitution has an effect upon the legal right in terms of which conduct is regulated' is at stake. Indirect horizontal application of the constitution is relevant to any law that regulates the relationship between natural or juristic persons.

norms.⁴⁸¹ The goal of this process is to ensure that the common law falls within the constitutional framework and then to ultimately achieve a single, coherent system of South African law.⁴⁸² It is therefore sometimes necessary to develop the common law to fit into this constitutional mould. Unfortunately, the law of indirect horizontal application is relatively still undeveloped in South Africa. No court has attempted to comprehensively pronounce on the meaning of section 39(2) or to explicate exactly how this section must be applied in practice. Roederer⁴⁸³ believes that it is probably unrealistic to expect this of the judiciary and that lawyers should be content rather to make sense of the 'varied judgments grappling with, on the one hand, existing rules, rights and duties under the common law and legislation, and on the other, a range partially coherent partially competing values (spirit, objects, purposes) of the Bill of Rights and the Constitution.' What follows is an attempt to do just that.

The most comprehensive precedent for the development of the law of delict in the light of the Constitution is a two-pronged test laid down in *Carmichele v The Minister of Safety and Security and Another*.⁴⁸⁴ According to this test, the court must firstly determine whether the common law needs to be developed and if so, whether a recommended development of the common law should be sanctioned or not. Commentary on these vague guidelines suggests that the Bill of Rights will typically be infused into open-ended or policy-type common law rules such as 'boni mores' or 'unlawfulness'.⁴⁸⁵ These 'open-ended' policy-type enquiries must be approached by replacing or supplementing the public's subjective perspectives of prevailing norms and values with the objective value system of the Constitution as the criteria on which these policy-type questions are answered.⁴⁸⁶ In this way,

⁴⁸¹ Currie I and De Waal J *The Bill of Rights Handbook* (2005) 73-74

⁴⁸² *Khumalo v Holomisa* 2002 (5) SA 401 (CC) at para 30-31

⁴⁸³ Roederer CJ 'Working the common law pure: developing the law of delict (tort) in light of the spirit, purport and objects of South Africa's Bill of Rights' (2009) 26(2) *Arizona Journal of International and Comparative Law* 427 at 482

⁴⁸⁴ 2001 (10) BCLR 995 (CC)

⁴⁸⁵ I Currie and J De Waal *The Bill of Rights Handbook* (2005) 69

⁴⁸⁶ *Carmichele v Minister of Safety and Security and Another* 2001 (10) BCLR 995 (CC) at para 56; Roederer CJ 'Working the common law pure: developing the law of delict (tort) in light of the spirit,

section 39(2) does 'not place a knife in the hand of the judge with which the common law should be beheaded, but simply provides clay with which an artwork should be moulded that can withstand the heat of the oven' [own translation].⁴⁸⁷

If one accepts that the law of delict needs to be developed in order for it to be an effective legal device to address climate change adaptation, then the way in which unlawfulness needs to be developed needs to be described. Once again, legal precedent and relevant Constitutional principles, values and rights can provide us with some guidelines.

Firstly, a 'rule of law' can be interpreted in such a way as to give effect to the 'spirit, object and purport' of the Bill of Rights. In *Minister of Safety and Security v Hamilton*,⁴⁸⁸ for example, the court was asked to consider whether police officials dispensed with their statutory duties under the Arms and Ammunitions Act 75 of 1969 by mechanically processing applications. The court found that police officials were required to screen certain applications by asking relevant questions that would serve to corroborate the veracity of the information put before the police officer concerned.⁴⁸⁹ In substantiation such a construction of the Act, the Supreme Court of Appeal made reference of the right to life, dignity and security of the person enshrined in the Bill of Rights.⁴⁹⁰ In the same way, the statutes and policies relevant to climate change adaptation may well be interpreted in such a way as to give effect to the precautionary principle and the right to an environment that is not harmful to well-being.⁴⁹¹ 'Dynamic coastal processes' as a factor that needs to be taken into account when an environmental impact assessment is being undertaken in the coastal zone, may well also be interpreted to include the future climate-induced change.

purport and objects of South Africa's Bill of Rights' (2009) 26(2) *Arizona Journal of International and Comparative Law* 427 at 497

⁴⁸⁷ LTC Harms 'Ontwikeling van die gemenerereg in die lig van artikels 39(2) en 173 van die Grondwet' (2004) 2 *Potchefstroom Electronic Law Journal* 1 at 18

⁴⁸⁸ *Ibid*

⁴⁸⁹ *Ibid* at para 32

⁴⁹⁰ *Ibid* at para 35

⁴⁹¹ The well-being in this instance being a house that will be unaffected by the climate-related coastal damage.

Secondly, the Constitution can play an important role in the interplay among the factors specific to the case. The courts will do well to consider that government is obliged to take reasonable 'legislative and other measures' within its means to ensure an environment that is not harmful to health and well-being.⁴⁹² An environment that causes extensive and regular damage to a person's coastal property is submitted to be inimical to the 'well-being' of that person. The courts may well also make reference of the precautionary principle as something that must influence public authorities' specific 'legislative and other measures.' It may be found that these measures should have prevented future climate-related damage. An absence of climate change adaptation policies also fly in the face of South Africa's obligations at international law, or more specifically the UNFCCC, to ensure that people and property are protected from climate change.

4.4 Comparing the duty to adapt to climate change under tort Law and the law of delict

Delict and the tort of negligence are both general remedies for negligent conduct and are similar in form and requirements: both actions require the plaintiff to show conduct, negligence, causation and damage. However, the requirement of unlawfulness in delict differs somewhat from the requirement of duty of care in tort. In the latter, 'reasonable foreseeability' is the threshold requirement, which is not an element of unlawfulness. In Queensland, thus, the likelihood, as perceived by the courts, of the climate change effects materialising will play a much bigger role in negligence, than it would in delict. The interpretation of the UNFCCC's classification of 'likely' and 'highly likely' may well be crucial in a future Australian claim for lack of climate change adaptation.

The 'salient factors' in negligence, on the other hand, are very similar to the various guiding factors in the law of delict. The relevant factors in both were a strong relationship between the parties, prior conduct and control. Moreover, in duty of care and unlawfulness alike, a legal duty must be found to exist for an omission to

⁴⁹² The Constitution Section 24

be negligent or unlawful. Therefore, in both jurisdictions, the courts must find that the relevant public authorities were in control of adaptation and thus created reliance by coastal property owners on the services of these authorities. Moreover, the relationship must be 'proximate' enough for there to be a legal duty; in other words, public authorities must be found to owe a legal duty to act to prevent property damage in coastal regions to specifically those that have suffered damage and not to the public at large. The present identifiability of areas endangered by climate change, hence, may well be crucial to the outcome of such a case.

Both unlawfulness and duty of care are limited by the doctrine of the separation of powers. This limitation, however, is much more pronounced in Australia than it is in South Africa. In Australia, executive and legislative decisions and laws relating to the effectiveness of climate change adaptation policy may well be excluded from judicial scrutiny. Even the implementation of these policies may be found to be non-justiciable, especially those that have a strong discretionary fiscal element. If the law of the 'political question' doctrine is not developed in Australia, it may well be found that there is a judicial check only IDAS-related decisions. In South Africa, on the other hand, there are no established rules governing the application of the separation of powers in the law of delict. However, it can be said that a strong 'polycentric' decision is not to be decided on by the courts. Decisions with budgetary implications, such as omitting to identify the effects of climate change on the coastal zone as a priority for climate change adaptation initiatives, may well be found to be outside of the court's jurisdiction.

An additional hindrance to establishing a duty of care to adapt the coast to climate change is the Civil Liability Act. The significance of this hindrance may well depend on the interpretation of 'obvious' risks and 'inherent' risks. If courts interpret these words in the context of 'risk society,' climate-related damage may well not be found to be an 'inherent' or an 'obvious risk.'

Perhaps the most significant difference between duty of care and unlawfulness is the application of the Constitution in the latter. The indirect horizontal application of Bill of Rights means that environmental norms and principles, especially the

precautionary principle, can more easily infiltrate the Roman-Dutch law than in the English common law. A South African court in the future may well find that preventative action was necessary to guard against future climate ills, in order to ensure an environment that is not harmful to the owners of coastal private property's well-being. Such a finding, it is submitted, will ensure coherence between the common law and the environmental regulatory system in that jurisdiction. The Australian common law, on the other hand, is in danger of falling behind more modern perceptions of how it is expected of government to deal with environmental risks, such as climate change. The development of the common law in this jurisdiction between now and when the climate change becomes a threat to coastal property owners may well be significant to a future judgment. The question will be if the Australian common law has shaken its 'Victorian bias' by then.

5. Conclusion

The UNFCCC is confident that sea-level rise and coastal inundation will be problems the next generation of people will have to face. Climate change adaptation is therefore an inherently moral issue as those living today will not be affected as severely thereby as will the next generation. This moral issue is identified as a major threat to future coastal inhabitants by the member States of the UNFCCC, who have accepted that adaptation is necessary to guard against future climate change risk. However, no formal binding agreements have been made by the Conference of the Parties to this Framework Convention, probably owing to the hesitancy of committing to obligations with huge financial implications that may well not benefit those currently living.

It is submitted that the climate change adaptation policy and statutory regimes in Queensland and South Africa generally follow the international trend. Governments in both jurisdictions have claimed responsibility for a safe environment, now and in the future, and have a myriad of tools and mechanisms at their disposal to give

substance to this responsibility, especially in the context of climate change adaptation, but are not under an obligation to adapt to climate change. At most, planning authorities in both jurisdictions have a discretion to 'have regard to' climate change when making decisions. However, it is submitted that a climate change adaptation duty is more compatible with the Queensland regime than it is with the South African regime. Queensland's planning law framework is more cohesive and therefore more open to the incorporation of a climate change duty. The Queensland government, part of a developed country, also has greater adaptive capacity than the South African State and presumably therefore a better chance of giving effect to this duty. Moreover, the climate change adaptation 'hotspots' have already been identified in Queensland, giving the Queensland adaptation regime more focus and a localised character. In contrast, the South African authorities do not even identify the predicted threats of climate change on the South African coastline as an adaptation priority.

Whether the common law rules will provide a remedy for climate-related damage is also speculative. Statutes such as the CLA in Queensland may be modified or new, similar legislation may be promulgated in South Africa in order to prevent a claim in tort or delict for non-action on climate change adaptation. In Queensland, the justiciability of the claim will also depend heavily on what the role of the courts will be at that stage in policy-making. Only if the judicial check on the executive and legislative law-making powers is accentuated between now and when the claim is instituted, can the courts make a meaningful contribution to climate change adaptation. In South Africa, courts are more willing to enter the policy-making realm, but are mindful of the constraints on an overburdened government to fulfil its socio-economic duties. Therefore, it is submitted that the degree of success in poverty alleviation efforts between now and when the claim is instituted will be crucial to the outcome of such a hypothetical claim.

If a claim in tort or delict is heard on the merits, the plaintiff's case will stand and fall on the development of the common law. In the English tradition, the

development of the common law has been conservative in nature, despite its obvious non-compatibility with modern environmental issues. Despite having enshrined environmental principles in important policy documents and legislation, the courts have no duty to base decisions impacting on the environment on these principles. The South African judiciary has been similarly cautious in being overly expansive in its development of the Roman-Dutch Law. However, the Constitution offers a litigator an opportunity to justify development of the common law. There is certainly room to argue that the Constitution makes it mandatory for courts to consider environmental principles such as the preventative principles and inter-generational equity in common law matters. The South African common law is therefore more flexible and is more open to developing an inherent climate change adaptation duty than the Australian system.

If there is not, or will never be, an adaptation duty in law, governments might well be slow and hesitant to devise and implement effective adaptation measures. This is an unacceptable situation for 'risk society,' who demands that risks are adequately managed by their governments. It is ideal for post-industrial society that people are not afraid of climate change, but that governments are afraid of the effects of climate change on its people.

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