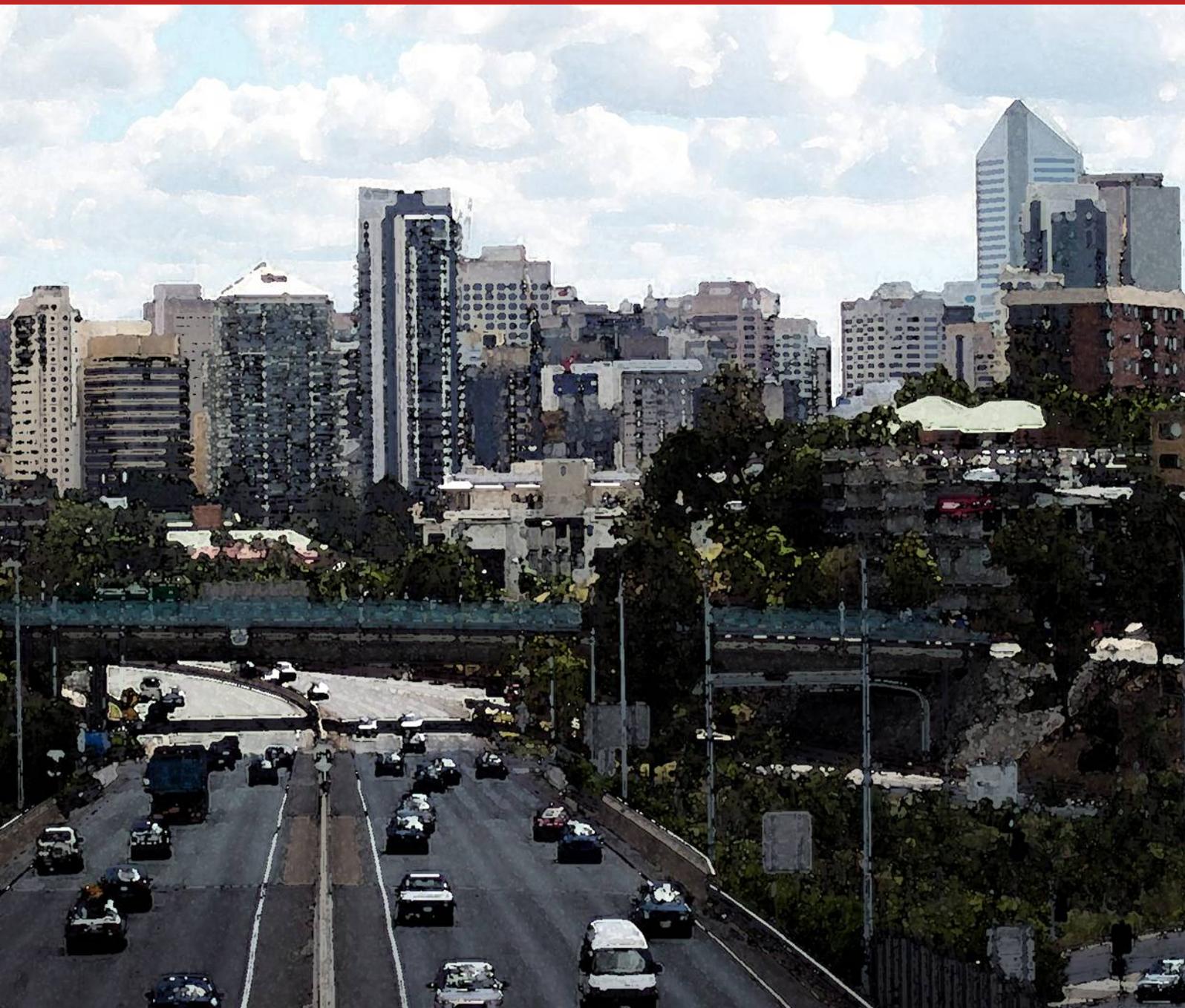


Climate change law for planners, developers, local government and greenies: A quick stock take and some ideas for the future

Philippa England



Urban Research Program

**Research Paper 16
June 2008**

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Urban Research Program
Griffith University
Brisbane, QLD 4111
www.griffith.edu.au/urp

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About the Author

Dr. Philippa England is a Senior Lecturer in the Griffith Law School and a member of the Urban Research Program, Griffith University.

Email: p.England@griffith.edu.au

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Introduction

Until 2007, Australia could justifiably be regarded as a “black sheep” on climate change at least within the international community. Happily, that situation is now changing and in the near future we are likely to see a suite of measures addressing climate change in Australia – with respect to both mitigation¹ and adaptation.² But in the rush to “get on with the job” I wish to draw attention to the efforts, achievements and experience of some of our “devolved” Australian institutions – primarily local governments, state governments and also the judiciary. These institutions have made some bold strides in the area of climate change. What are their most notable achievements to date and, from that experience, what lessons are to be learned for future initiatives, including national ones? To answer these questions, this paper first describes some of their main achievements to date. It then proposes a principled framework through which these and other relevant ideas, initiatives, policies and measures may be organised and rationalised. Finally, it speculates on some policy areas awaiting further development, either in the short or longer term, whether through a national or /and a more devolved approach. The value of a “principled analysis” is that it helps us draw together many disparate actions into a coherent whole – providing a framework that may usefully guide the future development of climate change law and policy in Australia.

Some achievements to date

Despite (and perhaps because of) the reluctance of the former Howard Government to get involved in any ambitious or compulsory national initiatives to address climate change, many other Australian institutions have been actively addressing climate change issues for some time. For instance, under the umbrella of the Cities for Climate Protection (CCP) Program, 178 Australian local councils have undertaken many and varied greenhouse gas mitigation projects realising a reduction of approximately 13.3 million tones of CO₂-e since 1997.³ The work of CCP Australia is a good illustration of organizational support for local councils, assisting them to network and build capacity in an emerging area of ‘core business’ for local government.⁴ What other landmarks or home grown achievements can Australia boast about to date? Four more initiatives come to mind.

Improvements in standards for building design

Australian state and local governments have shown leadership in this area of their jurisdiction. New South Wales, for instance, was the first state to require all new residential development be built to an energy standard 40% more efficient than similar existing housing stock.⁵ 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.⁶ 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. The BASIX software allows some flexibility about how to meet the requisite standards of efficiency. Since 2006, BASIX certification has applied to alterations and additions to existing buildings in that state.⁷

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.⁸ Nevertheless, several states continue to apply more stringent sustainability standards than are required by the national BCA. In Victoria, for instance, all new homes are required to have either a rainwater tank for toilet flushing or a solar hot water system.⁹ 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.¹⁰

Another area in which state and local governments are actively trying to reduce their carbon footprint is in urban planning. In recent years, several Australian state capitals have become the subject of city wide planning documents.¹¹ Among other things, all of these documents promote – a more compact city form; sustainable travel opportunities including cycling and walking; and greater investment in public transport. These are measures that should not only reduce the carbon footprint of urban residents but may also serve to make those residents less vulnerable to the escalating fuel and energy costs that are likely to characterise the low carbon economy of the future.¹²

Dealing with water shortages

Another noteworthy achievement to date, this time in the area of climate change adaptation, is the response to drought in our urban centres. South East Queensland, for instance, is currently experiencing its worst drought in over 100 years. The Wivenhoe Dam, the largest dam supplying South East Queensland, was last full in February 2001 but from 2001- 2007, average annual inflows were only 19% of the average annual inflows since 1889.¹³ At their lowest, dam levels dropped to about 18% in July 2007 and currently hover at about 37%.¹⁴ Water restrictions remain at level 6 and will not be relaxed until dam levels reach 40% minimum. The situation, no doubt, is a forerunner of things to come.¹⁵

In 2006, the State Government passed a water supply emergency regulation amending the *Water Regulation* 2002 to include specific measures for dealing with the drought in South East Queensland.¹⁶ The measures outlined in the regulation include several short and medium term infrastructure projects, including the construction of the South East Queensland (Gold Coast) Desalination Facility and the construction of the Traveston Dam. In addition to supply side infrastructure development, the Regulation includes demand management strategies including “ensuring service providers’ participation in pressure and leakage reduction programs and a domestic retrofit program”.¹⁷ These measures form part of a comprehensive demand management program developed by the Queensland Water Commission in close conjunction with local councils.¹⁸ Other demand side measures include rebates for the installation of water tanks, pool covers and restrictions on water usage.¹⁹

In South East Queensland, demand management measures appear to have been very successful. For instance, since 2005, Brisbane households have reduced their water consumption by 57%²⁰ and, in so doing, have saved 100 billion litres of water.²¹ In September 2007, their consumption hit a low of 122 litres per person per day, exceeding the official target of 140 litres per person per day.²² From water wasters, the Brisbane community has evolved into one of the lowest per capita consumers of water in the western world.

In preparation for future climate variability and the prospect of regular and prolonged drought, the afore-mentioned *Queensland Development Code*, now requires that all new houses in South East Queensland substitute 70,000 litres of reticulated water per year from rain water or by local recycling. One option to meet this requirement is to ensure rainwater tanks are used for toilet flushing, laundry and outdoor use.²³ In combination with the measures described above (requiring AAA rated shower roses etc), the Code will result in new houses using 33 per cent less water than existing ones.²⁴

Judicial decision-making

Turning to judicial fora, there have also been some exciting developments here. 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.²⁵ 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’.²⁶ There were legal complications in apportioning responsibility to any particular actors.²⁷ 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 impact report 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).²⁸ In arriving at this decision, Pain, J 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. [126]

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.²⁹

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 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.[74]

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.

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.³⁰

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.

These cases indicate the courts are now willing to accept the evidence of climate change and to require decision-makers to take that evidence into account when they engage in planning and development assessment activities.

Risk management techniques

Risk management is rapidly emerging as a key strategy for dealing with the emerging risks and associated impacts of climate change. This is particularly so at the local government level, a tier of government expected to play a critical role in adaptation to climate change. The Australian Greenhouse Office (AGO) (now the Department of Climate Change) has recently provided guidelines for incorporating climate change impacts into councils' risk management strategies.³¹ The recommended process is qualitative, relatively simple and flexible in order to meet the needs of different councils.³² 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.³³ The Local Government Association of Queensland (LGAQ) has also pioneered work in this area.³⁴ In May 2007, 33 councils received federal funding to implement risk assessment and risk planning activities in their Councils.³⁵

Analysing the development of climate change law and policy: 8 emergent principles

Climate change policies and programs, as illustrated above, cover a diverse range of actions, activities and aspects but are there any unifying or more general themes arising from the actions taken to date? Combining judicial deliberations and some of the more policy oriented, strategic documents that have been produced, there are some key principles emerging that have great value in allowing us to more fully comprehend the reach and substance of "climate change law". These include:

Intergenerational equity

A core objective of ecologically sustainable development (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.³⁶ Whether the principle of intergenerational equity is simply a restatement of the goal 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.”³⁷, or a more particular extension of it, is at times a little unclear but the term does at least emphasise the inter-generational nature of sustainability.³⁸ It expands the concept of sustainable development beyond the 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 across cultures.³⁹

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.⁴⁰

Interestingly, the key judicial decisions on mitigating greenhouse gas emissions in Australia have relied heavily on the principle of intergenerational equity. The Queensland Climate Change Adaptation Strategy is also mindful of the principle. It 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.⁴¹

In policy terms, the principle lends support to some further and more concrete propositions, such as the polluter pays principle.

Polluter pays principle

The polluter pays principle asserts that, in general, the costs of environmental pollution should be borne by the polluter.⁴² The main effect of the precautionary principle is to internalise the costs of pollution as another cost of production. In so doing, it provides a market driven incentive to reduce pollution. 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 function (to the extent that people, or the environment, that suffers from the pollution are financially compensated for that harm).⁴³ A number of international documents and treaties endorse the polluter pays principle, including, most notably, the *Single European Act*, 1986.⁴⁴ 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.⁴⁵

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. The enactment of new standards for energy efficient building development, described above, is a case in point. Consistent with the polluter pays principle, these measures direct the cost of adopting higher environmental standards into the hands of the ‘polluter’ who will enjoy the benefits of the ‘polluting’ activity.

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 cost of applicable measures at the current time, then the costs of abatement or adjustment should be borne by the present generation. The Stern Review took a strong line on this:

The benefits of strong, early action on climate change outweigh the costs The earlier effective action is taken, the less costly it will be.⁴⁶

Within Australia, the cost effective nature of early action is acknowledged in various State based policy documents.⁴⁷ 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.⁴⁸ 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.⁴⁹ 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.⁵⁰ The increasing uptake of risk assessment practices, as discussed above, should serve to further entrench this principle.

Considering and internalising abatement costs in new development

Gray's case established that that, when considering a major new energy related development, decision-makers should consider any significant impact (direct or indirect) on greenhouse gas emissions arising from that development.⁵¹ Although the decision in that case was focused on establishing a procedural requirement, subsequent cases have demonstrated the influence a procedural requirement may have on substantive outcomes. The principle of internalizing abatement costs correlates closely with intergenerational equity and the polluter pays principle. Once again, the amendments to the Queensland Development Code, promoting energy efficiency in new buildings, are a fine example of abatement costs becoming ‘internalised’. The Queensland Government’s commitment to offsetting greenhouse gas emissions generated by power used at its new Tugun Desalination Plant is a welcome initiative in this respect suggesting all new development has a role (or duty?) to play in reducing or offsetting carbon emissions associated with the project.⁵²

Developing synergies between abatement and adjustment policies

The literature is starting to recognise that climate change adaptation strategies must partner, or at least not compete with, greenhouse gas abatement (or mitigation strategies):

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.⁵³

In reality, there is a good deal of overlap between policies to reduce greenhouse gas emissions and policies to deal with life in a carbon constrained future including policies promoting public transport; more compact urban forms, shade and ventilation in new buildings etc. The Queensland *Sustainable Housing Code*, discussed above, is a good example of legislation that contributes to both climate change abatement and adaptation.

The precautionary principle

The precautionary principle is commonly stated as: “Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation.” The principle is recognised in international, national and state wide legal instruments.⁵⁴ Once again, the exact parameters of the

principle are controversial but one widely accepted view is that, if the precautionary principle applies, it serves to alter the ordinary burden of proof in court proceedings. That is, 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.⁵⁵ The previously noted risk assessment and risk adverse decisions made by local governments in the area of climate change adaptation, particularly regarding protection of the foreshore from development, are good examples of the precautionary principle at work. The principle is also noted and applied in some of the leading judicial discussions of climate change decision-making.⁵⁶

Collaborative partnerships

The necessity for collaboration to build effective partnerships between different levels of government as well as between government and non-government actors is widely recognised 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.⁵⁷

The Water Supply Emergency Regulations currently operating in South East Queensland offer one example of a collaborative, intergovernmental approach to climate change adaptation. Not only are these being implemented in large measure by local governments, the origins of many of the programs lie in the collaborative work of local councils in South East Queensland.

In addition to inter-governmental partnering, some local governments have begun to take a proactive approach to community collaboration. The CCP Annual Review states that, for the year 2006-2207, 85% (3.15 million tonnes CO₂-e) of the reduction in greenhouse gas emissions reported by local councils related to reductions within local communities. However, the majority of the reported actions related to community services provided by local councils rather than to actions taken in direct collaboration with their communities.⁵⁸

Transparency, accountability and education

Undoubtedly, reducing our energy consumption is the most cost effective way to begin tackling greenhouse gas emissions. Necessarily, therefore, abatement strategies must pay regard to the need for public education, including the dissemination of information about actual energy consumption and greenhouse gas emissions at all levels, from that of the household to large businesses and energy producers. With respect to the latter, the Greenhouse Challenge Program has been criticised for failing to make this information more widely available. Australia certainly has a long way to go in implementing energy efficiency labelling for all electrical appliances, recording data and making it publicly available.

Issues of transparency, accountability and education are also crucial with respect to climate change adaptation. Queensland's *Climate Smart Adaptation Strategy* recognises this by acknowledging the strategic importance of "building and sharing knowledge" including raising awareness.⁵⁹

Despite the importance of these strategies, the principle is fairly poorly represented in actual actions to date. The water demand management program in South East Queensland, noted above, has incorporated notions of transparency and education – by realising the need to better inform residents about their water consumption and how to reduce it. As another example, Brisbane City Council (BCC) documents claim that information about flooding risks is now more widely available than in the past.⁶⁰ However, in general, providing or encouraging public access to

council held information on natural hazards remains a sensitive topic for many local governments.

Some future directions for climate change law and policy

Where could this framework – or these principles - 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 at least in part - raise a number of issues that deserve further discussion and debate, hopefully in conjunction with national policy development. Working from a principled basis, for example, it seems perfectly rational to argue the common law duty to give consideration to the greenhouse gas impacts arising from major new development projects needs to be supplemented by a rule requiring project proponents to reduce or offset their new emissions. Such a requirement is consistent with the polluter pays principle, the cost effective principle 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?

Some other areas that beg urgent attention include – the need for better labelling, greater transparency and increased access to information; more collaborative partnerships between governments and with the community; a more widespread uptake of risk assessment techniques; and ever more stringent requirements for the design of new and existing buildings; vehicles and electrical goods of all sorts. All these actions are consistent with the principles discussed above, including the principles of intergenerational equity, the polluter pays principle and the acknowledged desirability of taking cost effective action sooner rather than later.

More contentiously, and perhaps in the more distant future, the principle of intergenerational equity reminds us there will be an ongoing need to give much greater consideration to cost burdens and equity considerations. For instance, 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?

Endnotes

- ¹ Mitigation in this context relates to reductions in the emission of greenhouse gases into the atmosphere.
- ² Adaptation means adapting to the likely impacts of human induced, climate change.
- ³ CCP, *Local Government Action on Climate Change: CCP Australia Measures Evaluation Report* 2007, p.3.
- ⁴ CCP is part of an international organization, ICLEI or Local Governments for Sustainability, which arose out of the Agenda 21 recommendations of the Rio Summit on Development and Environment, 1992.
- ⁵ Rossetto L, “Sustainable Homes: Recent Developments in Australia” (2007) 13 LGLJ 43 at 45
- ⁶ “About BASIX” available at <<http://www.basix.nsw.gov.au/information/about.jsp>> (viewed on 19/05/08).
- ⁷ Rossetto L, “Sustainable Homes: Recent Developments in Australia” (2007) 13 LGLJ 43 at 45.
- ⁸ ABCB, “Energy Efficiency Provisions for Housing”, available at - <http://www.abcb.gov.au/go/eehousing_p1> (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.
- ⁹ Rossetto L, “Sustainable Homes: Recent Developments in Australia” (2007) 13 LGLJ 43 at 48.
- ¹⁰ 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).
- ¹¹ OUM Queensland Government, *South East Queensland Regional Plan, 2005-2026*; City of Cities;
- ¹² This 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 (and undesirable impacts) of carbon.
- ¹³ QWC, *Framework for a South East Queensland Regional Demand Management Program* (p.3).
- ¹⁴ Details of dam levels are available at <<http://www.seqwater.com.au/content/standard.asp?name=DamOperationsandMaintenance>> (viewed 20/05/08).
- ¹⁵ Bernstein et al (eds), *Climate Change 2007: The Synthesis Report* (AR4 SYR Summary for Policymakers), IPCC Fourth Assessment Report, available at <http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf> viewed 5/12/07 at 1.
- ¹⁶ Water Amendment Regulation (no.6) 2006.
- ¹⁷ Water Regulation, 2002, 82(3)(b)(i).
- ¹⁸ For this purpose, demand management is defined as “any regulatory, policy, technical, service or commercial interaction with customers or consumers that aims to minimize the overall demand for water. QWC, *A Framework for a South East Queensland Regional Demand Management Program 2007-2009*, 2007, p.4.
- ¹⁹ Details are available on the QWC web site at <<http://www.qwc.qld.gov.au>> (viewed on 20/05/08).
- ²⁰ Lord Mayor’s Budget Speech, 2007, p.3, available at <http://www.brisbane.qld.gov.au/bccwr/lib485/budget0708_lord_mayor_speech.pdf> (viewed 8/04/08).
- ²¹ “Managing the Drought”, BCC web site at <http://www.brisbane.qld.gov.au/BCC:BASE:1132545514:pc=PC_2098> (viewed 8/04/08).
- ²² QWC media release, “SEQ Residents World Beaters Again”, 07/09/2007, available at <http://www.qwc.qld.gov.au/tiki-read_article.php?articleId=151> (viewed 08/04/08).
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- ²⁶ 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/data/assets/pdf_file/0011/48566/urp-ip06-england-2007.pdf> (viewed on 05/12/07).
- ²⁷ See further, Smith & Shearman D, *Climate Change Litigation* (Presidian Legal Publications, Adelaide, 2006).
- ²⁸ *Gray v Minister for Planning* (2006) 152 LGERA 258; [2006] NSWLEC 720 at [145].
- ²⁹ *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries)* 2007 (NSW), cl 14(2).
- ³⁰ *Walker v Minister for Planning* [2007] NSWLEC 741, per Biscoe J at [166].
- ³¹ SMEC Australia, *Climate Change Adaptation Actions for Local Government* (AGO, Canberra, 2007). 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).
- ³² SMEC Australia, *Climate Change Adaptation Actions for Local Government* (AGO, Canberra, 2007) at18.
- ³³ SMEC Australia, *Climate Change Adaptation Actions for Local Government* (AGO, Canberra, 2007) at11, 15.

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- ⁴² *Rio Declaration*, Principle 16: 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.
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- ⁵² The Gold Coast Desalination Project, information available at <http://www.desalinfo.com.au/The_Project.asp> (viewed 20/05/08).
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⁶⁰ Lord Mayor's Budget Speech, 2007, p.5, available at <http://www.brisbane.qld.gov.au/bccwr/lib485/budget0708_lord_mayor_speech.pdf> viewed 8/04/08.



**Urban Research Program
Griffith University
Brisbane, QLD 4111
www.griffith.edu.au/urp**