

# Doing the Groundwork: State, Local and Judicial Contributions to Climate Change Law in Australia\*

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## 1. Introduction

To be effective, and perhaps more importantly, practical, principles of intergenerational equity must be reduced from the level of abstruse generality to a level of particularity susceptible of application to specific environmental problems ... The translation of the principles of intergenerational equity into enforceable legal norms is thus an essential task for municipal and international law.<sup>1</sup>

In recent times, climate change law has been identified as an emergent body of law in its own right.<sup>2</sup> Much of the discussion to date has focused on relevant international law and its application to the domestic sphere.<sup>3</sup> Another topical discussion point is emissions trading schemes.<sup>4</sup> Both these areas tend to focus on mitigation or abatement (that is, emissions reduction) measures and often involve a discussion of comparative national or international measures. Whilst this debate and analysis is most welcome, the literature seems to give scant regard to the measures, actions and policies that Australian states and local governments have been pursuing. This failing seems unwarranted. The lack of national leadership through to the end of 2007 created a policy vacuum which these other actors started to fill. Whilst the federal Government confined itself largely to voluntary, no regrets measures, some states, local governments and specialist courts were developing a more proactive approach.<sup>5</sup> The contribution of these actors has not been limited to operational projects but has also included policy setting and law reform. From these actions, a wealth of experience and insight has developed – although little theorizing has ensued.

This article explores the contribution to legal and policy development that has already occurred within Australia in the hands of local government, state and judicial actors. It describes a select number of actions that serve to illustrate the variety and reach of their involvement to date. It

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<sup>1</sup> Redgwell C, “Intergenerational Equity and Global Warming” in Churchill R and Freestone D (eds) *International Law and Global Climate Change* (London: Graham & Trotman, 1991) pp 47-48

<sup>2</sup> Lyster R, “Chasing Down the Climate Change Footprint of the Private and Public Sectors: Forces Converge” (2007) 24 EPLJ 281. See also, Bonyhady T and Christoff P, *Climate Law in Australia* (Federation Press, Sydney, 2007).

<sup>3</sup> Lyster R, n.2; Jones D, “The Kyoto Protocol, Carbon Sinks and Integrated Environmental Regulation: An Australian Perspective” (2002) 19 EPLJ 109; Gumley W, “Legal and Economic Responses to Global Warming – An Australian Perspective” (1997) 14 EPLJ 341; Cusack V “Perceived Costs Versus Benefits of Meeting the Kyoto Target for Greenhouse Gas Emissions Reductions: the Australian Perspective” (1999) 16 EPLJ 53; Lyster R, “Common but Differentiated? Australia’s Response to Global Climate Change” (2004) 16 *Georgetown International Environmental Law Review* 561.

<sup>4</sup> Lyster R, n.2; Kearney T, “Market Based Policies for Demand Side Energy Efficiency: A Comparison of the New South Wales Greenhouse Gas Abatement Scheme and the United Kingdom’s Energy Efficiency Commitment” (2006) 23 EPLJ 113; Durrant N, “Emissions Trading, Offsets and other Mitigation Options for the Australian Coal Industry” (2007) 24 EPLJ 361; Thompson A and Campbell-Watt R, “Carbon Rights – Development of the Legal Framework for a Trading Market” (2004) 2 *National Environmental Law Review* 31; Lyster R and Bradbrook A, *Energy Law and the Environment* (CUP, Melbourne, 2006) esp chs 4,6.

<sup>5</sup> Peel J, “The Role of Climate Change Litigation in Australia’s Response to Global Warming” (2007) 24 EPLJ 90; O’Hart A, “Climate Change in Planning Decisions and Environmental Impact Assessment: Recent Cases” PIA Seminar Paper, unpublished, April 2007; Smith J and Shearman D, *Climate Change Litigation* (Presidian Legal Publications, Adelaide, 2006).

organizes these contributions around three over-arching principles – inter-generational equity; the precautionary principle and the principle (or policy recognition) of climate change as a “common concern”. These over-arching principles are already familiar themes in international environmental law but the concern here is to outline and explore their meaning and potential contribution to the development of Australia’s domestic law on climate change. To that end, this article outlines briefly the origin and status of each of the over-arching principles. It then proceeds to explore the relevance and applicability of each principle to domestic climate change issues, focusing on some existing developments (or “normative interpretations”) in local government, state and judicial fora. Finally, this article speculates on how these principles might continue to contribute to the evolution of climate change law and policy in Australia. Hopefully this discussion of diverse domestic measures in the context of three over-arching, thematic principles will ensure that state, local government and judicial experience to date serves to inform and enrich national policy development and the ongoing evolution of climate change law.

## 2. Principle 1: Intergenerational equity

In recent years, environmental law has embraced the concept of sustainable development, defined as, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>6</sup> Within Australia that concept has taken root as ecologically sustainable development (ESD), defined as, “development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.”<sup>7</sup> A core objective of ESD, as stated in the National Strategy for ESD (NSES), is “to provide for equity within and between generations” – the principle of inter-generational equity.<sup>8</sup> Whether the principle of intergenerational equity is simply a restatement of the principle of ESD, or a more particular extension of it, is a little unclear but the term does at least emphasize the intergenerational nature of sustainability.<sup>9</sup> In so doing, it expands the concept of sustainable development beyond positivist, scientific–rational notions of sustainable resource use and appeals to a more basic moral imperative – a notion of fairness or justice that extends across generations and, in one form or other, is said to be present in every culture.<sup>10</sup> In legal terms, the closest analogy may be with trust principles:

Each generation receives a natural and cultural legacy in trust from previous generations and holds it in trust for future generations.<sup>11</sup>

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<sup>6</sup> WCED, *Our Common Future: The Report of the World Commission on Environment and Development*, (OUP, Oxford, 1987), p 43.

<sup>7</sup> NSES, 1992, Goal. Available at

<http://www.environment.gov.au/esd/national/nsesd/strategy/intro.html#GoalsEtc> (viewed 28 April 2008).

<sup>8</sup> NSES, n 7, Core Objective no.2. On the intergenerational principle in general, see: Brown Weiss E, *In Fairness to Future Generations: International law, Common Patrimony and Intergenerational Equity* (New York: The United Nations University, Transnational Publishers, Inc, 1989); Brown Weiss E, “Goa Guidelines on Intergenerational Equity” (1988) 18 *Environmental Law and Policy* 190; Barry B, “Justice Between Generations” in Hacker P and Raz J (eds), *Law, Morality and Society: Essays in Honour of HLA Hart* (Clarendon Press, Oxford, 1977).

<sup>9</sup> Redgwell states: “Intergenerational equity is the international legal articulation of the principle of sustainable development” in Redgwell n 1, p 42.

<sup>10</sup> Redgwell, n 1, p.45. See further, D’Amato A, “What Obligations Does Our Generation Owe the Next? An Approach to Global Environmental Responsibility” (1990) 84 *American Journal of International Law* 198; Gundling L, “Our Responsibility to Future Generations for the Environment” (1990) 84 *American Journal of International Law* 207; Brown Weiss E, “The Planetary Trust: Conservation and Intergenerational Equity (1984) 11 *Ecology Law Quarterly* 495.

<sup>11</sup> Brown Weiss E, “Intergenerational Equity in International Law” (1987) *Proceedings of the American Society of International Law*, 81<sup>st</sup> Meeting, p.127.

Needless to say, at this level of abstraction, the principle of intergenerational equity raises all manner of problematic issues – should we never mine a non-renewable resource? How are we to know the wishes and preferences of future generations? If we convert non-renewable resources into a store of material wealth for future generations is intergenerational equity sustained? Who could or should enforce this “planetary trust”?<sup>12</sup> Whilst by no means a complete answer to these questions, some useful “component parts” have been added to the abstract principle. The concept of intergenerational equity has been said to encompass the need to:

- *Conserve options* - requiring the conservation of bio-diversity so the options available to future generations are not unduly restricted
- *Conserve quality* – so that, from one generation to the next, the planet is passed on in no worse condition than it is received; and
- *Conserve access* to environmental resources - including both an intergenerational dimension and, more controversially, an intra-generational dimension.<sup>13</sup>

Intergenerational equity has particular relevance to climate change issues. The evidence is now quite convincing, for instance, that unless dramatic cuts in greenhouse gas emissions are made within the next twenty years, iconic Australian habitats such as the Great Barrier Reef will be entirely lost to the next generation of Australians.<sup>14</sup> Perhaps more than any other current issue, climate change raises questions about the responsibilities of this generation to future ones. Moreover, as Redgwell identifies, climate change is particularly apposite for a case study of intergenerational equity because:<sup>15</sup>

- It is a serious and urgent problem
- The damage is potentially irreversible
- There is a need for new ways of thinking about the issues
- It is possible to develop acceptable measures of accountability
- It is a useful prototype for analysis of crises that occur in other contexts

The UN Framework Convention on Climate Change (UNFCCC) acknowledges the central role of intergenerational equity in climate change policy. It states:

The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.<sup>16</sup>

The following discussion reviews four “normative interpretations” of intergenerational equity that flow from current developments in Australian law and policy.

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<sup>12</sup> See further, Horn L, “Climate Change Litigation Actions for Future Generations” (2008) 25 EPLJ 115, p 121; Stone C, “Should Trees have Standing? Revisited: How Far Will Law and Morals Reach? A Pluralist Perspective” (1985) 59 *Southern California Law Review* 1; Sax J, “The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention” (1970) 68 *Michigan Law Review* 471.

<sup>13</sup> Weiss, “Conservation and Equity Between Generations” in Buergenthal, T, (ed) *Contemporary Issues in International law: Essays in Honour of Louis B Sohn* (1984). See also, Lammers, JG and Munro, RD (eds), *Environmental Protection and Sustainable Development: Legal Principles and Recommendations Adopted by the Experts Group on Environmental Law of the World Commission on Environment and Development* (1987) pp 42-45.

<sup>14</sup> McGarth C, “Setting Climate Change Targets to Protect the Great Barrier Reef” (2007) 24 EPLJ 182, p 186.

<sup>15</sup> Redgwell, n 1, p 53.

<sup>16</sup> *United Nations Framework Convention on Climate Change* (1992) (UNFCCC) 1771 UNTS 107; 31 ILM 849 (entered into force on 21 March 1994), Article 3, Principles.

## 2.1. Intergenerational equity means that, when assessing development applications, decision-makers should consider any significant impact on greenhouse gas emissions arising from that development.

If we accept that escalating greenhouse gas emissions pose a serious and significant threat to the well being of future generations then, consistent with the intergenerational principle, it becomes incumbent on current decision-makers to at least give careful consideration to the contribution made by new development to greenhouse gas emissions.

The environmental and planning legislation of each state commonly requires decision-makers, when considering applications for new development, to take into account the likely environmental impacts of the proposal.<sup>17</sup> However, for a number of reasons, a full consideration of climate change impacts has not always been factored into that equation. For instance, until quite recently, the science of climate change has been susceptible to so much debate and criticism that making reliable predictions of climate change appeared either scientifically impossible or impermissibly 'political'.<sup>18</sup> There were legal complications in establishing nexus and apportioning responsibility to any particular actors.<sup>19</sup> However, some recent cases have overcome these technical problems, focusing instead on the consequences of inaction, viewed through the lens of intergenerational equity. For instance, in the landmark case of *Gray v Minister for Planning*, Justice Pain decided that the environmental assessment report (EAR) for a proposed new mine at Anvill Hill should have included information about the downstream impacts of the mine, including its contribution to greenhouse gas emissions arising from the eventual burning of the coal to be mined at Anvill Hill (dealt with as scope 3 emissions in that case).<sup>20</sup> In arriving at this decision, her honour relied heavily on the principle of intergenerational equity:

[I]t is apparent that there is a failure to take the principle of intergenerational equity into account by a requirement for a detailed GHG (greenhouse gas) assessment in the EAR if the major component of GHG which results from the use of the coal, namely scope 3 emissions, is not required to be assessed. That is a failure of a legal requirement to take into account the principle of intergenerational equity.<sup>21</sup>

Although the Anvill Hill development ultimately went ahead, the requirement that, for major new development projects, the indirect contributions to greenhouse gas emissions should be reported and considered, has now been enshrined in NSW planning law.<sup>22</sup>

The requirement to carefully consider the contribution of new development to greenhouse gas emissions is essentially a procedural requirement but the effect of making that assessment may be to tip the scales in favour of, or against, any particular development. In other words, a substantive outcome may be the ultimate result of a procedural requirement. For instance, in *Taralga Landscape Guardians Inc v Minister for Planning* [2007], Chief Judge Preston applied the principle of intergenerational equity to reach a substantive, merits based outcome. This second NSW case involved an application for a new 69-turbine wind farm in an area subject to several

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<sup>17</sup> *Environmental and Planning Assessment Act*, 1979 (NSW) s.79C; *Planning and Environment Act*, 1987 (Vic) s.60; *Planning and Development Act*, 2007 (ACT) s.210; *Integrated Planning Act*, Qld, 1997, definition of impact assessment, schedule 10; *Environmental Protection Act*, 1993 (SA), s.36; *Environmental Management and Pollution Control Act*, 1994 (Tas), s.51; *Planning Act*, 1992 (NT), s.51.

<sup>18</sup> England P, "Climate Change: What Are Local Governments Liable for?" Issues Paper 6, March 2007, Urban Research Program, Griffith University; available at <[http://www.griffith.edu.au/centre/urp/urp\\_publications/Issues\\_Papers/URP\\_IP6\\_ENGLAND\\_Climate\\_LocGovt\\_final.pdf](http://www.griffith.edu.au/centre/urp/urp_publications/Issues_Papers/URP_IP6_ENGLAND_Climate_LocGovt_final.pdf)> (viewed on 5 December 2007).

<sup>19</sup> See further, Smith & Shearman D, n 5.

<sup>20</sup> *Gray v Minister for Planning* (2006) 152 LGERA 258; [2006] NSWLEC 720, para[145].

<sup>21</sup> *Gray v Minister for Planning* (2006) 152 LGERA 258; [2006] NSWLEC 720, para [126].

<sup>22</sup> *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries)* 2007 (NSW), cl 14(2).

heritage listings. In his reasoning, Preston CJ implied the principle of intergenerational equity gave rise to a presumption *in favour* of approving a new wind farm. This was because:

[We should] ... Increasingly substitute energy sources that result in less greenhouse gas emissions for energy sources that result in more greenhouse gas emissions, thereby reducing the cumulative and long term effects caused by anthropogenic climate change. In this way, the present generation reduces the adverse consequences for future generations.<sup>23</sup>

In approving the development, Preston CJ held the presumption in favour of renewable energy, derived from his interpretation of intergenerational equity, weighed more heavily than the other planning considerations (which favoured its refusal) in this particular case.

## **2.2. Intergenerational equity means future generations should not be forced to bear a disproportionate amount of the costs of abatement or adaptation.**

Apportioning the costs of environmental protection is a task intimately related to questions of both intergenerational and intra-generational equity. Distributive justice was a controversial aspect of early formulations of sustainable development but, at least in its intergenerational form, has survived and percolated into recent policy documents. For instance, Queensland's Climate Smart Adaptation Action Plan states:

Efforts aimed at sustainability will ensure that future generations are not forced to disproportionately carry the costs of adaptation, and that any benefits are shared across the community now and in the future.<sup>24</sup>

In practical terms, this normative interpretation of intergenerational equity lends support to two more sub-principles - (a) the polluter pays principle; and (b) the 'principle' of early intervention – that is, cost effective action should not be postponed or delayed if the cost of mitigation or adaptation measures is significantly less now than is likely to be the case in the future

### **2.2.1. The Polluter Pays Principle:**

The polluter pays principle asserts that, in general, the costs of environmental pollution should be borne by the polluter.<sup>25</sup> As such, the case for including this principle within the scope of what is a 'fair' or 'equitable' approach seems, in the majority of cases, to be self evident.<sup>26</sup>

In general, the effect of the precautionary principle is to internalize the costs of pollution as another cost of production. In so doing, it provides a market driven incentive for producers to reduce their pollution in order to reduce their costs of production. At its most effective, the principle may perform a *preventive function* (by providing an incentive to reduce pollution); a *redistributive function* (in that the real costs of pollution are borne by the polluters) and a *curative*

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<sup>23</sup> *Taralga Landscape Guardians Inc v Minister for Planning* [2007] NSWLEC 59, para [74].

<sup>24</sup> Queensland Government, *Climate Smart Adaptation 2007-12: An Action Plan for Managing the Impacts of Climate Change* (Department of Natural Resources and Water, Queensland, 2007) p.11.

<sup>25</sup> “National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.” (*Rio Declaration on Environment and Development*, (UNCED, 14/06/92, Doc A/CONF.151/26) Principle 16.

<sup>26</sup> A plausible exception might be where the polluter, through lack of financial means or other constraints, has no other option than to pollute.

*function* (to the extent that people, or the environment, that suffers from the pollution are financially compensated for that harm).<sup>27</sup> A number of international documents and treaties endorse the polluter pays principle, including, most notably, the *Single European Act*, 1986.<sup>28</sup> However, despite its frequent endorsement in international law, the polluter pays principle has not been definitively embraced within Australia. For instance, the National Strategy for ESD (NSES) excludes a specific reference to the polluter pays principle in its guiding principles. It does however state that:

Cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms.<sup>29</sup>

Despite the reticence of the NSES to endorse the polluter pays principle, the principle underscores many of the actions taken by environmental regulators operating in Australia. Environmental taxes and charges routinely applied by states to environmentally polluting actors may be justified on the grounds of the polluter pays principle as well as NSES Guiding Principle 6. In more recent times, emissions trading schemes are a good example of how the polluter pays principle may be employed in creative ways to drive change within existing, market-driven economies. Within Australia, the New South Wales Government has led the way in this area. In 2002, it passed the *Electricity Supply Amendment (Greenhouse Gas Emission Reduction) Act* which established the Greenhouse Gas Reduction Scheme (GGAS), one of the world's first mandatory emissions reduction schemes.<sup>30</sup> The scheme requires NSW electricity providers, and certain other parties, to meet mandatory targets for reducing or offsetting greenhouse gas emissions generated by their activities. Participants in the scheme can reduce the average emissions intensity of their activities by purchasing abatement certificates and surrendering these to the Scheme Administrator, the Independent Pricing and Regulatory Tribunal (IPART).<sup>31</sup> GGAS commenced operation in the Australian Capital Territory (ACT) in 2005. The scheme is likely to be transitioned into the national emissions trading scheme scheduled to commence operation in 2010.<sup>32</sup>

Emissions trading schemes have sometimes been envisioned as an ideal, market driven and almost comprehensive "solution" to escalating greenhouse gas emissions.<sup>33</sup> However, a more cautious assessment is probably required:

[W]e should not deceive ourselves: the distributive function for the most part remains more important than the preventive function. There are two explanations for this. First, hortatory mechanisms rest on the assumption that the polluter is behaving rationally, which is far from being always the case. Secondly, the dissuasive effect depends on the price charged the polluter – which is generally too low to encourage substantial reductions in pollution.<sup>34</sup>

The short lived experience of the GGAS seems to support these findings as:

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<sup>27</sup> De Sadeleer N, *Environmental Principles: From Political Slogans to Legal Rules* (2002, OUP, Oxford) p 34.

<sup>28</sup> Art 130R(2) (new Article 174(2)).

<sup>29</sup> NSES, n 7, Guiding Principle no.6.

<sup>30</sup> See further, "The Greenhouse Gas Reduction Scheme" at <http://www.greenhousegas.nsw.gov.au/default.asp> (viewed 28 April 2008).

<sup>31</sup> See further, The Greenhouse Gas Reduction Scheme: Overview" at [http://www.greenhousegas.nsw.gov.au/overview/scheme\\_overview/overview.asp](http://www.greenhousegas.nsw.gov.au/overview/scheme_overview/overview.asp) (viewed 28 April 2008).

<sup>32</sup> "About the ETS" available at <http://www.greenhouse.gov.au/emissionstrading/about.html> (viewed 25/05/08).

<sup>33</sup> Productivity Commission, "What Role for Policies to Supplement an Emissions Trading Scheme?" Submission to the Garnaut Climate Change Review (2008, Commonwealth Government, Canberra) p.12.

<sup>34</sup> De Sadeleer, n 27, p.36.

All projections indicate that certificate supply for 2007 will exceed the annual demand, while in 2008, 2009 and 2010 demand will exceed the supply. As certificates are bankable, the surplus of supply experienced in the first five years will assist in meeting the projected demand in these three years.<sup>35</sup>

In view of these concerns, additional, more tailored fiscal and regulatory measures, consistent with the polluter pays principle, should be explored across the board. A pertinent example is the requirement, in Queensland, for all new class 1 homes to be built to higher than previous standards of energy efficiency, including energy efficient light bulbs and greenhouse efficient hot water systems.<sup>36</sup> Other good examples may be drawn from the various water restrictions in place across Australia. For instance, in South East Queensland, owners of domestic swimming pools are only allowed to top up their pools with town water if they have met two out of three conditions requiring the installation of water saving devices.<sup>37</sup> Consistent with the polluter pays principle, these measures locate responsibility for adopting higher environmental standards in the hands of the 'polluter' who will enjoy the benefits of the 'polluting' activity.

### **2.2.2. Cost-effective action should not be delayed or postponed:**

Intergenerational equity requires that, if the costs of delaying action on climate change issues are likely to be significantly greater than the current cost of applicable measures, then the costs of abatement or adjustment should be borne by the present generation. This normative interpretation is consistent with the major premise of the Stern Review that the "benefits of strong, early action on climate change outweigh the costs .... The earlier effective action is taken, the less costly it will be".<sup>38</sup> Within Australia, the cost effective nature of early action is acknowledged in various State based policy documents.<sup>39</sup> Assuming that intergenerational equity means each generation has a broadly equal right and responsibility towards the environment, the logic of this sort of "cost effective" action, once again, appears self evident.

The principle that cost effective action should not be delayed or postponed needs to be distinguished from the "no regrets" initiatives of the former federal government. Energy efficiency, switching to more greenhouse friendly fuel (such as natural gas) and pursuing projects with multiple benefits all fit readily enough into the basket of "cost effective" action. These sorts of actions also met the Howard government's objective of adopting "no regrets" measures. However, whilst these sorts of measures are certainly a good starting point for action to reduce greenhouse gas emissions, a requirement to pursue "cost effective" action is potentially more onerous than a policy supporting only "no regrets" measures. Its tenor is that, if the long term

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<sup>35</sup> NSW Government, *Introduction to the Greenhouse Gas Reduction Scheme*, 2007, p.20. Available at - <http://www.greenhousegas.nsw.gov.au/documents/syn91.asp> (viewed 28 April 2008).

<sup>36</sup> Queensland Development Code, "Sustainable Buildings" Mandatory part 4.1, 2008, available at <http://www.dip.qld.gov.au/building/current-and-draft-parts.html> (viewed 19/05/08).

<sup>37</sup> Level 6 Water Restriction, Notice of a Commission Water Restriction under the Water Act (Qld) 2000, s 360ZD, (commenced 23/11/2007).

<sup>38</sup> Stern N, *Stern Review Report on the Economics of Climate Change* (HM Treasury, London, 2006) pp.i-ii. Available at [http://www.hm-treasury.gov.uk/independent\\_reviews/stern\\_review\\_economics\\_climate\\_change/stern\\_review\\_report.cfm](http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm) (viewed 24/05/08).

<sup>39</sup> Including - ACT, *Climate Change Strategy 2007-2025* (ACT, Canberra, 2007) at 21; Qld, *Climate Change Adaptation, 2007-2012* (Qld, Climate Change Centre of Excellence, Brisbane, 2007) at 7; NSW Greenhouse Office, *New South Wales Greenhouse Plan* (NSW Government, Sydney, 2005) at 19; South Australia, *Tackling Climate Change: South Australia's Greenhouse Strategy 2007-2020* (South Australian Government, 2007) at 1. See also, Council for the Australian Federation, *Declaration on Climate Change*, (February 2007) Preamble, available at [http://www.dpc.vic.gov.au/CA256D800027B102/Lookup/CAFDeclarationonClimateChange/\\$file/CAF%20Declaration%20on%20Climate%20Change.pdf](http://www.dpc.vic.gov.au/CA256D800027B102/Lookup/CAFDeclarationonClimateChange/$file/CAF%20Declaration%20on%20Climate%20Change.pdf) (viewed 24/05/08).

benefits outweigh the current costs of taking action, then it is the current generation that should foot the bill however 'regrettable' the financial cost to that generation is.

One of the difficulties associated with implementing "cost effective" action is that the task of accurately estimating the costs of action or inaction on climate change is inherently problematic. This, coupled with the unpalatable political significance of the principle, somewhat dilutes the imperative for adopting cost effective measures as soon as possible. Nevertheless, as the Stern Review has demonstrated, the anticipated impacts and associated costs of climate change are rapidly becoming more apparent and more easily quantifiable. This strengthens the arguments in favour of cost effective action as opposed to merely "no regrets" measures.

To date, adherence to the notion of adopting "cost effective" measures has been most prominent in the area of climate change adaptation, in circumstances where early intervention may effectively serve to prevent damage to property and lives. In this scenario "cost effective" action may incur little financial outlay on the part of regulators (although some financial gain may be foregone) and also serve to reduce their potential exposure to future compensation and /or legal liability claims.<sup>40</sup> Provisions requiring generous set backs from the coastal foreshore for new development, taking into account likely sea level rise, are a good example of the sorts of measures some local governments are now implementing.<sup>41</sup> Some local governments are also revising their guidelines for bush fire management, mosquito control, storm water capacities, building design and water efficiency to adopt more stringent standards.<sup>42</sup>

At the local government level, the switch is clearly underway, from a yardstick favouring "no regrets" measures to one favouring "cost effective" measures, at least in terms of adaptation to climate change.

### **2.3. Intergenerational equity means that climate change adaptation should be consistent with and, supportive of, greenhouse gas abatement strategies**

Adopting measures to adapt to climate change in isolation of – or in preference to – implementing greenhouse gas abatement strategies is antithetical to intergenerational equity on both practical and moral grounds. In practical terms, without significant abatement, the cost of adapting to climate change will become either prohibitively expensive for future generations, or simply impossible. These scenarios offend both the polluter pays principle and the early intervention arguments, as canvassed above. As recognized in Queensland's Climate Smart Adaptation Plan,

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<sup>40</sup> SMEC Australia, *Climate Change Adaptation Actions for Local Government Government* (AGO, Department of the Environment and Water Resources, Commonwealth Government, Canberra, 2007) at 11. Available at <http://www.greenhouse.gov.au/impacts/publications/local-government.html> (viewed 10/05/08). On potential sources of legal liability see further, England n 18; McDonald J, "A Risky Climate for Decision-Making: The Liability of Development Authorities for Climate Change Impacts" (2007) 24 EPLJ 405; Durrant N, "Professional Liability for Climate Affected Advice" 2007/8 13 *Queensland Environment Practice Reporter* 114.

<sup>41</sup> In New South Wales, local governments are required to ensure their Local Environmental Plans make provision for adequate set backs in areas of coastal erosion risk and ocean based inundation in accordance with the South Coast Regional Planning Strategy (NSW). See further, EDO (NSW), *Coastal Councils and Planning for Climate Change*, (Sydney Coastal Councils Group Inc, Sydney 2008). See also, State Coastal Planning Policy, no.2.6, Western Australia, Schedule One, Section D.3 (Factors to be Considered in Calculating Coastal Processes Setback: Distance to Allow For Seal Level Change).

<sup>42</sup> See examples described in, SMEC Australia, n 40, pp 51-53. Councils cited include: Port Adelaide-Enfield Council (SA); Ku-rin-gai Council (NSW) and City of Mandurah (WA). See also, Scott J, Hayward L Joyce A, "Climate Change Adaptation – Socialising the Science" (2008) 14 LGLJ 52.

this is not an “either-or” scenario, both adaptation and abatement must occur simultaneously and, wherever possible, in mutually reinforcing ways:

The only way to lessen the rate and overall magnitude of future climate change is to reduce emissions. A commitment to do so increases the likelihood of successful adaptation and decreases the potential cost of climate change.

Careful evaluation of adaptation responses will guard against inadvertently increasing greenhouse gas emissions, thus further increasing climate change risks.<sup>43</sup>

The arguments in favour of simultaneous and complementary action on abatement and adaptation do not rest purely on financial logic - they are moral and normative as well. For instance, each of the component parts of intergenerational equity – conserving diverse options; sustaining good environmental quality and providing access to resources for future generations – is likely to be seriously breached if policies to reduce greenhouse gas emissions are not pursued at least as vigorously as adaptation strategies.

The scope for simultaneous and complementary action for both abatement and adaptation on climate change is probably best illustrated by long term policies designed with the prospect of a “carbon constrained future” in mind.<sup>44</sup> Several state and local government actions illustrate the potential for simultaneous and complementary action in this field, the most obvious examples being in the area of sustainable building design; planning for compact cities and investment in public transport, including natural gas powered vehicles.<sup>45</sup> These are important initiatives that may not only help reduce carbon emissions in the long term but should also help to curb Australia’s escalating reliance on energy intensive forms of housing and transport - thereby reducing emissions whilst simultaneously adapting to predicted climate change impacts and the increasingly imminent prospect of a carbon constrained future.

In these areas, states and local governments have taken the boldest initiatives to date. New South Wales, for instance, was the first state to require all new residential development be built to an energy standard up to 40% more efficient than similar existing housing stock.<sup>46</sup> This requirement is implemented as part of the development application process – a development application cannot be processed until it has been issued with a BASIX certificate. In order to obtain a BASIX certificate, the design and construction of a new building must be assessed for its energy efficiency using freely available software that measures the performance of the building taking into account its method of construction, the building materials used and the overall design of the house, allowing some flexibility in how to meet the requisite standards of efficiency.<sup>47</sup> Since 2006, BASIX certification has applied to alterations and additions to existing buildings in that state.<sup>48</sup>

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<sup>43</sup> Principles 2 & 3 of *Qld Climate Smart Adaptation Plan*, n 24, at 11

<sup>44</sup> A carbon constrained future (or low carbon economy) is a future in which oil, coal and other fuels that emit greenhouse gases are more limited in supply and ever more costly to utilize. It is now becoming widely recognized that transitioning our industrial society towards a low carbon economy is the only long term solution that can reduce our vulnerability to the increasing cost of carbon.

<sup>45</sup> For details of urban containment policies in Sydney, Melbourne and Brisbane, see their respective regional / metropolitan planning documents – Department of Planning, *City of Cities: A Plan for Sydney’s Future* (NSW Government, Sydney, 2005); Department of Sustainability and Environment, *Melbourne 2030* (Vic Government, Melbourne, 2002); Office of Urban Management, *South East Queensland Regional Plan 2005-2026* (Queensland Government, 2005). For a survey of local government initiatives towards reducing greenhouse gas emissions, see Cities for Climate Protection (CCP), *Local Government Action on Climate Change: CCP Australia Measures Evaluation Report 2007* and the CCP web site available at - <http://www.environment.gov.au/settlements/local/ccp/> (viewed 24/05/08).

<sup>46</sup> “About BASIX” available at <http://www.basix.nsw.gov.au/information/about.jsp> (viewed on 19/05/08).

<sup>47</sup> Above, n 46.

<sup>48</sup> Above, n 46.

In 2006, the Building Code of Australia was revised to include more stringent energy rating requirements for new homes. The relevant requirements – now based on a 5 star energy efficiency requirement - relate mostly to the building fabric and external glazing of new dwellings.<sup>49</sup> Nevertheless, several states continue to apply more stringent sustainability standards than are required by the national BCA. In Victoria, for instance, new homes are required to have either a rainwater tank for toilet flushing or a solar hot water system.<sup>50</sup> In Queensland, all new homes are now required to have water efficient AAA-rated showerheads, dual flush toilets, energy efficient lighting in at least 40% of the house, water pressure limiting devices in areas with high water pressure and greenhouse efficient hot water systems.<sup>51</sup>

## 2.4. Intergenerational equity means that climate change issues are a matter of public interest and responsibility

Intergenerational equity is essentially a moral prescription that gives rise to financial and other implications. Its most important contribution, however, remains the ethical dimension it brings to debates about environmental protection at all levels of government. Ultimately it subjects other lines of reasoning - cost-benefit analyses, risk management strategies, debates about insurance and the methods of apportioning environmental costs – to a more fundamental test, that is, the well being of future generations. Because it pitches the well being of one community (the present generation) against that of another (future generations), it unequivocally situates the climate change debate in terms involving communities not just individuals. This means that not only must debates about climate change take place within the public sphere, those debates must acknowledge, define and give weight to the “public interest” in this issue. For instance, decision-makers with power to approve new development should not only weigh up the arguments of project proponents and any local opposition, they should now also consider the broader “public interest” in any aspect of their decision that has a bearing on climate change issues. The basis for this proposition derives from the legal endorsement of the principle of intergenerational equity - and / or ecologically sustainable development - found in much of Australia’s planning legislation.<sup>52</sup>

Judicial support for this line of reasoning can be clearly seen in the aforementioned case of *Taralga Landscape Guardians Inc v Minister for Planning* [2007]:

This choice arises in a context where there is no compelling reason why there should not be some turbines in this landscape and where there is a significant public interest, in general terms, in adoption of alternative, more environmentally

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<sup>49</sup> ABCB, “Energy Efficiency Provisions for Housing”, available at - [http://www.abcb.gov.au/go/eehousing\\_pl](http://www.abcb.gov.au/go/eehousing_pl) (viewed on 16/05/08). The revised provisions have been adopted in the Australian Capital Territory, South Australia, Victoria and Western Australia. See further, Rossetto L, “Sustainable Homes: Recent Developments in Australia” (2007) 13 LGLJ 43 at 50.

<sup>50</sup> Practice Notes, clause Vic 1.2.2(a)(ii) of Volume Two of the Building Code of Australia (BCA) 2005. See also, Building Commission, *Residential Sustainability Measures*, Practice Notes (2007 -55) available at [http://www.sustainability.vic.gov.au/resources/documents/Practice\\_note\\_2007.pdf](http://www.sustainability.vic.gov.au/resources/documents/Practice_note_2007.pdf) (viewed 25/05/08); Wilkenfield and Associates, *Water Saving Requirements for New Residential Buildings in Victoria: Options for Flexible Compliance* (Department of Sustainability and Environment, Vic 2006) available at - [http://www.dse.vic.gov.au/CA256F310024B628/0/624CE956BC9D9D89CA2572DD002A1812/\\$File/Water+savings+options+for+new+residential+buildings+in+Victoria+June+2006.pdf](http://www.dse.vic.gov.au/CA256F310024B628/0/624CE956BC9D9D89CA2572DD002A1812/$File/Water+savings+options+for+new+residential+buildings+in+Victoria+June+2006.pdf) (viewed 24/6/08).

<sup>51</sup> Queensland Development Code, “Sustainable Buildings” Mandatory Part 4.1, 2008, available at <http://www.dip.qld.gov.au/building/current-and-draft-parts.html> (viewed 19/05/08).

<sup>52</sup> See for instance, *Environmental and Planning Assessment Act*, 1979 (NSW) s 5; *Planning and Environment Act*, 1987 (Vic) s 4(1); *Planning and Development Act* 2007 (ACT) s 9; *Integrated Planning Act*, Qld, 1997, s 1.2.3(1); *Development Act*, 1993 (SA) s 3. Note also, the NSESD states, “The global dimension of environmental impacts of actions and policies should be recognised and considered” (Guiding Principle, no.3, NSESD).

friendly, energy generation sources. Although there will be change to the village's outlook, I am satisfied that the broader public interest must outweigh this impact.<sup>53</sup>

Protecting the public interest has also been a consideration in a number of cases involving coastal erosion.<sup>54</sup> In these cases the courts have upheld planning instruments of local governments which prioritise public access to the foreshore over and above defensive works protecting private property or further residential development.

### 3. Principle 2: The Precautionary Principle

The precautionary principle has been defined as “Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”<sup>55</sup> Compared to intergenerational equity, the principle has received significant attention both in academic scripts and in the courts.<sup>56</sup> De Sadeleer locates this principle firmly within the context of post industrial risk society<sup>57</sup> in which precise, measurable knowledge of scientific risk is replaced by relationships of “possibility, eventuality or plausibility” between cause and effect.<sup>58</sup> These inherently uncertain risks are characteristic of a new generation of environmental risks, including climate change, arising at the end of the 20<sup>th</sup> century. They frequently involve long lead times, diffuse impacts and the (relatively uncertain) prospect of very serious consequences. De Sadeleer argues that environmental law has responded to the emergence of uncertain risks by developing a new “anticipatory” model of environmental law that constitutes an epistemological break away from previous models of curative<sup>59</sup> and preventive<sup>60</sup> environmental laws. The precautionary principle sits squarely within this anticipatory model being designed to help decision-makers’ deal with the assessment of uncertain scientific evidence.

Whereas the principle of intergenerational equity is fundamentally a moral premise, the precautionary principle appeals more to a common sense, “better safe than sorry” type of reasoning. Nevertheless, value judgments must still come into play in determining the fundamental question of what is a tolerable degree of risk, that is, at what point does scientific

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<sup>53</sup> *Taralga Landscape Guardians Inc v Minister for Planning* [2007] NSWLEC 59 at [146]-[147].

<sup>54</sup> *Parkes v Byron Shire Council* [2004] NSWLEC 92; *Northcape Properties Pty Ltd v District Council of Yorke Peninsula* [2008] SASC 57; *Falkner v Gisborne DC* [1995] NZRMA 462.

<sup>55</sup> *Rio Declaration on Environment and Development*, above n 25, Principle 15.

<sup>56</sup> See for instance, Peel J, *The Precautionary Principle in Practice* (Federation Press 2005); Harding R and Fisher E, *Perspectives on the Precautionary Principle* (Federation Press 1999); Freestone D, “The Precautionary Principle” in Churchill R and Freestone D, n 1; De Sadeleer N, “The Precautionary Principle” in De Sadeleer n 27 at 91-226; Freestone D and Hey E (eds), *The Precautionary Principle and International Law*, (Kluwer, The Hague, 1995); Barton, C, “The Status of the Precautionary Principle in Australia: Its Emergence in Legislation and as a Common Law Doctrine” (1998) 22 *Harvard Environmental Law Review* 509; Harding R and Fisher E (eds) *Perspectives on the Precautionary Principle*, (Federation Press, NSW, 1999); Wyman L, “Acceptance of the Precautionary Principle – Australian v International Decision-Makers” (2001) 18 *EPLJ* 395; Stein P, “Are Decision-Makers too Cautious with the Precautionary Principle?” (2000) 17 *EPLJ* 3.

<sup>57</sup> On the nature of risk society see Beck, U, *Risk Society: Towards a New Modernity* (Sage Publications, 1992); Giddens, A, *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Polity, 1990); Luhmann, N, *Risk: A Sociological Theory*, (De Gruyter, 1991).

<sup>58</sup> De Sadeleer, n 27 at 152.

<sup>59</sup> The Curative Model includes laws aiming to “eliminate the deleterious effects of over exploitation, by decontaminating, re-introducing, cleaning up, restoring” the health of the environment after its exploitation. De Sadeleer, n 27 at 15.

<sup>60</sup> The Preventive Model includes laws to ensure that “problems be prevented from occurring in the first place and, once they have occurred, be prevented from spreading”. De Sadeleer, n 23 at 16.

uncertainty become sufficiently certain to trigger the operation of the principle and with what cost consequences? More specifically, some of the debates relate to -

1. *Uncertainty about the nature of potential consequences:* For many 21<sup>st</sup> century environmental problems, including climate change, the full range of possible consequences cannot be predicted with absolute certainty. This factor differentiates today's environmental problems from those of the earlier, preventive era of environmental law.
2. *Uncertainty about the likelihood of potential risks actually occurring:* In scientific disciplines, establishing a causal relationship usually requires proof in the order of 95% certainty<sup>61</sup> – but when the consequences of doubt and inaction are potentially serious and irreversible, as is the case with climate change, it may not be wise to wait for 95% or more proof of a causal relationship. A lower threshold may suffice.
3. *Uncertainty about the nature of cumulative, inter-related risks and consequences:* Many of today's environmental problems are so complex, contingent and inter-related that full scientific understanding of all the issues is impossible. Furthermore, sometimes the indirect consequences of actions to address particular issues cannot be fully ascertained – fixing one problem may create others, as in the case of recent bio-fuel programs.<sup>62</sup>
4. *Uncertainty about the relative costs and benefits of precautionary action:* Most importantly, in the light of all these uncertainties, there is little agreement on the appropriate price that should be paid to implement precautionary measures. Is it sufficient to implement only “no regrets measures”, or is it necessary to “hedge our bets”, or, if the risk is accepted as sufficiently certain and serious, is “zero tolerance” that is, the elimination of the cause of the problem, the only sensible strategy to adopt? To further complicate any cost-benefit equation, the economic value of some environmental assets (for instance, biodiversity) is simply not fully quantifiable.<sup>63</sup>

Needless to say, all these issues are directly relevant to climate change. Fortunately, in this area, the reports of the IPCC have helped to reduce the level of uncertainty with respect to points (1) and (2) above whilst the Stern Report now provides an authoritative measure of the relative economic costs of precautionary action versus inaction of relevance to point (4). For the majority of decision-makers, these authoritative international documents seem to have provided sufficient evidence to make the issue of climate change now “certain enough” to warrant action, the main outstanding questions being “what action should we take?”, “how far should we go?” and “who should pay the price”? So while there is near universal agreement that a precautionary approach is justified,<sup>64</sup> there is still no consensus on just how precautionary that approach should be – specifically, how much climate change is tolerable, should less certain consequences (eg from tipping points and cumulative risks) be taken into account and what cost is it tolerable for this generation to bear?

Within Australia, the precautionary principle has had a chequered history. In the leading case of *Leach v National Parks and Wildlife Service*, Justice Stein applied the principle to completely halt

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<sup>61</sup> Peel, n 56, p 40.

<sup>62</sup> Joint Transport Research Centre, *Biofuels: Linking Support to Performance: Summary and Conclusions* (OECD /International Transport Forum, Paris, 2007) p 1.

<sup>63</sup> Fisher D, “Intrinsic Environmental Values” in Fisher D, *Australian Environmental Law* (Lawbook, Sydney, 2003), pp 43-45.

<sup>64</sup> See for instance, endorsement of the principle in the *UN Convention on Climate Change*, 1992, Art.3: “The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. 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, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.”

a development proposal until sufficient information to enable a proper environmental impact assessment was made available.<sup>65</sup> At the time of the proceedings, the nature and extent of the Giant Burrowing Frog, a species that had recently been listed as a threatened species, was simply unknown. Despite the lack of any specific evidence, the fauna impact statement submitted by Council had concluded no adverse impacts on this species were likely because the relevant area was degraded natural habitat. Justice Stein's decision highlighted an important role for the precautionary principle in raising the quality and rigour of environmental impact assessment.<sup>66</sup> It took a "hard line", or highly *risk averse* approach to a development proposal involving uncertain environmental risks.

After the decision in *Leatch*, a number of Australian cases assigned a less radical role to the precautionary principle.<sup>67</sup> At best, these subsequent cases suggest development should not generally be halted so much as modified to take into account a *cautious* approach to environmental issues. The increasing endorsement of ongoing environmental management plans to deal with deleterious side effects as and when they become better understood, has been one result.<sup>68</sup> In addition, the emphasis in *Leatch* on requiring comprehensive environmental evaluation has been interpreted as an essentially procedural requirement.<sup>69</sup> This essentially *procedural* interpretation of the precautionary principle does not necessarily require the imposition of risk averse solutions if and when an evaluation either - (a) finds evidence of serious or irreversible environmental harm; or (b) is inconclusive.

Standing somewhere in between the two extremes of the *risk averse* and the *cautious* approach is another line of reasoning finding widespread support in the Australian courts. This is the view that, if the precautionary principle applies, it serves to alter the ordinary burden of proof. If a development proposal is associated with threats of serious or irreversible harm to the environment, the burden of proof is shifted away from the defendant (to prove environmental harm) to the project proponent to offer appropriate measures to prevent that harm occurring or to mitigate its effects.<sup>70</sup>

The following discussion discusses three 'normative interpretations' of the precautionary principle particularly applicable to climate change issues:

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<sup>65</sup> (1993) 81 LGERA 270.

<sup>66</sup> Peel, op cit, n 56 at 197. See also, *Planning Workshop Ltd v Pittwater Council* [1996] NSWLEC 211; *Dayfast v Ballina Shire Council* [2000] NSWLEC 128 for further endorsement of this approach.

<sup>67</sup> *Nicholls v Director-General of National Parks and Wildlife* (1994) 84 LGERA 397; *Friends of Hichinbrook Society Inc v Minister for Environment* (no.2) (1997) 69 FCR 28; *Lend Lease Development Pty Ltd v Manly City Council* [1998] NSWLEC 136. See further, Peel, n 56 at 203-205.

<sup>68</sup> *Tuna Boat Owners Association of South Australia Inc v Development Assessment Commission* (2000) 77 SASR 369; *R v Resource Planning and Development Commission; ex parte Aquatus Pty Ltd* (1998) 100 LGERA 1; *St Ives Development Pty Ltd v City of Mandurah* (2003) 31; *North Queensland Conservation Council v Great Barrier Reef Marine Park Authority* [2000] AATA 925.

<sup>69</sup> For a fuller discussion of these issues see further, Peel, n 56, pp 203-205; Stein, n 56, pp 12 -16; Wyman n 56 pp 397-402; Barton, n 56, pp 535-542.

<sup>70</sup> *Tuna Boat Owners Association of South Australia Inc v Development Assessment Commission* (2000) 77 SASR 369; *Booth v Bosworth* (2001) 114 FCR 39. For further discussions of the reverse burden of proof, see Barton, n 56, pp 519-520; Preston B, "The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific", Paper Presented to the Kenya National Judicial Colloquium on Environmental Law Mombasa, Kenya, 10-13 January 2006, at 39 (available at [http://www.lawlink.nsw.gov.au/lawlink/lec/ll lec.nsf/vwFiles/Speech\\_17Apr06\\_Preston.pdf/\\$file/Speech\\_17Apr06\\_Preston.pdf](http://www.lawlink.nsw.gov.au/lawlink/lec/ll lec.nsf/vwFiles/Speech_17Apr06_Preston.pdf/$file/Speech_17Apr06_Preston.pdf)) (viewed 25/05/08); O'Riordan T and Cameron J, "The History and Contemporary Significance of the Precautionary Principle" in O'Riordan T and Cameron J (eds) *Interpreting the Precautionary Principle* (Earthscan Publications, London, 1994) at 15-16.

### **3.1. The precautionary principle requires decision-makers to consider comprehensive environmental information about the effects of climate change on new development.**

The precautionary principle requires that decision-makers are furnished with comprehensive environmental information, including climate change related issues, when considering new development. We have already observed an emerging procedural requirement, premised on intergenerational equity, for decision-makers to take into account the impact of new energy related projects on greenhouse gas emissions. The precautionary principle is also applicable here as it warns against compounding a situation in which there is still some (albeit diminishing) uncertainty about the overall environmental impact of development. However, the most significant contribution of the precautionary principle is likely to be in the area of climate change adaptation where the task incumbent on decision-makers is to consider any possible or likely impacts arising from climate change on new development. Two recent cases demonstrate the potentially far reaching application of this principle to new development that will be affected by – and presumably need to adapt to – climate change impacts.

In *Walker v Minister for Planning* [2007] NSWLEC 741 Ms Walker challenged the validity of a concept plan approval for a residential subdivision and a retirement development at Sandon Point in NSW. The applicant argued the Minister for Planning had approved the Plan without considering whether the flooding impacts of the project would be compounded by climate change and, as such, had failed to give due regard to the principles of ecologically sustainable development. The decision of the Minister to approve the development was overturned on that ground:

Having regard to the subject matter, scope and purposes of the EP Act and the gravity of the well known potential consequences of climate change, in circumstances where neither the Director-General's report nor any other document before the Minister appeared to have considered whether climate change flood risk was relevant to this flood constrained coastal plain project, the Minister was under an implied obligation to consider whether it was relevant and, if so, to take it into consideration when deciding whether to approve the concept plan. The Minister did not discharge that function.<sup>71</sup>

In *Northcape Properties Pty Ltd v District Council of Yorke Peninsula* [2008] SASC 57, the Yorke Peninsula District Council had taken a proactive approach to the likelihood of sea level rise caused by climate change. Its decision to refuse an application for residential development on the outskirts of Marion Bay was appealed by the developer. Council's decision to refuse the application was upheld in the Environment Court of SA and, on appeal, the SA Supreme Court. Both decisions relied on expert evidence that coastal erosion of 30-45m could be expected in the next 100 years, taking sea level rise into account. Both decisions confirmed and endorsed the Council's objectives for coastal development, stated in the applicable Development Plan. These gave consideration to sea level rise from climate change in the following terms:

To promote development which recognises and allows for hazards to coastal development such as inundation by storm tides or combined storm tides and stormwater, coastal erosion and sand drift; including an allowance for changes in sea level due to natural subsidence and predicted climate change during the first 100 years of the development.

This case is a good indication the courts are now willing to accept the evidence of climate change and to support councils in their endeavours to plan, in a precautionary way, for a future that takes that evidence into account. When employed in this way, the precautionary principle becomes

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<sup>71</sup> *Walker v Minister for Planning* [2007] NSWLEC 741, per Biscoe J at [166].

more than a procedural requirement. It becomes a counsel of wise practice, endorsing the view that any adopted solutions should themselves be precautionary (that is, risk averse) in nature.

### 3.2. The precautionary principle endorses development conditions that are precautionary in nature.

In *Northcape Properties Pty Ltd v District Council of Yorke Peninsula* [2008] SASC 57, the Supreme Court endorsed not only a cautious *approach* to development assessment but also a precautionary *solution* to climate change adaptation. The South Australian Supreme Court is not alone in this interpretation of the precautionary principle and decisions throughout Australia are now starting to condone the actions of local governments that make development decisions premised on an expectation of climate change. In a small number of cases this trend has led to development applications being refused.<sup>72</sup> In other cases, it has served to enlarge the scope of what is considered a “reasonable” development condition. A pertinent example is the decision in *Charles Howard Pty Ltd v Redland Shire Council*. In this case, the Queensland Court of Appeal upheld a development approval that was granted subject to a condition that effectively prevented the applicant from building on his own land in the position applied for.<sup>73</sup> Instead, the Council required the applicant to build on a different part of his land, at a site that was not subject to inundation by the Q100 flood level and was therefore less vulnerable to climate change and flooding impacts.

These recent developments in the courts, justifying notions of a “precautionary response” to climate change, are mirrored in recent policy documents on climate change adaptation. Increasingly local governments and other public authorities are being urged to adopt measures that will improve resilience and decrease vulnerability to climate change.<sup>74</sup> A selection of adaptation measures from the Queensland Adaptation Action Plan, 2007-2012 is listed in table 1 as an illustration of the sorts of measures now being implemented.

Table 1: A Selection of Measures Included in the Queensland Climate Smart Adaptation Action Plan, 2007-2012<sup>75</sup>

Action	Priority	Expected Completion Date
Develop a web portal to provide a single point of access to : <ul style="list-style-type: none"> <li>• Queensland Government climate change information and science</li> <li>• Tools for self assessment of risk and vulnerability to climate change.</li> </ul>	High	2012

<sup>72</sup> *Hain v Glen Eira* [2006] VCAT; *Taralga Landscape Guardians Inc v Minister for Planning and RES Southern Cross Pty Ltd* [2007] NSWLEC; *Jackson Teece v Waverly Council* [2007] NSWLEC; *14 Regent Street Pty Ltd v Hobart City Council* [2005] TASRMPAT. See further, O’Hart A, “Climate Change in Planning Decisions and Environmental Impact Assessment: Recent Cases” April 2007, Seminar delivered to the Planning Institute of Australia, April 2007.

<sup>73</sup> [2007] QCA 200.

<sup>74</sup> See for instance, *Climate Smart Adaptation*, n 24, p 8; Government of South Australia, *Tackling Climate Change: South Australia’s Greenhouse Strategy 2007-2020* (Government of South Australia, Adelaide, 2007) p16; NSW Greenhouse Office, *NSW Greenhouse Plan* (NSW Government, Sydney, 2005) p 24; Allen Consulting, *Climate Change: Risk and Vulnerability* (Report to the Australian Greenhouse Office, Canberra, 2005) Executive Summary, p ix.

<sup>75</sup> *Climate Smart Adaptation*, n 21 at 19-27.

Diversify water supply sources to reduce dependency on vulnerable supplies. This requires: <ul style="list-style-type: none"> <li>• Considering climate change in regional water security plans</li> <li>• Investigating the potential of less climate-dependent water supply options.</li> </ul>	High	2012
Incorporate changes in flood risk due to climate change in the proposed State Flood Risk Management Policy, local government flood plain management plans and relevant state guidelines.	Medium	2010
Update the Queensland Urban Drainage Manual as needed to reflect changes in hydrology associated with climate change.	Medium	2010
Incorporate the latest technical information in risk assessment prior to designing and planning roads, bridges and other transport infrastructure subjected to flood and heat stress.	Medium	2012
Ensure that reviews of local disaster management plans include relevant climate change issues.	Medium	2010
Extend "preparedness and awareness" programs to communities where the risk of extreme climatic events has increased.	Medium	2012

### **3.3. The precautionary principle encourages decision-makers to routinely apply risk assessment and risk management principles to all their activities.**

A key strategy for improving resilience to climate change is the adoption of enhanced risk assessment in all tiers of government and in particular, at the local government level - a tier of government expected to play a critical role in adaptation to climate change.<sup>76</sup> The Australian Greenhouse Office (AGO) has recently provided guidelines for incorporating climate change impacts into councils' risk management strategies.<sup>77</sup> The recommended process is qualitative, relatively simple and flexible in order to meet the needs of different councils.<sup>78</sup> The benefits of early adoption of risk assessment and management tools are said to include more timely and cost effective adoption of appropriate adaptation actions and reduced exposure to liability claims in the aftermath of a climate change event.<sup>79</sup> The Local Government Association of Queensland (LGAQ) has also pioneered work in this area.<sup>80</sup> By planning ahead for climate change impacts in this way, public institutions are adopting an inherently "precautionary" approach. In May 2008, 33 local councils received federal funding to implement risk assessment and risk planning activities in their councils.<sup>81</sup>

<sup>76</sup> SMEC, n 40, p 9; LGAQ, *Adapting to Climate Change: A Queensland Local Government Guide* (LGAQ Inc, Brisbane, 2007), p 8; Australian Greenhouse Office, *National Climate Change Adaptation Framework* (COAG, Canberra, 2007) p 4, available at [http://www.coag.gov.au/meetings/130407/docs/national\\_climate\\_change\\_adaption\\_framework.pdf](http://www.coag.gov.au/meetings/130407/docs/national_climate_change_adaption_framework.pdf) (viewed 25/05/08).

<sup>77</sup> SMEC Australia, n 40. See also, *Climate Change Impacts & Risk Management - A Guide for Business and Government* (AGO, Department of Environment and Heritage, Canberra, 2006), available at <http://www.greenhouse.gov.au/impacts/publications/risk-management.html> (viewed 10/05/08).

<sup>78</sup> SMEC Australia, n 40, p 18.

<sup>79</sup> SMEC Australia, n 40, pp 11,15.

<sup>80</sup> LGAQ, n 76.

<sup>81</sup> Local Adaptation Pathways Program, details available at <http://www.greenhouse.gov.au/impacts/localgovernment/lapp.html> (viewed 20/05/08).

## 4. Principle 3: Climate change is a “common concern”

That climate change is a “common concern” of all humanity is indisputable given the global nature of the problem. In recognition of the nature of this particular problem, the UN Climate Change Convention states:

The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.<sup>82</sup>

The principle of “common but differentiated responsibility” reflects the pre-eminent concern, at the international level, to bring all nation states to the negotiating table and to encourage their cooperation in developing a legally binding, response to climate change.<sup>83</sup> The recognition of “differentiated responsibilities” in the international context is a reflection of developing countries’ particular viewpoint that, historically, developed countries have been the main source of human induced greenhouse gas emissions and that, correspondingly, it is they who should take the lead in reducing their greenhouse gas emissions.

Just as in the international sphere, on the domestic front, there is much work to be undertaken in developing institutional capacities and mutually supportive institutional roles to address climate change. However, whereas the international documents emphasize “common but differentiated responsibilities”, within Australia there is now a clear consensus on the need to build and develop “effective and complementary” governance regimes to promote change throughout the community:

Climate change represents the ‘greatest and widest ranging market failure ever seen’ and therefore necessitates government intervention. While the challenges presented by climate change are great, they are not insurmountable if governments work together. It is the responsibility of all Australian governments to work collaboratively across their respective jurisdictions.<sup>84</sup>

How to design and promote effective and complementary institutional relationships, including collaborative partnerships, is an issue that will need to be addressed and continually re-visited over the next few years as part of an evolving, comprehensive climate change legal and policy framework. For this reason, the issue is included here as a third principle - or policy imperative – that goes to the heart of climate change law and policy. By way of some preliminary guidance, the following observations can be made:

### 4.1. Climate change is a common concern for all tiers of government

The public interest – and by implication the governmental responsibility – in both greenhouse gas abatement strategies and adaptation to climate change has already been discussed. The gravity of the situation, as well as the reality of Australia’s federal system of government, underscore the

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<sup>82</sup> UNFCCC, Article 3.1 (Principles), above n 15.

<sup>83</sup> Borione D and Ripert J, Exercising Common But Differentiated responsibility” in Mintzer I and Leonard J (eds) *Negotiating Climate Change: The Inside Story of the Rio Convention* (Cambridge University Press, Cambridge, 1994). See also, Read P, *Responding to Global Warming: the Technology, Economics and Politics of Sustainable Energy* (Zed Books, London, 1994).

<sup>84</sup> CAF, *Climate Change Declaration* (Council for the Australian Federation 9/2/2007) available at [http://www.dpc.vic.gov.au/CA256D800027B102/Lookup/CAFDeclarationonClimateChange/\\$file/CAF%20Declaration%20on%20Climate%20Change.pdf](http://www.dpc.vic.gov.au/CA256D800027B102/Lookup/CAFDeclarationonClimateChange/$file/CAF%20Declaration%20on%20Climate%20Change.pdf) (viewed 25/05/08).

need for *all* tiers of government to be involved in developing an effective response to climate change. Given the Commonwealth government is now likely to take on a leadership role in implementing Australia's mitigation strategy, what are the sorts of roles and functions likely to be required of state and local governments in the near future?

**State governments:** Within Australia, South Australia has, to date, developed the most sophisticated institutional and legal framework for dealing with climate change issues. The *Climate Change and Greenhouse Emissions Reduction Act, 2007*, sets a statutory emissions reduction target and vests the responsible Minister with various functions and powers to assist in achieving that target. These include – promoting early action to meet the emissions reduction target; developing policies to address climate change; supporting initiatives to develop a national emissions trading scheme; supporting public education in relation to climate change and establishing appropriate reporting frameworks across government.<sup>85</sup> The Act also establishes a Climate Change Council to provide independent advice to the Minister about climate change.<sup>86</sup> Other states have also acted to re-orient existing state departments or to create new entities capable of advising on climate change issues.<sup>87</sup>

The South Australian legislation indicates the sorts of functions state governments may usefully contribute within a national framework for climate change policy. These include – reporting on emissions, emissions reduction and other measures; funding state wide programs; training and institutional support for local government and non government actors; revising and updating policy documents and technical requirements to reflect climate change issues (particularly in the realm of regionally specific, climate change adaptation); and translating national and international research into regionally applicable information.<sup>88</sup>

**Local governments:** Several local governments, to date, have played an active role in promoting and implementing greenhouse gas abatement measures. Actions are diverse and range from: reducing energy use in council buildings; distributing free, high efficiency light bulbs to residents; promoting public transport; purchasing natural gas powered buses; publishing educational material and campaigning to raise public awareness.<sup>89</sup> Of particular symbolism is the construction of Council House 2, Australia's first, six star rated, energy efficient commercial building, designed and built for Melbourne City Council.<sup>90</sup> These and many other activities have been encouraged by Cities for Climate Protection, a federally funded association, linked to the International Council for Local Environmental Initiatives (ICLEI) which supports local governments to implement sustainable development practices in line with the objectives of the United Nations' Agenda 21 program. Over the 10 years that CCP has been operating in Australia, the 178 local councils involved in the program have reduced their greenhouse gas emissions by almost 13.3 million tones.<sup>91</sup>

Given the significance of urban communities' contributions to greenhouse gas emissions, local governments - whose jurisdiction includes urban planning, development, infrastructure, land management, engaging with communities etc - will continue to have a crucial role to play in greenhouse gas abatement strategies. Over time, their freedom to pick and choose their level of

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<sup>85</sup> *Climate Change and Greenhouse Emissions Reduction Act, 2007*, SA, s.6.

<sup>86</sup> *Ibid*, ss 9,11.

<sup>87</sup> For instance, in 2007, the NSW Greenhouse Office merged into the new Department of Environment and Climate Change; a new Office of Climate Change was established in the Department of Premier and Cabinet (Vic) and, in Queensland, the Queensland Climate Change Centre of Excellence was established.

<sup>88</sup> See also, NSW Greenhouse Office, *NSW Greenhouse Plan* (NSW Government, Sydney, 2005) Part C (Actions to be Taken).

<sup>89</sup> For a review of some current projects see CCP, n 45.

<sup>90</sup> This standard, which represents world leadership in office building design, was awarded to Council House 2 by the Green Building Council of Australia in April 2005. See "CH2 Setting a New World Standard in Green Building Design" at <http://www.melbourne.vic.gov.au/info.cfm?top=171&pg=1933> (viewed 25/5/08).

<sup>91</sup> CCP, n 45, p 3.

commitment and types of activities may diminish as national targets and initiatives are put into place. Nevertheless, it is to be hoped the scope for 'trail blazers' will not be unnecessarily circumscribed as local governments have proven to be effective innovators, pushing the boundaries for action in this area well beyond the average or 'mean' solutions most likely to be adopted in national measures.<sup>92</sup> In the future, local governments' full access to and participation in the national emissions trading scheme will be essential in order to harness and foster this level of enthusiasm.

In addition to their role in mitigation strategies, the significance of local government in the realm of adaptation to climate change is now starting to be realized. Climate change adaptation measures are likely to require regionally specific solutions, tailored to regional risks, geography and social circumstances. Local governments are expected to play an important role in tailoring adaptation programs to local circumstances and delivering applicable measures "on the ground".<sup>93</sup> Institutional support for local government from state and federal governments will, nevertheless, be critical in determining the success of adaptation programs.

**Collaborative partnerships:** Although there may be merit in demarcating different institutional roles, the overriding message is that collaboration between all tiers of government will be essential. The necessity for collaboration to build effective partnerships between different levels of government as well as between government and non-government actors is widely recognized and endorsed in all the major policy documents:

National, state and territory and local government have differing and complementary roles in climate change adaptation ... governments will pursue a partnership approach to adaptation to manage risks and identify any opportunities.<sup>94</sup>

The *Water Supply Emergency Regulations* currently operating in South East Queensland offer one example of a collaborative, intergovernmental approach to climate change adaptation.<sup>95</sup> The regulations outline in some detail measures that each service provider must implement to increase water supply and reduce demand for water, a time frame for each measure and the relevant financial and other contributions to be made by state and local government bodies.<sup>96</sup> Monthly reporting to the Queensland Water Commission is required from each service provider and many of the measures are jointly financed by state and local governments.<sup>97</sup> Additionally, both the state government and the Brisbane City Council (BCC) offer rebates for the installation of water tanks and pool covers.<sup>98</sup> Residents are eligible to claim both rebates meaning, if the conditions are met, a saving up to \$2,350 for the installation of a rainwater tank with a minimum

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<sup>92</sup> Bonyhady, n 2, p 4. The Mount Alexander and Newcastle local governments have been particularly active in pursuing innovative greenhouse gas abatement strategies. On action by Mount Alexander Shire Council, see ALGA and National Economics, *State of the Regions report 2007-2008* (ALGA and National Economics, Canberra, 2007) pp 131-141.

<sup>93</sup> SMEC, n 40.

<sup>94</sup> National Climate Adaptation Framework, n 76, p.4

<sup>95</sup> *Water Amendment Regulation* (no. 6), 2006, Qld.

<sup>96</sup> *Ibid*, Schedule 10B.

<sup>97</sup> *Ibid*, Schedule 10B.

<sup>98</sup> For details of BCC rebates see "Rebates" available at [http://www.brisbane.qld.gov.au/BCC:BASE:1523992815:pc=PC\\_2291](http://www.brisbane.qld.gov.au/BCC:BASE:1523992815:pc=PC_2291) (viewed 25/05/08). For details of Queensland State rebates, see, "Home and Garden WaterWise Rebates Scheme" available at [http://www.nrw.qld.gov.au/water/saverscheme/rebate\\_schemes.html](http://www.nrw.qld.gov.au/water/saverscheme/rebate_schemes.html) (viewed 25/05/08).

capacity of 3000 litres.<sup>99</sup> The popular appeal of so generous a rebate is evident from the fact that, as of 2007, more than 27,000 Brisbane homes had a rainwater tank.<sup>100</sup>

## 4.2. Climate change is a common concern for government and non government actors

Collaboration, partnerships and effective action to combat climate change are not confined to intergovernmental action. Just as the sources of greenhouse gas emissions are dispersed throughout society so must the solutions be. There is common agreement that solutions need to be fostered across the whole of society.

Effective adaptation requires commitment and action from all parts of society. Individuals, communities, technical and professional disciplines, industry and governments at all levels can contribute.<sup>101</sup>

Within Australia, the Greenhouse Challenge (1995-2005) and Greenhouse Challenge Plus programs are examples of joint, cooperative action by public and private institutions. In these programs, which are also funded by the federal government, major emitting industries inventory their emissions, plan reduction strategies and programs and report on their progress in implementing those projects to the Australian Greenhouse Office.<sup>102</sup> Until 2005 participation in the program was entirely voluntary. Nevertheless, by 2000, Greenhouse Challenge participants accounted for approximately 47% of national emissions, with the Greenhouse Challenge having almost total coverage in a number of major industrial sectors, including electricity generation and distribution, oil and gas extraction, iron and steel, aluminium and coal mining.<sup>103</sup> Despite this coverage, the lack of specific, mandatory targets for emissions reductions and the largely voluntary nature of the programs have been criticized.<sup>104</sup>

Other examples of partnerships with non government actors are less well publicised. CCP reports that in the year 2006-2007, 85% (3.15 million tonnes CO<sub>2</sub>-e) of the reduction in greenhouse gas emissions reported by local councils related to reductions within local communities.<sup>105</sup> However, the majority of these actions related to services provided by local councils to their communities. In the areas of education, behaviour change and policy formulation, councils reported over 160 actions for the year 2006/7 but the quantitative impact of these measures is not calculable. Some local governments have begun to take a more proactive approach to community collaboration. For instance, the cities of Wanneroo, Stirling and Joondalup in Western Australia have collaboratively promoted an eco-business energy assessment program for small businesses, with funding assistance from the Australian Government. The program has helped 75 small businesses enhance their environmental efficiency by reviewing their energy use, water use, travel decisions and waste and recycling methods. Potential savings from the implementation of all possible actions are estimated at around 6,000 tonnes CO<sub>2</sub>-e and \$173,900 annually.<sup>106</sup>

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<sup>99</sup> As of March 2008 the rainwater tank rebate is only available for a new rainwater tank, with a minimum capacity of 3000 litres and internally plumbed to either a laundry cold water tap or toilet suite.

<sup>100</sup> Newman C, The Lord Mayor's Budget Speech, 2007, p 4, available at [http://www.brisbane.qld.gov.au/bccwr/lib485/budget0708\\_lord\\_mayor\\_speech.pdf](http://www.brisbane.qld.gov.au/bccwr/lib485/budget0708_lord_mayor_speech.pdf) (viewed 8/04/08).

<sup>101</sup> Qld Climate Smart Adaptation, n 24, Principle 4, at 11.

<sup>102</sup> Department of the Environment, Water, Heritage and the Arts, *Greenhouse Challenge Plus* available at <http://www.environment.gov.au/settlements/challenge/> (viewed (25/05/08).

<sup>103</sup> AGO, Annual Report, 1999-2000 (AGO, 2000). See further, Sullivan, "Greenhouse Challenge Plus: A New Departure or More of the Same?" (2006) 23 EPLJ 60 at 64; Parker C "The Greenhouse Challenge: Trivial Pursuit?" (1999) 16 EPLJ 63; Bubna-Litic K, "Climate Change and Corporate Social Responsibility: The Intersection of Corporate and Environmental law" (2007) 24 EPLJ 253.

<sup>104</sup> Sullivan, n 103, p 71-73.

<sup>105</sup> CCP above n 45 at 3.

<sup>106</sup> CCP above n 45 at 18.

## 5. Future Directions for Climate Change Law and Policy

This discussion has reviewed a small number of the actions, policies and developments on climate change currently being undertaken by state and local governments across Australia. These contributions have been subsumed within three core principles of more general, overarching application – the principle of intergenerational equity; the precautionary principle and the principle (or policy imperative) recognizing climate change as a common concern. These principles, particularly intergenerational equity and the precautionary principle, are consistent with some of the more enlightened judicial statements on climate change emanating from Australian courts. They have resonance in international documents including the UN Climate Change Framework Convention.<sup>107</sup> By viewing the work of these institutions through the lens of a framework of principles, we begin to see how principles of such “abstruse generality” may be fleshed out and given meaningful content in municipal contexts. These devolved institutions, in a very real sense, have been “doing the groundwork” in establishing the norms, policies and actions required to start Australia on the path to a low carbon economy.

Where could this principled framework take us next? Obviously, the future of climate change law and policy is now primarily in the hands of the Garnaut Review and the national response to that review, expected later this year. Nevertheless, whatever the outcomes of that national process, the principles herein discussed, already tried and tested in the community, raise a number of issues that deserve further discussion and debate, hopefully in conjunction with national policy development. For instance, this article argued a procedural requirement to give genuine consideration to the effects of new development on greenhouse gas emissions was part of a larger principle directing decision-makers to turn their minds to intergenerational equity. In the not too distant future, that procedural requirement should evolve or be supplemented by a substantive requirement upon all developers to make a significant contribution to reducing or offsetting the greenhouse gas emissions arising from their developments. Such a requirement is consistent with the polluter pays principle, the cost effective rule and an equivalent rule is already in operation for people wishing to build a new home. So perhaps the idea is not such an “unreasonable” one after all? Another area that seems worthy of further thought and development is that of partnerships and collaboration, especially within the community. The work of local governments in this area to date is embryonic, yet the long term success of climate change measures requires behavioural change throughout the whole community.<sup>108</sup> Even more contentiously, the principle of intergenerational equity at least reminds us there will, in the not too distant future, be a need to give much greater consideration to intra-generational equity considerations. For instance, how should the financial burdens of greenhouse gas abatement strategies be apportioned? Who will or should bear the costs of restoration after extreme weather events? What is the role of private insurance versus public institutions in these situations? And who, ultimately, will or should take responsibility for climate change refugees at home or overseas?

## 6. Conclusion: Value of a Principled Approach to Climate Change Law and Policy

This article has examined a variety of state and local government actions tackling climate change currently underway. These tiers of government have not waited for national leadership, they have harnessed resources, created programs and re-considered their policies and regulations in the light of climate change. In several instances, specialist planning and environmental courts have

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<sup>107</sup> Above n 16, Article 3(1) & (3).

<sup>108</sup> Flannery T, *We Are the Weather Makers* (Text Publishing, Melbourne, 2006).

upheld and endorsed their proactive approach; in others, those courts have held governments to account for failing to give genuine consideration to the issues raised by climate change. Judicial contributions have been particularly helpful in highlighting some key principles, or building blocks, for an emerging climate change jurisprudence. These include the principle of intergenerational equity and the precautionary principle. The actions of local and state governments advance our understanding of how those principles may apply, in practice, to climate change issues. When considered together, the practical in the light of underlying principles, we can start to sense the beginnings of a *coherent* body of climate change law that draws together many diffuse and diverse actions across all tiers of government and in all aspects of life. It is to be hoped that, viewed in this way, the achievements of those entities already active in the area can be systematically explored, acknowledged and appropriately integrated into future national policy making.