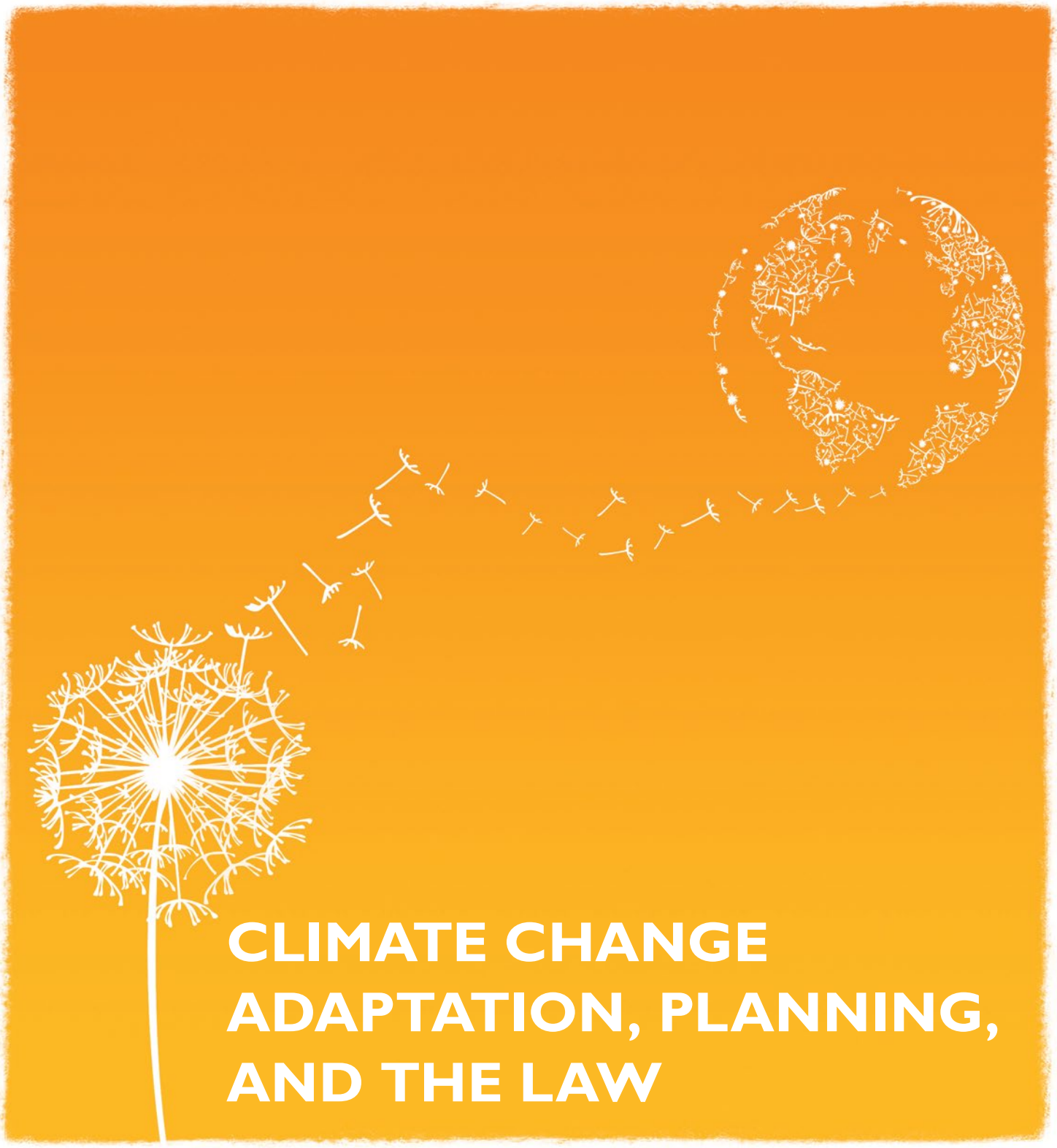

CLIMATE CHANGE ADAPTATION, PLANNING, AND THE LAW

A report on the
Climate change, planning and the law student workshop
held in Brisbane in November 2014

DLA PIPER

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

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FOREWORD

The law and education are both powerful tools for change, which is why at DLA Piper we place a great deal of importance on enabling access to legal education and justice around the world. Through various programs, we focus on projects that improve access to education in the first instance, so young people can progress to a level at which we can actively engage with them through our careers-based community development projects. We are also deeply concerned about the environment and so globally we were the first law firm to achieve ISO 14,001 certification in every office, committing us to significantly reducing our impact on the environment. It is a natural progression then for us to be concerned about the impacts of climate change.

As a firm, we have been actively involved in efforts to develop responses to climate change.

Given the significant impact that climate change will have on our children and future generations it is crucial that young people now understand the importance of law and planning in climate change adaptation. It is for this reason that we have begun working closely with universities and students – the leaders of tomorrow.

Sir Nigel Knowles
Global Co-Chairman of DLA Piper

ACKNOWLEDGMENTS

DLA Piper acknowledges the generous support of the convenors who each donated their valuable time to attend and present at the workshop. We are very grateful for the effort that they put into preparing for the workshop and for their excellent presentations. Their great contribution to the success of the workshop and for making themselves available to meet with the student attendees was very much appreciated.

We also acknowledge the support of the participating universities for funding the workshop and for encouraging their students to attend. We would like to thank the following heads of faculty for their kind support and assistance:

- Professor Sarah C Derrington, Academic Dean and Head of School, T C Beirne School of Law, University of Queensland
- Associate Professor Glen Searle, Program Director of Planning, School of Geography Planning and Environmental Management, University of Queensland
- Professor Anne Rees, Co-Head of School and Foundation Professor of Law, School of Law, University of the Sunshine Coast
- Associate Professor Johanna Rosier, Program Coordinator of the Regional and Urban Planning Program, University of the Sunshine Coast
- Professor Nick James, Acting Executive Dean and Associate Dean, Learning and Teaching, Faculty of Law, Bond University
- Dr Bhishna Bajracharya, Associate Professor of Urban Planning, Faculty of Society & Design, Bond University
- Professor Raoul Mortley, Dean and Pro-Vice-Chancellor, Faculty of Society and Design, Bond University
- Professor John Humphrey, Executive Dean, Faculty of Law, Queensland University of Technology
- Dr Severine Mayere, Senior Lecturer, Civil Engineering & Built Environment, Science and Engineering Faculty, Queensland University of Technology
- Professor Penelope Mathew, Dean and Head of School, Griffith Law School, Griffith University
- Dr Therese Wilson, Deputy Head of School, Learning and Teaching, Griffith Law School, Griffith University

A special thank you to Jasmine Robinson and Stacey Gannon of DLA Piper for help in organising the workshop, to Dr Justine Bell from the University of Queensland for arranging use of the University's financial services, and to Anna Simpson of the University of Queensland for assistance in proofing and editing this report.

We also thank the students who attended at the workshop during their study leave and summer break. Not forgetting that everyone who attended the workshop had to navigate through or around the 'super-hailstorm' that caused over $1 billon in insurance losses in Brisbane the evening before.

EXECUTIVE SUMMARY

PRESENT RESPONSES TO FUTURE ISSUES

The 1960s was a period of radical social and political change. It is a time well known for student activism, for the civil rights movement, youth culture, and anti-war protests. Interestingly, public concern about climate change also began to emerge in the late '60s. As early as the 1890s, scientists had concluded that emissions of carbon would eventually lead to global warming, but it was not until an initiative of the Nixon administration in 1969 to establish a research hub under NATO to consider the 'greenhouse effect' that the issue of climate change was really brought to the attention of the wider public. Nearly five decades on and obligations to take into account and respond to climate change impacts are only just being embedded in policy and legislation.

That basic need for community, engagement, and dependence that drove change in the '60s still fuels student activism today. The discourse has progressed to issues of LGBT rights, economic inequality, ideological extremism, and of course, climate change. Student activists still take to the streets to voice their concerns, but they are now adopting new and complementary mechanisms to meet broader campaign objectives, such as, legal interventionism. As a consequence, we see university students commencing legal action against organisations for failing to divest from carbon producing industries, and students commencing proceedings against governments for failing to plan for national climate recovery. To date, no student activist groups have commenced climate change related proceedings in Australia, but planning court decisions like *Gray v Minister for Planning* and the recent series of climate change related actions in the Land Court of Queensland have contributed greatly to the development of climate change jurisprudence in Australia.

While support for climate change activism is growing in university campuses, students are increasingly unsure of what role they can play once they leave university and begin their professional careers. It was this concern that promoted the idea for the workshop. In fact, the workshop developed out of a conversation with some of those students who felt frustrated with the prospect that once they had completed their studies and entered the workforce, they would have to abandon their hopes for effecting social and political responses to climate change. The purpose of the workshop was to belie that concern and show that there are professionals in the planning and legal community, in the private and public sector, who are concerned about climate change and are actively involved in developing local and global responses. The aim of the workshops was to provide an opportunity and forum within which some of these professionals could talk about their experiences and for the students to meet and discuss, and develop relationships with them. Most importantly, the workshop sought to inspire the students to continue to focus on this important issue in their professional careers.

A well-known human rights activist from the '60s stated, 'The future belongs to those who prepare for it today'. We congratulate those students who attended the workshop, who question and challenge, and who, as upcoming leaders, prepare for and plan the future of our society.

ABOUT THE WORKSHOPS

The last quarter of 2014 was a significant period of focus for DLA in respect of climate change events.

In September, the Queensland Government committed to release a whole-of-government partnership driven climate adaptation strategy to reduce risks to the economy, environment, infrastructure and communities from current and future climate impacts. This commitment recognised views raised in the Queensland Plan, a 30-year vision for Queensland shaped by more than 80,000 people across the state. Mark Baker-Jones, Special Counsel with DLA Piper was appointed by the Minister for Environment and Heritage as Chair of the Partnership Group. In October, Mark was also named the National Climate Change Adaptation Research Facility (NCCARF) 2014 Climate Change Champion individual at the Australian National Climate Change Adaptation Awards.

In December, DLA Piper lawyers from Europe and the United States participated in the international climate change negotiations in Lima, Peru at the 20th Conference of the Parties (COP 20) to the United Nations Framework Convention on Climate Change. DLA Piper represented the country of Georgia at the climate conference.

In addition and in partnership with the University of Queensland, Bond University, University of the Sunshine Coast, Queensland University of Technology, and Griffith University, DLA Piper provided a full day workshop on climate change, planning, and the law. The workshop was held in DLA Piper's Brisbane office on Friday 28 November 2014.

The workshop was designed specifically for law students, and urban and regional planning students interested in climate change.

The objectives of the workshop were:

(i) to encourage discussion on current climate change legal matters, including climate change policy, regulation and litigation

(ii) to provide an update on the national and international reforms to planning legislation

(iii) to discuss land use planning and legal issues associated with climate change impacts

(iv) to encourage an exchange of ideas on climate change, planning and the law.

This specialised workshop provided a forum for exchanging ideas and information between leading practitioners, academics and students focussed on planning reform and climate change. One of the primary goals was to establish and build links between the students and the professionals convening the sessions.

In light of the valuable contribution the attendees made to the workshop through the expression of their knowledge, skills and various experience in climate change adaptation, a number of attendees, who, through work, studies and research, are affected by or have involvement in climate change adaptation related action, were invited to contribute articles. Some of those articles have been included in this report.

1. PRESENTATION ABSTRACTS

This section includes abstracts and key messages from the various presentations, starting with short profiles of the convenors.

The convenors for the workshop were, in order of presentation:

Donavan Burton, Climate Planning

Laura Gannon, Jensen Bowers Group

David Ransom, Cardno HRP, Urban Development Institute of Australia

Mark Baker-Jones, DLA Piper

Sean Ryan, Environmental Defenders Office Inc.

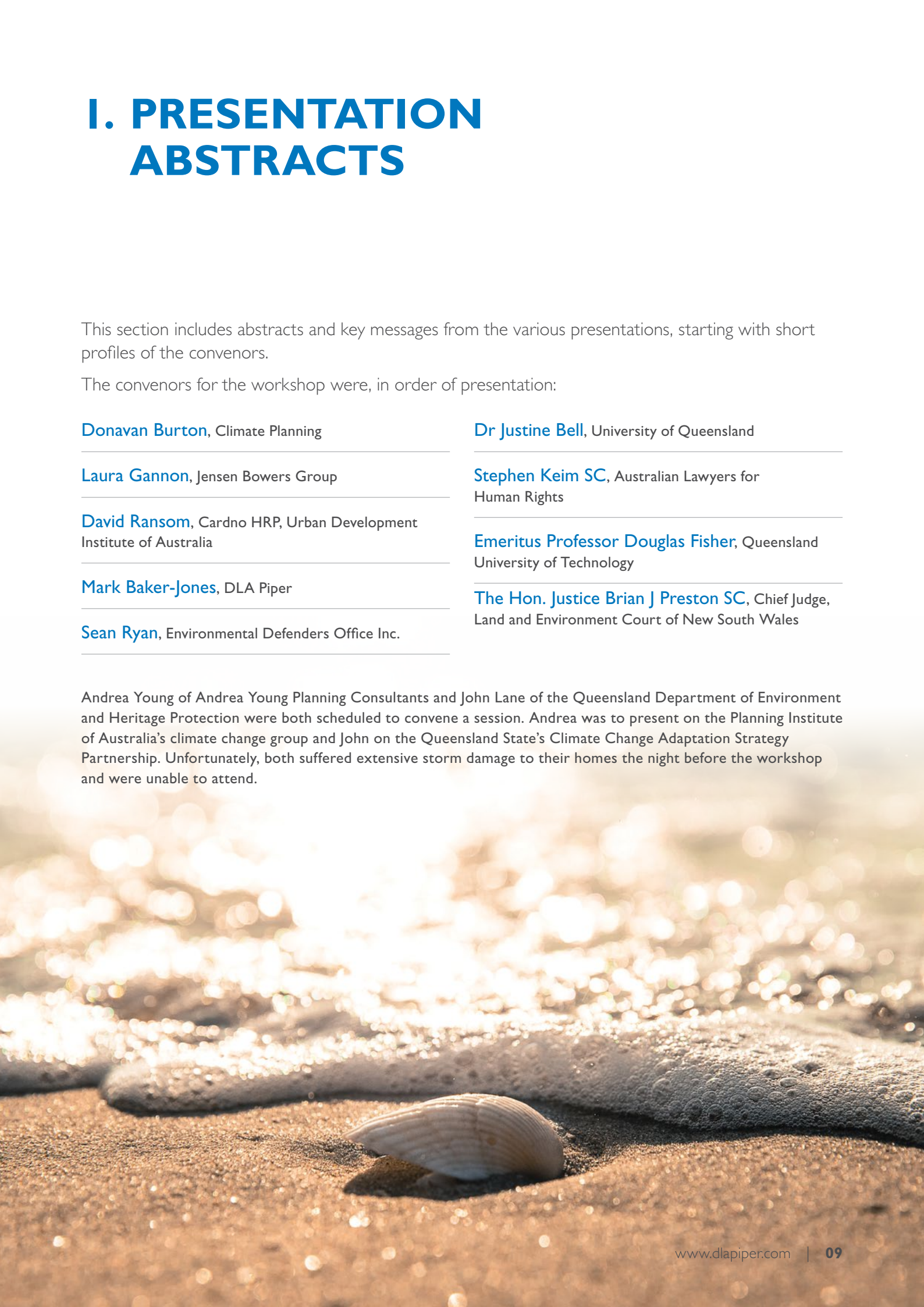
Dr Justine Bell, University of Queensland

Stephen Keim SC, Australian Lawyers for Human Rights

Emeritus Professor Douglas Fisher, Queensland University of Technology

The Hon. Justice Brian J Preston SC, Chief Judge, Land and Environment Court of New South Wales

Andrea Young of Andrea Young Planning Consultants and John Lane of the Queensland Department of Environment and Heritage Protection were both scheduled to convene a session. Andrea was to present on the Planning Institute of Australia's climate change group and John on the Queensland State's Climate Change Adaptation Strategy Partnership. Unfortunately, both suffered extensive storm damage to their homes the night before the workshop and were unable to attend.



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Barrister-at-Law and became Senior Counsel in 2004. He was awarded the Human Rights Medal by the Australian Human Rights Commission in 2009 and in 2010 was elected as president of Australian Lawyers for Human Rights (ALHR). Stephen writes regularly on law and human rights issues (see https://independent.academia.edu/StephenKeim/Analytics#/overview)

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Joined QUT as Professor of Law in 1991. Prior to this he held appointments at the University of Edinburgh, UQ, ANU, the University of Dundee and Victoria University. Author of, amongst many other books, *Legal Reasoning In Environmental Law.*

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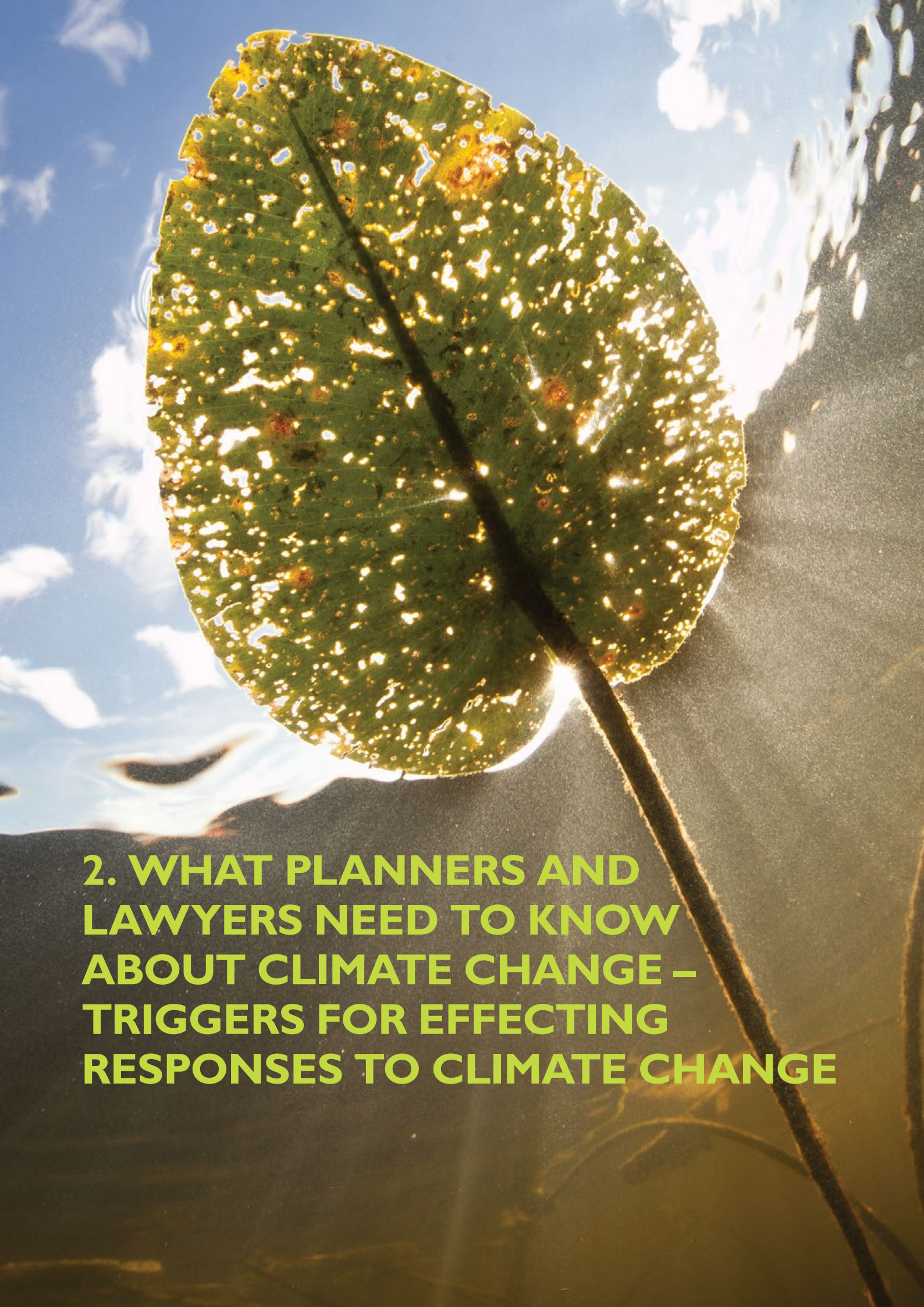
Chief Judge of the Land and Environment Court of New South Wales. Prior to being appointed in 2005, he was a senior counsel practising primarily in environmental, planning, administrative and property law. Contributor to the International Bar Association (IBA) Task Force on Climate Justice and Human Rights report entitled, 'Achieving Justice and Human Rights in an Era of Climate Disruption'.



2. WHAT PLANNERS AND LAWYERS NEED TO KNOW ABOUT CLIMATE CHANGE – TRIGGERS FOR EFFECTING RESPONSES TO CLIMATE CHANGE

WHAT PLANNERS AND LAWYERS NEED TO KNOW ABOUT CLIMATE CHANGE – TRIGGERS FOR EFFECTING RESPONSES TO CLIMATE CHANGE

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PROFILE

Donovan Burton is a climate planning specialist, leading climate change knowledge broker, and owner of Climate Planning.

Donovan has extensive experience in sharing insights on adaptation. From keynote presentations through to intensive training, Donovan has presented to thousands of people in Korea, Vietnam, Thailand, USA, Fiji, Samoa, Vanuatu, Marshall Islands, New Zealand, and throughout Australia.

Donovan has applied experience with insurers, developers, corporations, UN agencies, research organisations, and all levels of government. Much of Donovan's current focus surrounds metadata analysis of information to better understand the barriers and enablers to change. His research interests include understanding and managing trade-offs associated with adaptation, mal-adaptation, climate legal risk, catastrophe bonds, and energy and urban planning.

ABSTRACT

Climate change adaptation is complex. It requires society to reach beyond the exploration of the physical issues (e.g., properties at risk from sea level rise) and requires a systems thinking approach to follow and manage the cascading risks and opportunities. However, in practice few have yet to adopt this approach. What this means is that in its embryonic stages of implementation of adaptation winners and losers will emerge, requiring practitioners to manage trade-offs and contain mal-adaptation. These points of conflict are likely to materialise across temporal and jurisdictional boundaries. Identifying the potential issues requires a considered and inclusive approach. One person's adaptation can be another's risk.

For example, in 2014, the city of Toledo (Ohio, USA) had to turn off the potable water supply to almost half a million people. This is because the city extracts its water from Lake Erie, which over the past few decades has been plagued by a highly toxic and carcinogenic blue-green algae. Due to climate change in the Great Lakes region, there are likely to be more growing days and more agricultural activity, resulting in more chances to pollute. Climate change will also increase the range of bio-threats with invasive species and disease management responses (e.g., pesticides) likely to also flow down the catchment. Combined with the fact that climate change will also make the conditions in the lake more suited to algae blooms, it is easy to paint a bleak picture. This is agricultural adaptation versus urban adaptation – food security versus potable water security, with many of the battles likely to occur in the courtroom.

KEY MESSAGES

The climate change adaptation market is growing exponentially. However, as the adaptation science and practice is still in the nascent stages there is considerable potential for conflicts. This is because there is almost no adaptation action or process that provides wins for all. As such adaptation is about managing trade-offs. Exploring the cascading risks of climate change requires an inquisitive mind and a commitment to exploring, yet containing, the rabbit warren of issues. While there is a reasonable understanding of the direct risks from climate change (e.g., sea level rise or increased bushfire occurrence) the indirect issues are much more complex (e.g., trying to establish the extent to which someone should have known about emerging risks like insurance availability, market demand or supply chain disruption).

CONCLUSION

Climate change adaptation is about informed-decision-making and as such, it is imperative that those in the legal profession inform themselves about the emerging issues. Opportunities for early movers are aplenty.

BUSHFIRE HAZARD PLANNING POLICY, BUSHFIRE RESPONSIVE STRATEGIC PLANNING AND PLANNING FOR DEVELOPMENT IN BUSHFIRE HAZARD AREAS

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PROFILE

Laura Gannon is a Senior Town Planner and Bushfire Planning Specialist with Jensen Bowers Group.

Laura is a specialist in the area of bushfire planning and management, with extensive knowledge and experience with regard to bushfire hazard planning policy, bushfire responsive strategic planning and planning for development in bushfire hazard

Laura is a Corporate Member of the Planning Institute of Australia (**PIA**), a Member of the Fire Protection Association of Australia and a member of the Australian Institute of Emergency Services. She is the Convenor of the PIA Queensland Environmental Planning Chapter, is a member of the PIA National Climate Change Advocacy Group and member of the Queensland Government Climate Adaptation Strategy Partnership Group. Laura is also a member of the Australian Sustainable Built Environment Council's (ASBEC) Resilience Task Group and was awarded Australian Young Planner of the Year in 2011.

ABSTRACT

Planning for bushfire protection is an area requiring an advanced level of emphasis particularly in the Queensland context. Climate change impacts are projected to yield longer and more severe annual fire seasons, lower average rainfall, more frequent and severe drought and higher than average temperatures. General increased severe weather is also projected. Combined, the effects of these weather changes will place many areas of Australia at a new bushfire risk frontier. Increased storm activity will escalate the likelihood for ignition via lightning strike (currently estimated at 25 per cent of all ignitions) across drier landscapes. Opportunity for important hazard reduction (prescribed burning) activities will be reduced and overall fuel load dynamics will alter in adjustment to a warmer, drier climate and changing vegetation characteristics. The very manner in which tactical bush fire fighting is undertaken will also be affected. Overall, these impacts will generate more frequent and severe fire activity across regions within Queensland and Australia, with evidence indicating a number of these issues are already emerging.

The role of land use planning remains one of the most effective mechanisms in the mitigation of natural hazard and risk borne to new and existing communities from climate impact. How planning methodologies are rationalised and utilised at State and local government levels with respect to bushfire is integral to the level of land use responsiveness, and ultimately the preparedness and resilience of communities. Whilst current approaches rely heavily on statutory measures such as overlay mapping and overlay codes, it is strategic processes which are most appropriate in identifying and responding to risk from natural hazard. In contemplating a planning system which addresses climate adaptation specifically for bushfire hazard, planning policy must provide for the consistent application of robust practices. The important role of risk perception must also be recognised.

KEY MESSAGES

Strategic land use planning processes must utilise advancing technologies and risk assessment methodologies in the development and implementation of strategic planning instruments. Whilst increasingly innovative practices and data are emerging, it is how these tools are utilised and capitalised upon in a planning context, which will guide resilience activities into the future. Overcoming issues of risk perception, or complacency, and avoiding the continuation of the status quo is a particular challenge.

CONCLUSION

Considerations in terms of developing climate-adaptive planning processes to reconcile bushfire risk include the following:

- Informed planning policy which re-adjusts the relationship between strategic and statutory planning measures and ensures State-wide consistency
- Increased strategic rationalisation of bushfire hazard and inclusion of emergency management methodologies to assess and address cumulative risk
- Quantification of impacts on existing and established communities and development and implementation of measures to improve resilience
- Utilisation of advanced fire modelling and prediction technologies in land use planning processes to enhance sophistication of development approaches
- Move away from a one-method-fits-all approach which is currently the case in Queensland, and utilise new mapping methodologies to develop a suite of land use practices which respond to varying levels of risk
- Emphasis of shared responsibility both horizontally and vertically across governments and government agencies, non-government organisations and community groups
- Develop strategies to further enhance bushfire education and awareness in both professional and community contexts, in a movement away from poor risk perception.

The balance of a number of competing interests, which generally emerge within planning processes, will remain an issue but ideally, the prioritisation of natural hazard in policy and strategic planning directives may avoid any potential conflict and emphasise the achievement of community resilience in the face of a changing climate.

CLIMATE CHANGE AND THE DEVELOPMENT INDUSTRY

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PROFILE

David Ransom is a Principal at Cardno HRP Gold Coast and President Urban Development Institute of Australia (UDIA) Gold Coast/Logan.

David draws from over seventeen years of experience as a town planner, in his role as a Gold Coast Principal and former Director of Humphreys Reynolds Perkins Gold Coast. During this time, David enjoyed seven years at the Gold Coast City Council in both strategic and statutory town planning capacities. David was employed in a senior capacity within the Council's Planning Environment and Transport Directorate, assessing a range of significant development applications within the southern part of the city. In private practice, David has worked on a variety of residential, commercial and mixed-use development proposals ranging from greenfield subdivisions to large mixed-use tower developments. David also provides expert evidence in the Planning and Environment Court. David is a member of the Planning Institute of Australia, and is a Fellow of the Urban Development Institute of Australia.

ABSTRACT

The impacts associated with climate change and in particular sea level rise, pose significant challenges for coastal urban communities into the future. These challenges need to be dealt with holistically by all tiers of government, the development industry, the insurance industry and the broader community. To date there has been a fragmented approach from government to the issue of sea level rise, often involving the devolution of responsibility to local government, being the tier of government which is least resourced to deal with the problem. The sheer number of affected local governments also leads to a disjointed and inconsistent approach along our coastlines. Given the obvious political and financial challenges associated with this issue, there has been a tendency to push responsibility onto the development sector through requirements for increase flood floor levels. This approach is not holistic and ignores the future threat to government infrastructure such as roads, sewers, water supply and the like. This approach also offers no protection to existing development which will be increasingly subject to skyrocketing insurance premiums or lack of insurance coverage in the future. The key challenge for the future is to determine what physical means are required to protect our coastal urban areas, to determine who pays and over what period such measures will be implemented. Physical protection, assuming it is possible from an engineering perspective, will no doubt be demanded by coastal urban communities to ensure private and public property assets are safeguarded. This process will be challenging and will inevitably create winners and losers, but is essential to addressing the future risks associated with sea level rise.

KEY MESSAGES

Climate change and particularly sea level rise is a significant challenge requiring cooperation between Government, the development industry, the insurance industry and the broader community to be addressed in a holistic manner. The development industry cannot realistically deal with this issue on its own.

CONCLUSION

Broad and ongoing consultation between all stakeholders is required to produce a strategic response to climate change issues that can be implemented over the medium to long term.

1 These comments do not necessarily reflect the views of Cardno or UDIA.

CLIMATE CHANGE AND GOVERNMENT – QUEENSLAND CLIMATE CHANGE ADAPTATION STRATEGY

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PROFILE

John Lane is the Director of Environmental Planning, Environment and Policy Making in the Department of Environment and Heritage Protection.

ABSTRACT

In September 2014, the Queensland Government committed to release a whole-of-government partnership driven climate adaptation strategy to reduce risks to our economy, environment, infrastructure and communities from current and future climate impacts.

This commitment recognised views raised in *The Queensland Plan,* a 30-year vision for Queensland shaped by more than 80,000 people across the state.

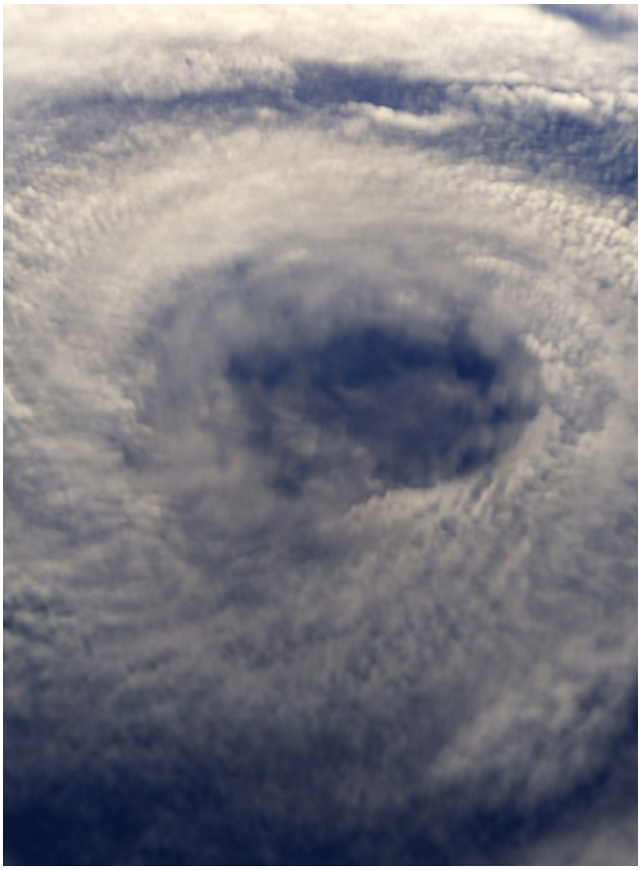
The Government's response to *The Queensland Plan* prioritised delivery of a partnership-driven Climate Adaptation Strategy (**CAS**) as one of 29 new actions against the Plan's nine Foundation Areas, reflecting the goal of the Queensland Government to become the most resilient state in Australia. With the commitment aligned to the Environment Foundation Area, this sends a clear signal that natural environment resilience will be a key theme that is to be woven throughout the strategy's development.

KEY MESSAGES

The Minister for Environment and Heritage Protection has endorsed the establishment and the development of a CAS, which will build resilience and create adaptation opportunities across Queensland's regions and sectors.

CONCLUSION

To address the complex issues that emerge in the context of climate change impacts, it is essential that the CAS is developed in partnership with those who carry the risk. A partnership-driven approach is essential if Queensland is to plan and manage current and future climate impacts effectively and efficiently across the spectrum risks and across regions.



CLIMATE LEGAL RISK

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PROFILE

Mark Baker-Jones is Special Counsel with the DLA Piper, the world's largest law firm. Mark focuses on planning and environmental law, as well as legal responses to climate change, particularly climate legal risk. He has a multi-jurisdictional knowledge of the law as it relates to the built and natural environment, making him one of Australia's principal planning and environment lawyers. He has particular skills in legal and institutional frameworks (including procedures and protocols) that facilitate climate change adaptation and has an unprecedented understanding of the legal liabilities and risks associated with the impacts of climate change.

Mark has presented internationally and nationally on climate legal risk including in association with UNESCO and the Secretariat of the Pacific Regional Environment Programme (SPREP), to Pacific Island Nations, to the UNEP, development banks, the Japanese and South Korean Departments of Environment, at National Climate Change Adaptation Research Facility conferences and forums, and the annual Commonwealth Scientific and Industrial Research Organisation (CSIRO) engineering forum. He is a guest lecturer at the University of Queensland Renewable Energy Law Master's course and has appeared before a number of government panels including the Queensland Government State Development, Infrastructure and before the Industry Committee on planning reform.

ABSTRACT

Climate change related litigation associated with land use and land use planning can be costly to developers, local governments and the community. Land use planning and planning law professionals should therefore take time to consider what, if any, obligations there may be under current and proposed land use planning legislation and the various planning instruments to adapt to climate change.

Planning in Queensland is largely governed by the *Sustainable Planning Act 2009* (**SPA**) and therefore, in the course of considering how climate change currently affects the practice of planning in Queensland, it is necessary to consider the requirements under SPA. The phrase 'climate change' is mentioned in SPA three times. The first two mentions occur in reference to how the purpose of the Act is to be advanced. Interestingly, in each case, the drafters appear to be considering climate change in terms of mitigation rather than adaptation measures. This does not mean however that the SPA does not require land use planners to take climate change into account when exercising powers to make decisions under the SPA. The purpose of the SPA is to seek to achieve ecological sustainability. Climate change is made relevant to this in the third occurrence of the term, which appears in the explanation to the use of the term ecological sustainability.

At the time of the workshop, a new Planning Act was proposed – the Planning and Development Bill 2014. Although the purpose of the Bill, which was to facilitate Queensland's prosperity, was to be achieved through ecologically sustainable development there was no

explicit reference to climate change in the Bill. There is a sufficient and established body of jurisprudence on the principles of ecological sustainability, for it to be clear that this means 'recognising our duty to each other, to future generations and to the earth itself'. Land use planners required to make a decision if the Bill had passed would, therefore, have needed to be give careful thought as to whether they were obliged to take climate change into account when making that decision. They would have been well guided by the burgeoning case law, which accepts that administrative decision makers must take into account climate change.

The increase in climate change litigation over the last decade, in part, has come about because of regulatory failure to deal with climate change impacts. Whereas the most recent case relates to an explicit obligation under legislation to consider climate change, litigation has increasingly arisen out of planning disputes about how to deal with the impacts of climate change in cases where the liability has not been statutorily allocated. For this reason, it is through common law actions such as the tort of negligence or judicial review that climate change litigation is most likely to occur.

KEY MESSAGES

Reference to ecologically sustainable development in the planning legislation keeps open a door to the requirement that climate change be considered in land use planning and development assessment, but this becomes less certain when reference to climate change is removed. Regardless of the legislation there is potential for effecting change through public law challenges.

CONCLUSION

A failure to regulate the legal liability associated with climate change will increase uncertainty and expose decision makers to greater risk. If decision makers are powerless to plan for the impacts of climate change, they can only react after the damage has been done. It is therefore crucial that rather than avoiding or ignoring climate legal risk, legislators confront this central issue, and implement regulatory frameworks that provide the certainty needed to deal with the risk. Unless this occurs, climate change related litigation is likely to increase.

CLIMATE CHANGE LITIGATION – A PRACTITIONER'S PERSPECTIVE

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Having worked for all levels of government and a range of industries on broad ranging environmental issues, Sean brings a broad perspective to assisting the community and public interest at EDO. Sean focuses on climate change related litigation, education, and law reform.

Sean is a specialist planning and environment lawyer with degrees in both Law and Environmental Science and a Masters in Environmental Law from the University of Queensland.

ABSTRACT

International law has failed to result in any binding limit on greenhouse gas emissions that would avoid the 2 degree Celsius warming threshold for dangerous climate change.

Nationally Australia's current emissions target is not sufficient to reduce our fair share of emissions to stay below 2 degree Celsius, and there is no legally binding mechanism to achieve this target.

This leaves no legal constraint on emissions from the burning of our abundant coal resources after the mining is approved.

Mining approvals however require the environmental consequences of coal mines to be considered and has led to a series of cases questioning whether the consideration of environmental consequences includes the emissions resulting from the burning of the coal.

The jurisprudence has been slowly advancing from the Courts' initial questioning the reality of climate change to climate change now being considered an issue of significant public interest, in which the contribution of large mining projects is 'real and of concern'.

The key remaining barrier to considering the climate change impact of large mining projects is the view that halting a project would be futile as the coal will simply be sourced from somewhere else, resulting in similar emissions.

This issue is currently before the Courts in at least three cases that are to be heard this year.

KEY MESSAGES

Climate change can be considered a special species of indirect pollution which potentially falls within existing laws designed to capture pollution impacts of mining projects. However it is an area of fierce legal debate being fought out in Court rooms across Australia. The jurisprudence is rapidly evolving but still trails scientific understanding of climate change.

CONCLUSION

The slow accretion of climate change jurisprudence through litigation is an important component of enabling existing law to reflect current community values and knowledge, particularly while more comprehensive national and international laws take time to be developed and implemented.

COASTAL LAW AND PLANNING FOR CLIMATE CHANGE: ADAPTING TO SEA-LEVEL RISE IN EXISTING SETTLEMENTS

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PROFILE

Dr Justine Bell is a lecturer at the TC Beirne School of Law, University of Queensland, teaching undergraduate and postgraduate courses in the areas of Environmental law, Climate Change law, and Property. Justine obtained a PhD from the Queensland University of Technology in 2010, and was awarded an ARC funded Postdoctoral Fellowship in 2011. Justine undertook her postdoctoral research at the Global Change Institute at The University of Queensland, focussing on legal, policy and insurance responses to sea-level rise. Justine's main area of research interest is climate change adaptation law, and she recently published a book titled *Climate Change and Coastal Development Law in Australia* through Federation Press.

ABSTRACT

One of the most challenging policy issues arising from sea-level rise is how to address the risks posed to the considerable number of existing settlements in high-risk areas. Strong presumptions against retrospectivity are a barrier to introducing risk mitigation strategies, and compulsorily acquiring land may be only way for governments to alleviate completely risks to private property. This difficulty is compounded by long and imprecise timescales, and high scientific uncertainty.

On the flipside though, these long timescales provide a unique opportunity for governments to spread costs and implement a strategic approach to acquiring property. Governments can, in effect, 'time-limit' communities, as the impacts of sea-level rise may not be experienced for several decades. Governments may prefer to implement measures that allow homeowners to reside in their properties for the remainder of their lifetime, or until the risk materialises, rather than acquiring properties immediately. This would achieve a compromise, by allowing landholders to remain in their homes and communities for the short- to medium-term, whilst still ensuring that homes vulnerable to sea-level rise are eventually moved into public ownership.

KEY MESSAGES

Theoretically, a land acquisition policy can be implemented gradually, even over several decades, with priority given to those properties most at risk in the short-term. However, this approach would require a significant re-imagination of the role of land acquisition laws in Australia. These laws differ considerably across the States, and most Acts would require some amendment. In particular, laws could be amended to allow for acquisition and lease-back land, for long-term notices of intention to acquire, and for scaled compensation schemes.

CONCLUSION

These are difficult policy questions to resolve, particularly given the high prominence of privately-held property in Australia. That said, deferring action is not a sound approach, as extreme events and associated calls for disaster relief will result in huge financial shocks for government. It is crucial that these issues are considered now, to allow for the cost burden to be spread over time.

CLIMATE CHANGE AND HUMAN RIGHTS

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PROFILE

Stephen Keim SC has been a practising lawyer for nearly thirty-seven years. He was admitted as a solicitor in February 1978; was called to the Bar in July 1985; and became a Senior Counsel for the State of Queensland in December 2004.

Although Stephen's practice has always been diverse, it has always included a thread of environmental law including being briefed on behalf of community groups to challenge development decisions that were seen to have unjustifiably adverse impacts on the environment.

Stephen has always had a lay interest in and concern about the threat of climate change. He has written numerous articles on different aspects of the threat. In 2010, Stephen was kidnapped by another of his long-term interests when he became national president of Australian Lawyers for Human Rights. For the three years that he was president, Stephen wrote and spoke extensively on human rights issues and continues to do so. It is not surprising, therefore, that Stephen ended up bringing the two interests together in an article published in 2013 in the journal, *Jurisprudence*, on the subject *Climate Change and Human Rights*.

With certain commercial interests keen to make Queensland the land of the giant coal mines, Stephen is currently involved in litigation in which the correct way of taking into account the greenhouse gases from the burning of coal from those coal mines is being debated. The results of this litigation may have far-reaching results for the effectiveness of environmental protection legislation around the globe.

A selection of Stephen's writings and speeches may be found at **his Academia portal**.

ABSTRACT

The relationship between human rights and climate change has been explored in the last decade as a result of complaints brought to international fora, firstly, by an Inuit community and, subsequently, by the Maldives on behalf of the Association of Island States.

The tentative result of these discussions is that existing international human rights instruments have not bestowed a right to a healthy environment so as to make climate change impermissible per se. However, the international observers who have considered these issues have observed that impacts on the environment, including those arising from changes to the world's climate, have the potential to indirectly impact upon recognised human rights such as the right to life and the right to the enjoyment of the highest attainable standard of physical and mental health.

Discussions have also suggested that, in the knowledge that climate change is having an adverse effect on a number of human rights protected by international law, a failure to act to prevent or minimise climate change may constitute a breach of international human rights law.

KEY MESSAGES

There is much to be gained from considering the impacts of climate change through the prism of human rights law. The principles of human rights are a time honoured guide to fairness. The principles assist in identifying unfairness through some communities suffering from the effects of climate change while others can use their wealth and power to insulate themselves.

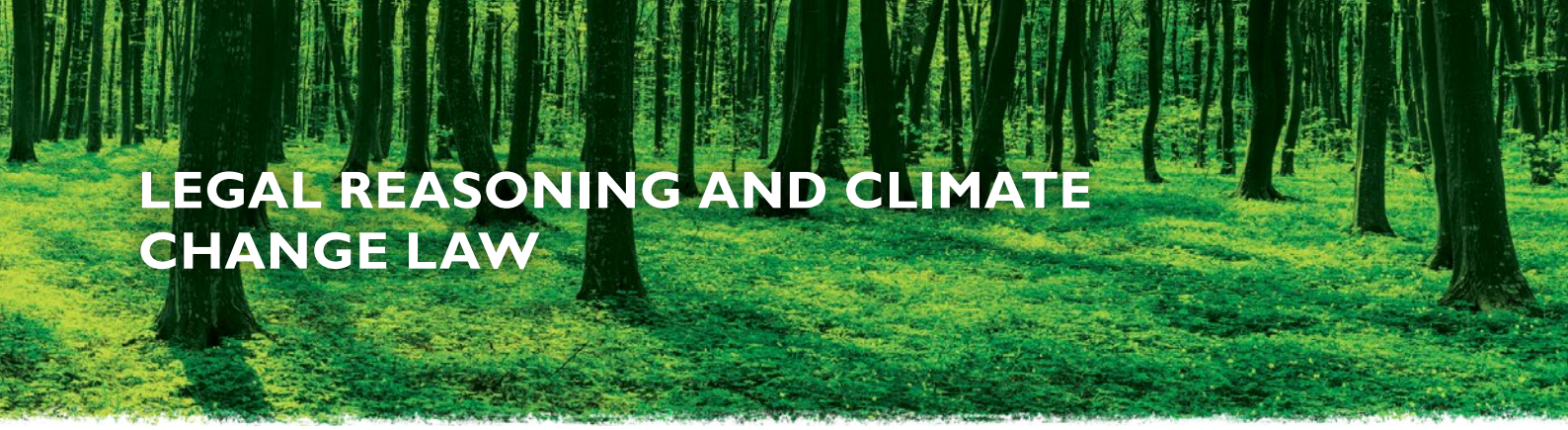
Human rights principles also assist in avoiding unfairness through the steps taken to deal with climate change both in seeking to prevent or mitigate the changes and in developing methods to adjust to the effects of climate change.

Human rights law and the principles it contains and espouses are an invaluable tool and should be utilised by everyone involved in issues associated with climate change.

CONCLUSION

Discussion of climate change in human rights fora such as the Human Rights Council or United Nations High Commissioner for Human Rights may have been seen to be desirable as a way of moving climate change mitigation discussions forward where, particularly after the disappointing Copenhagen Conference of the Parties to the Climate Change Framework Convention in 2009, the direct discussions on steps to mitigate were perceived to have stalled.

There is cause to be more optimistic about direct discussions on climate change, today, than five years ago.



LEGAL REASONING AND CLIMATE CHANGE LAW

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PROFILE

Douglas Fisher joined Queensland University of Technology as Professor of Law in 1991. Prior to this, he held appointments at the University of Edinburgh, the University of Queensland, the Australian National University and the University of Dundee before being appointed as Professor of Law at Victoria University (Wellington, New Zealand) in 1982, where he was Dean from 1988 until the end of1990. He also practised law in the public sector in the United Kingdom and was for some 10 years a consultant with Phillips Fox (now DLA Piper) in Brisbane.

His principal teaching and research interests are currently in the areas of Environmental Law and Natural Resources Law. Professor Fisher's most recent publications are *The Law and Governance of Water Resources – The Challenge of Sustainability* (2009) published by Edward Elgar Publishing Ltd, *Australian Environmental Law* (2014) 3rd ed published by Thomson Reuters and *Legal Reasoning in Environmental Law – A Study of Structure, Form and Language* (2013) also published by Edward Elgar Publishing Ltd.

ABSTRACT

Legal reasoning reflects the form, structure and language of the rule and this in turn reflects the function of the rule. Traditionally rules have assumed the form of liability rules. A standard is stated. Past events and actions are assessed against that standard and a decision reached: a reactive approach and a form of deductive reasoning. The issue in question tends to be relatively specific: what may be described as a unicentric approach. This remains relevant in climate change law but only in very specific sets of circumstances.

Much of climate change law now assumes the form of strategic and methodological rules. Strategic rules state what is to be achieved by the decision making process in question: an outcome driven process directed at the substance of the decision. Methodological rules indicate not what but how the decision is to be reached: for example by enabling or requiring stated policies, factors or other matters to be assessed and considered or even afforded a certain priority. This is a proactive approach that looks to the future and not the past. The process of reasoning tends to be inductive by considering first the circumstances and then proceeding to a conclusion that effectively creates a rule tailored to the circumstances but reached in accordance with the relevant strategic and methodological rules. This has been described as a polycentric approach to decision making. It is emerging as the contemporary paradigm of environmental and therefore of climate change law.

KEY MESSAGES

Language is critical to effective legal reasoning. The function of a legal rule is revealed by the language by which it is expressed. This is particularly so in climate change law which is for the most part polycentric in nature: in other words how to balance a complex range of competing perspectives.

CONCLUSION

The legal analysis of a climate change issue depends ultimately upon the language of the relevant legal rule. Much of climate change law creates rights and obligations for the future. The legal reasoning is likely to be inductive rather than deductive in nature. It accordingly looks to the future than to the past.

CLIMATE JUSTICE AND THE ROLE OF AN INTERNATIONAL ENVIRONMENTAL COURT

THE HON. JUSTICE BRIAN J PRESTON SC

Chief Judge, Land and Environment Court of New South Wales

PROFILE

Justice Preston is the Chief Judge of the Land and Environment Court in New South Wales. Prior to being appointed in November 2005, he was a senior counsel practising primarily in New South Wales in environmental, planning, administrative and property law. He has lectured in post-graduate, environmental law for over 23 years. He is the author of Australia's first book on environmental litigation and 86 articles, book chapters and reviews on environmental law, administrative and criminal law. He holds numerous editorial positions in environmental law publications and has been involved in a number of international environmental consultancies.

Since 2013, Justice Preston has been a member of the International Bar Association President's Climate Change Justice and Human Rights Task Force, which was established to support the IBA in assessing the challenges to the current national and international legal régimes on climate change. In July 2014, the Task Force set forth its analysis and recommendations in a report entitled *Achieving Justice and Human Rights in an Era of Climate Disruption*. Justice Preston has also presented papers on climate change litigation, the role of courts in adapting to climate change and climate change justice and human rights.

In 2010, he received an award by the Asian Environmental Compliance and Enforcement Network in recognition of his outstanding leadership and commitment in promoting effective environmental adjudication in Asia. He was made, in 2013, a Fellow of the Australian Academy of Law and in 2014 an Honorary Fellow of the Environment Institute of Australia and New Zealand.

INTRODUCTION

Where political action on climate change has not been forthcoming, individuals and groups have sought to achieve climate change justice through litigation. Such litigation involves answering difficult questions about what constitutes climate change injustice, the injuries suffered, the costs of these injuries, who has a legal right to claim redress, who is legally responsible, and what cause of action is available. The International Bar Association ('IBA') Climate Change Justice and Human Rights Task Force Report, *Achieving Justice and Human Rights in an Era of Climate Disruption* (July 2014) ('the IBA Task Force Report') made numerous recommendations for the clarification of human rights obligations relating to climate change in international and regional human rights law, and proposed further work to progress domestic and international action, specifically through consideration of a Model Statute on Legal Remedies for Climate Change.

ISSUES IN LITIGATION FOR CLIMATE CHANGE JUSTICE

The first step in climate change litigation involves identifying the injustice caused by climate change (e.g., what injustice has been suffered and by whom). The concepts of distributive justice and procedural justice are relevant to climate change injustice. Distributive injustice involves the unjust distribution of burdens and benefits. It is concerned with who suffers injury by reason of climate-change induced events, such as sea level rise and increased storm surge on coasts. Injury may be suffered by individuals, communities, the state, future

generations or non-human nature (such as individual species, populations, endangered ecological communities, ecosystems, and the biosphere). Examples of injuries that could be suffered include harm to individual health, damage to private property, damage to public property and infrastructure, damage to common natural resources (res communes) or unowned natural resources (res nullius), or damage to ecosystem services and functioning.

The second step involves quantification and monetarisation of these injuries. This can be a difficult task especially for injuries to non-human nature. Economics is concerned with the loss of utility to humans. Injury to non-human nature only has economic value in so far as it causes the diminution of utility of humans.

The third step involves identifying who has the legal right to claim redress for these injuries and costs, who is legally responsible to meet the claim for redress, and what is the cause of action that enables the victim to claim redress against the perpetrator. These questions are interdependent: the cause of action will differ depending on who the claimant alleges is legally responsible, and vice versa.

For a cause of action arising in tort (e.g., in trespass, public or private nuisance, or negligence), the defendant or wrongdoer could include those responsible for greenhouse gas emissions, those responsible for removing carbon sinks, or those approving these activities. Statutory actions could also be taken, including prosecution for environmental offences, or civil enforcement of environmental laws. In administrative law, claimants could seek merits review of decisions to approve strategic plans or policies, or specific activities, that increase greenhouse gas emissions or remove carbon sinks, or judicially review such decisions. Litigation could also be commenced invoking the doctrines of the public trust or parens patriae regarding injuries to certain common natural resources (such as the air, sea and seashores).

An abuse of human rights could also be litigated. Climate change might injure economic, social and cultural rights (such as a right to adequate food, water and health, and an adequate standard of living) or civil and political rights (such as a right to life, and right to respect for private life and family life).

Procedural justice is also relevant to climate change injustice. Procedural injustice can occur through the denial or diminution of access to information about climate change and its causes and effects including climate change induced events, public participation in decision-making regarding climate change mitigation and adaptation policies, approvals and actions, and access to justice to enforce substantive and procedural rights and to remedy wrongs.

ACHIEVING CLIMATE CHANGE JUSTICE

The IBA Task Force Report has recommended 'greening' existing human rights obligations, and the development of a freestanding right to a safe, clean, healthy and sustainable environment. The Task Force also recommended that an IBA Working Group on Climate Change Justice be designated to draft a Model Statute on Legal Remedies for Climate Change. In the long term, the Task Force encourages states to adopt domestic procedural and substantive laws incorporating the legal principles as set out in the Model Statute.

The Task Force recommended that the Model Statute address the following substantive and procedural issues:

- *actionable rights* affected by climate change;
- clarification of the role and definition of *legal standing*. This includes addressing issues such as what right or interest needs to be affected, whether the claimant can be outside political borders, whether opt in or opt out mechanisms are more appropriate for class actions, whether gateway or leave provisions are appropriate, and whether guardians or trustees for future generations or non-human nature should have standing;
- issues regarding *causation*, including appropriate standards for proving a legally cognisable causal link between greenhouse gas emissions and relief sought. This involves considering the types of evidence that constitute sufficient proof of causation;
- whether *knowledge*, including foreseeability of harm, is relevant to liability or judicial relief;

- development of methods for awarding *remedies and relief* as warranted by the circumstances, including uniform standards by which to apportion damages, and the provision of declaratory, interim and injunctive relief;
- issues regarding standards of *liability*, including the appropriateness of no fault or strict liability, or joint and several liability;
- the interrelationship of *competing claims* by nations, communities and individuals. This involves consideration of whether future claims by similarly harmed individuals and communities are precluded, whether claims by future generations are precluded, how defendants can be protected from paying excessive or duplicate damages, and the development of a claim-based system of distributing monetary compensation;
- overcoming *limitation periods* fixed by statute for commencing action;
- the availability of pre-trial and interim applications for *disclosure and discovery*;
- guidelines on *costs* awards in climate change cases; and
- guidelines for the *jurisdictional reach* of domestic and international courts to adjudicate climate change related claims.

INTERNATIONAL COURT FOR THE ENVIRONMENT

The IBA Task Force Report recommended, as a longer term goal, the creation of a new permanent formal judicial institution, an International Court for the Environment (ICE), to adjudicate environmental disputes. An ICE could ascertain and clarify environmental legal obligations of governments and businesses, facilitate harmonisation of and complement existing legislative and judicial systems, and provide access to justice to a broad range of actors through open standing rules. The Report recommended that:

- both states and non-state actors (organisations, individuals and corporations) should have standing before the ICE, so as to enable broad airing of the potential complexity of issues and multiplicity of parties involved in climate change related disputes;
- the ICE's procedures should allow the parties to choose the location for constituting the court;
- states should ultimately be bound by the decisions of the ICE;
- in terms of remedies, the ICE should have broad powers to make findings of incompatibility between domestic legislation and multilateral environmental agreements ('MEAs'), to order provisional measures, and to make final judgments that encompass both monetary awards and performance of tailored orders of environmental rehabilitation or restoration; and
- the ICE should be empowered to fulfil a judicial review role, to make international environmental law, to police legislation for compliance with MEAs, and to adjudicate disputes.

CONCLUSION

Climate change litigation involves numerous challenges. The IBA Task Force Report recommendations seek to clarify human rights obligations relating to climate change, and progress domestic and international action.

3. PAPERS FROM ATTENDEES

VOICES FOR THE FUTURE

Following the workshop, attendees were invited to provide a short piece on the topic of 'climate change, planning and the law'. The students were asked to make their own choice on the content and style.

The purpose was to encourage the students to give expression to their own views on climate change.

The papers are varied in style and content. They offer a student perspective on planning for climate change. What is common amongst them is the view that more needs to be done to adequately respond to climate change, whether it is examining the vulnerabilities of coastal towns in the Bay of Bengal or developing new international agreements to deal with the climate change related forced displacement of people in the Pacific.

Below is a collection of those papers that were submitted.

CLIMATE CHANGE ADAPTATION IN INDIAN COASTAL CITIES

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India is home to several million-plus populated coastal cities, which include Surat, Bhavnagar, Vishakapatnam, Kandla and the mega urban centres of Mumbai and Chennai[1]. A mean sea level rise (SLR) of 0.8 metres could mean disaster to several of these cities and regions that are highly vulnerable as large concentration of the urban population lives within a low elevation coastal zone (LECZ). Additionally, a significantly high level of settlement is incident along the deltas of the rivers of Ganga, Krishna, Godavari, Cauvery and the Mahanadi. This presents a truly unique urban challenge to limit the extent of vulnerability to these cities and towns from climate change induced disasters. By the year 2060, about 7000 to 12000 urban settlements in India are expected be to be affected by environmental transitions leading to air and water pollution, health disorders and climate change.[2]

The National Action Plan on Climate Change (NAPCC) released in 2008 serves as India's bible for adaptation strategies to tackle climate change, and lead the country towards an ecologically sustainable development path. The key eight missions formulated in this document are focussed on energy security using increased solar power generation, energy efficiency, developing a sustainable habitat, water conservation, sustaining the Himalayan eco-system, increasing carbon sinks, sustainable agriculture practice and developing strategic knowledge on climate change.[3] Though the objectives are commendable, it is unfortunate that there is no mention about battling the issue on the crucial warfront – the cities that are host to a major percentage of India's urban populace.

The Indian sub-continent is projected to have a population growth of 1.6 billion by 2060 and therefore climate change will be a crucial economic as well as political concern. The situation in cities has to be viewed in a threefold context – demographic shift due to an increase in population, rural to urban migration and a simultaneous environmental transition.[4] Though the 2005 tsunami that brought havoc to the India's coastal zone helped in establishing the integrated coastal zone management program and an early prediction mechanisms, there is lack of a clear climate mitigation and adaptation strategies that could have a positive impact on the economic growth and development. It is ironic that the progress on adaptation measures has been weak in India despite a more than average scientific presence in IPCC process with an Indian occupying the Chair of the committee since 2002, until early 2015.[5]

The Bay of Bengal on the east coast is prone to five times the frequency of cyclones compared to the Arabian Sea in the west; making it highly vulnerable to cyclones, storm surges and coastal inundation, though it is one of the least intense cyclone basins in the world.

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1 D Aggarwal and M Lal'Vulnerability of Indian Coastline to Sea-level Rise' (2001) *Centre for Atmospheric Sciences at the Indian Institute of Technology.*

2 G McGranahan, B Deborah and A Bridget, 'The Rising Tide: Assessing the Risks of Climate Change and Human Settlements in Low Elevation Coastal Zones' (2007) 19(1) *Environment and Urbanisation* 17, 17-37.

3 National Portal of India, *Combatting Climate Change and Working Towards Sustainable Development* (21 November 2014) Government of India <http://india.gov.in/people-groups/community/environmentalists/combating-climate-change-and-working-towards-sustainable-development.>

4 A Revi, 'Climate Change Risk: Adaptation and Mitigation Agenda for Indian Cities' (Speech delivered at the Global Urban Summit, Bellagio, July 2007).

5 P R Shukla, *Climate Change in India: Vulnerability Assessment and Adaptation* (Hyderabad University Press, 2003).

In addition to the high concentration of population along this coast, a sea level rise of 3 metres could see 1 percent of the urban areas being wiped out[6]. Although this may not be huge when compared to the 10 percent risk in countries like Bangladesh, the coastal cities together with the ports produce a significant share of GDP, which could see a huge dent even with a minimal loss of coastal land area. Therefore, the need of the hour for India is a composite macroeconomic risk analysis[7] to examine the vulnerabilities and a national multi-hazard risk adaptation strategy as developed by countries like United Kingdom.

[6] S Dasgupta et al, 'The Impact of Sea-level Rise on Developing Countries: a Comparative Analysis' (World Bank Policy Research Working Paper No 4136, The World Bank, February 2007).

[7] N Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2007).

CLIMATE CHANGE, PLANNING AND THE LAW

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In the wake of overwhelming scientific evidence in support of anthropocentric climate change the debate has shifted from one of proof to damage control and mitigation. The need for action is dire especially in the arenas of planning and the law. As the issue is global by definition, appropriate planning mechanisms and legal guidance is needed from the local government level all the way up to the auspices of public international law. The speakers at the 2014 workshop at DLA Piper in Brisbane highlighted both the breadth of the issue, in terms of the array of effects we can expect as a society, as well as some of the deficiencies in our current legal systems both nationally and internationally.

In the workshop, a plethora of issues concerning climate change were considered. These ranged from some of the practical effects we are expected to have to cope with on the ground level (in Queensland this includes bushfire and flood disaster management) to the current state of the National legal system, in terms of climate legal risk and climate change litigation, to finally consider some crucial jurisprudential questions that are relevant in both the municipal and international legal arenas. It became apparent that reform at all levels (locally, state-wide, nationally and internationally) is necessary to address, and mitigate where possible, an issue which is unprecedented in scale.

At the local council level, appropriate planning in terms of mitigating the effects of climate change is necessary and possible. However, although such action is needed, limited resources and training means that successful action will arguably depend on strong leadership from above and/or community support, preferably both.

National and state governments have an enormous responsibility. They need to provide leadership to subordinate governmental bodies, educate the public, make appropriate legal changes and, at the federal level, negotiate in the international arena.

Legally, a core problem is that there is a lack of legal protection offered in respect of climate change both nationally and internationally. Indeed, given the global nature of the problem, leadership and collective action at the international level will also be necessary. Although the speakers at the workshop explored the current state of legal liability and causes of action under the current common law and legislative framework, this more fundamental problem emerged. Nationally it is apparent, in cases such as Xstrata that the legislative framework is such that it is difficult to base a cause of action around climate change. Internationally, the systemic structure of international law is such that it is insufficient to cope with climate change issues or to allow for international collective action. Despite this, there is scope for reform. For example, this may be in the form of a new international environmental court or in the arena of international human rights law. Indeed, even if there is yet to be widespread recognition of a human right to protection of the environment, many recognised human rights are, and will be, affected by climate change. Despite this scope, issues concerning the difficulty of obtaining international collective action as well as general issues concerning consent and enforcement in international law generally must be recognised.

The workshop provided a vital snapshot of just how endemic and widespread this problem is. Unfortunately reform, while crucial, is not easy – especially where informed decision-making is difficult and trade-offs will have to be made. This is further complicated by the fact that the issue has become political. While no obvious solution exists, it is clear that effective adaption depends on a multi-pronged approach from all levels in addition to strong leadership and collective human responsibility.

CLIMATE CHANGE MITIGATION – A GLOBAL MORAL RESPONSIBILITY

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Climate change has become a growing global concern in the 21st century. The 2014 Brisbane G20 Summit displayed the global desire for 'strong and effective action to address climate change' including 'support for mobilising finance for adaptation and mitigation'.[1] Nonetheless, global efforts have at times become paralysed by inertia[2] where the temporal reality of political election cycles takes precedence over considerations of intergenerational ethics and the distribution of responsibility is mired in diplomatic obstinacy and self-interest.

Despite these challenges, the spatial reality of climate change consequences (that is, international impacts of domestic policy decisions) reinforces the need for global cooperation and raises considerations of human rights and climate justice. As an aspirational goal, climate justice recognises the need to protect the most vulnerable and distribute the 'burdens and benefits of climate change and its resolution equitably and fairly.'[3]

Action, or indeed inaction, to mitigate climate change thus exhibits a moral dimension that places domestic decision making into stark focus where political intransigence and popular attempts to deny, rationalize or trivialize the consequences of inaction must be viewed through a prism of global moral responsibility.[4] Indeed, Queensland case law has suggested that transferred emissions (that is, Scope 3 emissions) from new coal mining ventures include a public interest dimension that necessarily requires consideration.[5]

However, as Gardiner has suggested, global climate change policy making is the 'perfect moral storm' as it 'involves a number of factors that threaten our ability to behave ethically.'[6] His thesis suggests that even if difficult ethical questions could be answered, such as the need for a global ceiling on GHG emissions or balancing the increasing energy consumption needs and aspirational goals of some developing nations versus the reality of impacts of fossil fuel use, there may still be an unwillingness to act. The institutional inadequacies of global policy making, profligacy of intergenerational burden shifting and theoretical considerations of climate change all converge to create a perfect storm in which 'moral corruption' becomes a salient concern and procrastination, compounded by self-interest, becomes the preferred response.[7]

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1 G20 Australia 2014, *G20 Leaders' Communiqué: Brisbane Summit 15-16 November 2014* (15 November 2014) G20 Australia 2014, <https://g20.org/wpcontent/uploads/2014/12/brisbane_g20_leaders_summit_communique1.pdf>.

2 See for example, Richard Black, 'Why did Copenhagen fail to deliver a climate deal?' *BBC News* (online), 22 December 2009, http://news.bbc.co.uk/2/hi/8426835.stm.

3 International Bar Association, *Achieving Justice and Human Rights in an Era of Climate Disruption*, International Bar Association Climate Change Justice and Human Rights Task Force Report (July 2014) 3.

4 For an examination of some individualized behaviours (such as leaving appliances on standby or having energy efficient light globes) having become increasingly moralized, see Catherine Butler 'Morality and Climate Change: is leaving your T.V on standby a risky behaviour?' (2010) 19(2) *Environmental Values* 169. See also, Stephen M Gardiner, 'A Perfect Moral Storm: Climate Change, Intergenerational Ethics and the Problem of Moral Corruption' (2006) 15 *Environmental Values* 397.

5 *Hancock Coal Pty Ltd v Kelly & Ors and Department of Environment and Heritage Protection (No. 4)* [2014] QLC 12 (8 April 2014) [218].

6 Gardiner, above n 4, 398.

7 Ibid.

This procrastination by policy makers, combined with devolution of responsibility for climate change adaptation to a local level, risks creating a paradoxical apathy within communities at a time when action on climate change is so essential. To overcome this, the discourse around climate change mitigation has begun to shift towards an analysis of human rights, where actions and their consequences are measured against the indivisibility of our shared humanity,[8] as opposed to an analysis of economic costs versus benefits. While most international human rights instruments do not contain explicit reference to a healthy environment,[9] the UN Office of the High Commissioner for Human Rights has stated that all UN human rights bodies at least 'recognize (sic) the intrinsic link between the environment and the realization (sic) of a range of human rights, such as the right to life, to health, to food, to water and to housing'.[10]

While such global ideals provide an important moral benchmark against which to measure action, given the undeniable nexus between politics and climate change mitigation, such a human rights approach must overcome the inevitable self-interest of domestic policy making by engaging local actors to incorporate a global moral responsibility discourse in their climate change campaign strategies. Climate change campaigns thus become a necessary manifestation of acting locally while thinking globally.

[8] See Stephen Gardiner et al (eds), *Climate Ethics: Essential Readings* (Oxford, 2010) where Simon Caney suggests that '[a] human rights approach insists on the protection of the entitlements of *all* individuals and condemns any tradeoffs [sic] that would leave some below the minimum moral threshold' (emphasis in original) from Simon Caney, 'Climate Change, Human Rights and Moral Thresholds' cited in Stephen Gardiner et al (eds), *Climate Ethics: Essential Readings* (Oxford, 2010) 163, 165.

[9] See International Bar Association, above n 3, 118 n 465 for the few exceptions.

[10] Human Rights Council, *Report on the Relationship Between Climate Change and Human Rights*, GE Res 09-10344, UN OHCHR, 10th sess, Agenda Item 2, UN Doc A/HRC/10/61 (15 January 2009) [18].

RIGHTS OF NATURE, LEFT OF FIELD?

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Human rights have grown to become one of the most dominant discourses in modern thought. The advent and due primacy of international statements such as the *Universal Declaration of Human Rights* throughout the last century has ensured as much. It was perhaps always inevitable, then, that the ongoing climate change crisis, arguably the world's greatest challenge of present and future, would eventually receive treatment in this vein. Indeed, efforts have increasingly been made to circumvent the quarrelling and relative inertia of the global community by defining the nexus between human rights and climate change, and admirably so.[1] Human rights are just that, though—*human* rights. It begs the question whether such an anthropocentric approach can really provide the ideal framework for contending with climate change, at least as a matter of jurisprudential and socio-legal thought.

True enough, climate change will impact humankind and those commonly articulated human rights to food, water, shelter, health, and even life, *inter alia*.[2] It could sensibly be said that it already has. *Prima facie*, then, applying a human rights framework to the issue of climate change offers many practical advantages, namely, that the relevant tools and forums already largely exist. Immediate action can, theoretically, be taken. Moreover, a human rights-based approach to climate change is another channel for calling attention to that all-important Hobbesian self-interest—'*my* basic, fundamental human act rights are affected by climate change' and so I should act—and, too, but perhaps less rousingly, that 'particle of the dove kneaded into our frame, along with … the wolf and serpent'—our concern for our fellow man and woman.[3] That it should stem from an appreciably august and moral platform, so much the better.

A human rights-based approach to climate change is not without its own distinct problems, however. In fact, many human rights instruments are conceptually unsound in the context of climate change, their substance having largely preceded the modern environmental movement. As such, there exists no international freestanding human right to a quality environment, and nor is a quality environment widely recognised as a precondition for the observance of existing human rights in an explicit way.[4] Any claim requires an evidential and jurisprudential 'leap', consequently, to show an enumerated human right impacted directly by climate change or indirectly by climate change-induced environmental degradation. While neither need be too difficult, how conceited the latter would be, to acknowledge and remedy a circuitous harm to humanity, but not the environment.

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1 See generally Stephen Humphreys (ed), *Human Rights and Climate Change* (Cambridge University Press, 2009).

2 See, e.g., Gustav Lanyi, 'Climate Change and Human Rights: An Unlikely Relationship?' (2012) 37 *Alternative Law Journal* 269.

3 David Hume, *An Enquiry Concerning the Principles of Morals* (London, 1751) 270.

4 Climate Change Justice and Human Rights Task Force, 'Achieving Justice and Human Rights in an Era of Climate Disruption' (Report, International Bar Association, July 2014) ch 3. Cf *Charter for the Environment* (France) art 1.

Ultimately, climate change is an Earth issue — it may be anthropogenic and it may be solved by the human species, but it will cause harms indiscriminate of humanity, if it has not already done so. As Dr Sam Adelman opines, '[e]very crisis is potentially also an opportunity' however.[5] Thought cannot stop at the self-imposed walls of human rights. Progress must continue to be made towards a conceptual and perhaps operable recognition of the rights to exist and to thrive of the whole community of life, of which humankind is but one part.[6] That is an overdue and necessary extension. The alternative is an incomplete framework, incapable of going to the root of the climate change and broader environmental problem.

The confluence of science, philosophy, spirituality, ethics, and good sense is so often the dependence of humankind on the natural world. We simply do not have the means to divorce ourselves from the Earth, and why should we? There ought to be a profound humility in this, a resonant compassion for and solidarity with all life and surrounds, but there is not. Those are virtues too easily forgotten or discarded in the lagging clamour of politicking and lawmaking. Every crisis is an opportunity, however. Recognition of the rights of nature is a sound start.

[5] Sam Adelman, 'Rethinking Human Rights: The Impact of Climate Change on the Dominant Discourse' cited in Stephen Humphreys (ed), *Human Rights and Climate Change* (Cambridge University Press, 2009) 159, 159.

[6] See, e.g., *Ecuadorian Constitution* (Ecuador) art 71.

THE ABSENCE OF HASTE

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Climate change is an issue that has slowly been gaining momentum as a high priority for decision makers around the globe. Society does have the ability to make remarkable changes in short periods of time, but we need to get to the point where the majority of people see it as necessary. Unfortunately in Australia, we are still seeing a lack of political drive and a lack of recognition of the urgency of the problem, even amongst Australians that see climate change as an issue.

Changes in legislation require governments to be committed to climate action or adaptation. Litigation can be a slow process and although each case sets important precedent and this is good in delaying projects such as new coal mines, it may not be enough. The law can shape our response to climate change; it can challenge decisions, slow emissions, require standards etc., however, this alone will be slow and ineffective without the corresponding public support and political will. Law cannot achieve enough on its own. Much of the problem is due to the perception of the problem as either being only an environmental issue or only something that will affect us far into the future.

We cannot treat this multi-faceted issue as a problem for the planners alone, or for the environmental scientists, or for the lawyers alone – it needs to be a cooperative, creative and concerted approach. The idea of 'framing' is particularly important in addressing climate change, as the language we use has a significant effect on how people see the issue. The simple change of 'global warming' to 'climate change' has had such an impact on the perception of the issue. In my experience, a lot of the difference in the opinions on climate change comes with people having different values and different ways of understanding problems. There is a noticeable change in peoples' response when the problem is framed around economic impacts, jobs, and adding dollar values to it. We need to learn to communicate to those that deny climate change, in their own language, not in a way that would convince ourselves. It is something that the movement is getting better at, but there is still a long way to go.

CLIMATE CHANGE LAW: A MULTIDISCIPLINARY CHALLENGE

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Climate change is emerging to the forefront of global issues for current and future generations. Its observed effects and future impacts are well documented; changes in climate expose both vulnerable natural and human systems, which can alter ecosystems and disrupt infrastructure and resources.[1] The challenge in confronting climate change is that it requires a multi-disciplinary approach. It is a difficult task as the law currently provides an unstable foundation; it is a creature shaped by political whims and social and economic pressures.

Australian environmental law and policy is increasingly fragmented, where legislation in response to climate change and emissions trading has emerged on an ad-hoc basis, rather than as a coherent scheme. The contributions of States, local governments and specialist courts have been labelled as more pro-active whilst Federal actions have focused on mitigation or abatement measures.[2] However, the vacillation of national policy schemes and lack of guidance has been a challenge for the law's development in this area. Past actions, such as the Carbon Pollution Reduction Scheme Bill, have been shut down as inadequate in reconciling the needs and desires of a myriad of stakeholders. Carbon emitting, mega industries such as coal and gas are disinclined to support such schemes whilst taxpayers are warned they may have to bear the financial burden. Such schemes have also been criticised as the 'systematic externalisation of the costs of climate change onto other species and other countries based on "wilful blindness"'.[3] Climate law must be guided by other disciplines from science, economics to politics. However, Australia's track record to reconcile and understand contributions from other disciplines has been a haphazard one.

The legal regime itself provides both challenges and opportunities. On a broad level, environmental law is based on principles such as intergenerational equity and the precautionary principle. The law's effectiveness depends on the reduction of these principles from abstract generalities to enforceable legal norms that can respond to specific environmental issues.[4] This has manifested in environmental and planning law as environmental impact considerations that must be accounted for by decision-makers during development phases. However, it has been difficult to link the effects of climate change to specific projects. Regardless of its far-reaching and extreme nature, the effects of climate change are cumulative and popularly phrased as a 'death by a thousand cuts'. However, the law has an opportunity to develop on an incremental basis. Even though projects such as coal mining may ultimately receive approval due to economic pressures, considerations of greenhouse gas emissions arising from downstream, not just direct, impacts from such projects are legally relevant.[5]

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1 Intergovernmental Panel on Climate Change, 'Summary for Policy Makers' cited in Christopher B Field et al (eds), *Climate Change 2014: Impacts, Adaptation and Vulnerability* (Cambridge University Press, 2014) 1.

2 Phillipa England, 'Doing the Groundwork: State, Local and Judicial Contributions to Climate Change Law in Australia' (2008) 25 *Environmental and Planning Law Journal* 360.

3 Yoriko Otomo, 'When the Wind Is In The East… Environmental Law and Climate Change in Australia' (2010) 22 *Amsterdam Law Forum* 87.

4 England, above n 2.

5 *Gray v Minister for Planning* (2006) 152 LGERA 258, 126.

Climate change law will develop incrementally but must do so on an informed and coherent basis. It must also do so in the realm of political, social and economic pressures. Top-down measures, for law, planning and policy that develop without the acceptance of relevant stakeholders will be met with opposition.[6] The response to climate change must shift from a purely economic point to provide ethical considerations. Any proposed 'universal, formal calculus of cost' of climate change that presents a financial cost must apply not only to members of metropolitan Australia,[7] but vulnerable communities and the natural environment. Increasing scientific evidence, engagement with the community and corporate stakeholders, communication between all levels of public and private sectors are all factors that can aid in the development of an effective body of climate change law. The law alone cannot act as a panacea for climate change; it requires consultation with other disciplines and stakeholders across society.

[6] Phillipa England, 'Too Much Too Soon? On the Rise and Fall of Australia's Coastal Climate Change Law' (2013) 30 *Environmental and Planning Law Journal* 390, 401.

[7] Otomo, above n 3, 90.

WHERE GOVERNMENTS FAIL, CAN CITIZENS PREVAIL?

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Australia's efforts to reduce Carbon emissions has become increasingly frustrated by political processes, the need to take action is only growing. The blocking of the *Carbon Pollution Reduction Scheme Bill* 2009 (Cth), the repeal of the *Clean Energy Act 2011* (Cth) and the growing attacks on the Renewal Energy Target, have been huge legal setbacks in trying to plan a carbon neutral economy. Climate change litigation to stop Australia's huge contributions to atmospheric carbon emissions has become a source of empowerment for community groups, landholders, and even international parties.

The refusal of Australian Governments to confront their own contributions to climate change is not confined to the Federal Government. In approving coalmines, the Queensland Government has declined to consider Scope 3 emissions – a position affirmed by the courts.[1] This method has allowed Queensland to benefit from the resource, whilst not grappling with any of the external costs inherent in its use. The deference of this responsibility to overseas countries is worrying, especially when Queensland's coal is largely being used by nations that are still developing their approaches to climate change.

Whilst challenges to coalmines based on climate change issues have been somewhat unsuccessful in Queensland,[2] there has been some success relating to groundwater impacts. From a climate change mitigation perspective such a win is bittersweet. By passing the buck and relying on other countries or entities to mitigate carbon emissions from Queensland's coal, our government is actually allowing its use to go ahead unmitigated. Fortunately, unsatisfied community groups in Queensland continue to challenge this approach. The case law is still being developed and challenged with the judicial review of the Alpha Coal Mine decision, and the latest objection to Australia's biggest coalmine, the Carmichael coalmine.

The success of campaigns to prevent Queensland's carbon sinks from being liberated has not gone unnoticed. The Queensland Government has realised the economic threat being posed to the State. A discussion paper launched in 2013[3] proposed to remove objection rights to smaller scale mining activities. The objection rights to larger coalmines would remain. This position was discarded when a last minute amendment was made to the mining law reform, excluding the biggest mining projects[4] from objections in the Land Court.[5] This amendment was the first to commence, coming into effect late October.

The future of objection rights and coalmines is now uncertain. Without the Queensland Government wanting to engage with climate change, and the exclusion of communities from decision making processes, the merits of continuing to expand coalmining operations will go untested. With legal avenues for mitigating climate change being restricted, legal professionals need to work harder to not only help reduce emissions, but also to help deal with the impacts of climate change in the future.

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1 *Hancock Coal Pty Ltd v Kelly & Ors and Department of Environment and Heritage Protection (No. 4)* [2014] QLC 12 (8 April 2014) [210]-[220].

2 *Xstrata Coal Queensland Pty Ltd & Ors v. Friends of the Earth – Brisbane Co-Op Ltd & Ors, and Department of Environment and Resource Management* [2012] QLC 013 (27 March 2012) [564]-[570].

3 Department of Natural Resources and Mines, 'Mining Lease Notification and Objection Imitative Discussion Paper Summary' (Discussion Paper No 1, Department of Natural Resources and Mines, March 2014).

4 'Coordinated Projects' declared under s 26 of the *State Development and Public Works Organisation Act 1971* (Qld).

5 The amendment to the Mineral and Energy Resources (Common Provisions) Bill 2014 (Qld) added cl 632A, which in turn inserted s 47D into the *State Development and Public Works Organisation Act 1971* (Qld).

CLIMATE CHANGE, PLANNING AND THE LAW

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Climate change must be addressed through the implementation of informed decision-making. In the past, planning and policy has been made and influenced predominately by political and economic ideologies. In order to address and adapt to climate-related issues, decisions must therefore, be made with regard to scientific evidence and data.

Through policy and judicial decision-making, it is evident that economic growth is placed with higher priority than environmental preservation. Drawing upon *Hancock Coal Pty Ltd v Kelly & Ors and Department of Environment and Heritage Protection (No. 4)*,[1] the approval of mining[2] was found to be of greater necessity than the conservation of the Galilee Basin.[3] This was made despite evidence presented, which outlined the dangerous quantities of greenhouse gases that the Alpha Mine would produce. Political agendas and economic organisations appear to be behind the influence of, not only these legal decisions, but also the legislation that binds them.[4] In recent years, there has been one major counterargument that opposes serious climate action. Mining companies, shareholders and politicians often state that limiting greenhouse gas emissions and mining productivity will have a detrimental effect on Australia's economy.[5] Consequently and somewhat ironically, little regard is subsequently given to the financial loss that is likely to transpire if appropriate measures are not taken to combat climate change. The damage caused by flooding[6] and bushfires[7] alone indicate the economic burdens that current legal policies have bestowed upon those whom are affected. The scientific importance of sustainability, backed by common law must therefore be adopted in order to enable processes of informed decision-making on the political and legal arenas.

Amendments and new legislation must be constructed, which incorporate greater consideration of the consequences and effects that unsustainable practices have on the environment. Climate change has already been identified as a clear matter of the general public, and is one that courts must hold a serious regard over.[8]

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1 [2014] QLC 12 (8 April 2014).

2 *Mineral Resources Act 1989* (Qld) s 2.

3 *Environmental Protection Act 1994* (Qld) s 3.

4 Mark Baker-Jones, 'Case Note: Conventionalising Climate Change by Decree' (2013) 30 *Environmental and Planning Law Journal* 371, 374.

5 R Bartel, P McFarland and C Hearfield, 'Taking a De-binarised Envirosocial Approach to Reconciling the Environment vs Economy Debate: Lessons from Climate Change Litigation for Planning in NSW, Australia' (2014) *The Town Planning Review 85.1*, 71.

6 D Keogh et al, 'Resilience, Vulnerability and Adaptive Capacity of an Inland Rural Town Prone to Flooding: a Climate Change Adaptation Case Study of Charleville, Queensland, Australia' (2011) *Natural Hazards 59.2,* 700.

7 Laura Gannon, 'Placing People in the Landscape: Towards a Robust Policy Framework for Bushfire Hazard Planning in Queensland' (Paper presented at 2014 PIA Conference, Gold Coast, 24-26 September 2014).

8 *Xstrata Coal Queensland Pty Ltd & Ors v. Friends of Environment and Resource Management* [2012] QLC 013 (27 March 2012) [576].

This must then be incorporated into legislative materials as a measure to minimise activities that are detrimental towards the environment. It is pivotal that precedents such as *Rainbow Shores P/L v Gympie Regional Council*[9] are highlighted in regard to identifying and considering the potential risks that climate change poses upon future developments.[10] Federal and State governments must pass legislation, similar to Victoria, which is designed to specifically address climate change.[11] It is important that these laws draw upon and outline the scientific evidence that correlates with the effects that climate change has upon the safety and security of anthropogenic wellbeing. This will enable for specific legal standards and rules to be set, which allow for the implementation of clear strategies that continuously address climate-related issues.[12] For example, a statutory law that requires 70% of all electricity to be sourced from renewable energies by 2030. Reliable solutions will consequently transpire, which enable for not only increased awareness on the issue of climate change, but also influence a new paradigm of environmental law.

It is therefore clear that sustainable activities must be given greater importance than economic productivity. In order for this to occur, changes must be made to current legislative and legal instruments, which draw upon scientific data and reasoning. This will consequently, generate informed decision-making on political and legal fronts, which effectively address current and future climate-related issues.

[9] [2013] QPEC 26 (12 June 2013).

[10] Baker-Jones, above n 4, 371, 372.2.

[11] *Climate Change Act 2010* (Vic) s 1.

[12] G Taylor, *Evolutions Edge: the Coming Collapse and Transformation of our World* (New Society Publishers, 2008) 158.

AC (TUVALU) [2014] NZIPT 800517-520

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Australia and New Zealand are neighboured by several low-lying nations, many of which are battling against the effects of climate change and sea level rise. While the world is witnessing the first waves of 'climate refugees', courts and tribunals are examining this emerging form of adaptation to climate change.[1]

It is worth noting that the concept of 'climate refugee' remains unclear. The United Nations High Commission for Refugees warns that this term is misleading because it has no basis in international refugee law.[2] Furthermore, research and scholars report that environmental factors are blurred with other pressures that influence migration, particularly overcrowding, unemployment and development concerns.[3] Environmental issues may also lead to consequences that force people to relocate, such as conflict, lack of resources and lack of economic viability.[4] It is also thought that climate change will generate cases of pre-emptive migration, a situation in which it is difficult to claim refugee status.[5]

These and other related issues have recently been discussed by tribunals and courts in New Zealand. In May 2014, a man from Kiribati who had been denied refugee status was refused leave to appeal to the High Court.[6] It was held that 'the effects of climate change on Mr Teitiota, and indeed on the population of Kiribati generally, do not bring him within the Convention [the 1951 Convention Relating to the Status of Refugees].'[7]

This was followed by *AC (Tuvalu)* in which the Immigration and Protection Tribunal of New Zealand heard the case of a family from Tuvalu. The husband and wife claimed that they had moved to New Zealand because the impacts of climate change were affecting their way of life in Tuvalu to the extent that they should be protected by refugee law. The Tribunal ultimately denied the appellants refugee status under the Convention and protected person status under the International Covenant on Civil and Political Rights (the ICCPR).[8]

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1 Jane McAdam, *No "Climate Refugees" in New Zealand* (13 August 2014) Brookings Institute <http://www.brookings.edu/blogs/planetpolicy/posts/2014/08/13-climate-refugees-new-zealand-mcadam>.

2 United Nations High Commission for Refugees, *Climate Change, Natural Disasters and Human Displacement: A UNHCR Perspective* (14 August 2009) UNHCR < http://www.unhcr.org/cgi-bin/texis/vtx/home/opendocPDFViewer.html?docid=4901e81a4&query=climate change, natural disasters and human displacement>; Refugee Council of Australia, *Climate Refugees?* (May 2012) <http://www.refugeecouncil.org.au/f/int-env.php>; Rajendra Ramlogan, 'Environmental Refugees: A Review' (1996) 23(1) *Environmental Conservation* 81, 82.

3 Jane McAdam, 'Swimming Against the Tide: Why a Climate Change Displacement Treaty is Not *the* Answer' (2011) 23(1) *International Journal of Refugee Law* 2, 3; Vikram Kolmannskog, 'Climate Change, Human Mobility and Protection: Initial Evidence from Africa' (2010) 29(3) *The Refugee Survey Quarterly* 103, 117; Ramlogan, above n 2, 83-85.

4 Kolmannskog, above n 3, 117; United Nations High Commission for Refugees, above n 2.

5 McAdam, above n 3, 8, 20.

6 *Teitiota v Chief Executive of the Ministry of Business, Innovation and Employment* [2014] NZCA 173 (8 May 2014).

7 Ibid [21].

8 [2014] NZIPT 800517-520 (4 June 2014) [38].

Member Burson noted several difficulties in applying the current law to the plight of 'climate refugees' at present. Firstly, in order to determine whether there is a chance that a person will suffer arbitrary deprivation of life or be subjected to cruel, inhumane or degrading treatment as outlined in the ICCPR, there must an inquiry into the timing and severity of this probable treatment.[9] Member Burson states that 'This forward looking assessment of risk means that the slow-onset nature of some of the impacts of climate change such as sea-level rise will need to be factored into the inquiry as to whether such "danger" exists at the time the determination has to be made… much will depend on the nature of the process in question, the extent to which the negative impacts of that process are already manifesting, and the anticipated consequences for the individual claimant.'[10] Consequently, the uncertain and slowly-emerging impacts of climate change may mean that pre-emptive migration will be greatly curtailed. Another factor influencing the tribunal was that there was no evidence that Tuvalu is 'failing to take steps within its power to protect the lives of its citizens from known environmental hazards – including those associated with the effects of climate change – such that any of the appellants' lives can be said to be in danger.'[11] It was found that Tuvalu is actively seeking to reduce the impacts of climate change upon its territory and population.[12] Therefore, it could not be said that the government of Tuvalu is failing to carry out its obligations to its citizens. Tuvalu is not failing to take positive steps to protect the appellants' rights. Furthermore, it was acknowledged that in the context of natural disasters, a phenomenon which will become more frequent and intense due to climate change,[13] there are numerous gaps in refugee and human rights law.[14] These shortcomings are partly caused by the uncertainty of the risk and severity of any future harm caused by such events.[15]

Nevertheless, the court did not exclude the future possibility of refugee or protected person status for persons who might migrate because of climate change.'[16] Yet, *AC (Tuvalu)* leaves more questions than answers. What about persons from countries that are not implementing plans to protect its citizens against the impacts of climate change? Will refugee status only be recognised after a natural disaster, conflict or crisis caused by climate change? Are there ways to help countries that lack the capacity to adequately deal with the effects of climate change?[17] Is there any chance of a merits-based migration scheme that may save lives in the future?[18] Is there a pressing need to create a new international agreement or amend existing laws to respond to this new type of cross-border movement? These and many other questions will need answers soon. Like all problems developing due to climate change, the world is going to need cooperation, understanding, ingenuity, optimism and strong leadership to tackle the issue of climate change induced migration.

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9 Ibid [57]-[60]

10 Ibid [58].

11 Ibid [102].

12 Ibid [113].

13 United Nations High Commission for Refugees, above n 2.

14 Ibid [68]-[69].

15 Ibid.

16 Ibid [60], [83], [98], [114].

17 See the discussion of natural disasters in *AC (Tuvalu)* [2014] NZIPT 800517-520 (4 June 2014) at [84].

18 See the recommendations of McAdam, above n 2, 20.

KILLING TWO BIRDS WITH ONE STONE: WHY GOVERNMENTS SHOULD INTEGRATE ADAPTATION + MITIGATION INTO THEIR PLANNING PROCESS

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In recent years there has been a rising consciousness amongst decision makers of the climate change risks associated with poor planning decisions. Proactive government bodies have attempted to diminish the likelihood of losses resulting from climate change by investing and embracing both outcomes based and process based forms of adaptation. Although these are effective responses to the increasing risks presented by climate change, the adaptive capacity of governments is limited and must be supported by mitigation responses as well. There will come a point where the compounding costs of maintaining and investing in adaptation will demand greater mitigation efforts in order to preserve the adaptation gains that have already been made.

Prudent government bodies should turn their attention to locating optimal levels of synergy between adaptation and mitigation planning. A holistic integration of adaptation and mitigation into development and land-use planning is already being undertaken by vulnerable communities around the world as a 'win-win' strategy to build resilience, reduce the risk posed by natural hazards, and lower their overall emissions.

Government bodies are doing this by developing institutional links that facilitates synergies between adaptation and mitigation efforts, and builds the responsive capacity of governments to such risks. An example of this is the integration of adaptation planning and low emission technology to reduce the risks posed by system disruption in agriculture, energy and transportation by extreme weather, fires, flooding and sea level rise. Institutional links between adaptation and mitigation planning also enables knowledge and resource sharing and generates new response methods and solutions. In many cities around the world, a Chief *Resilience Officer* has become the connecting node between different decision making agencies and departments to facilitate this integration. The Officer is able to have oversight and access to all relevant bodies relating to a certain project, allowing for a more cohesive and integrative planning process for the government body as a whole. This institutional design is enabling other positive spillovers such as innovative solutions in 'green' infrastructure and urban design that developers and planners are using to lower both climate change risk to communities and their emissions.

However, as with any planning decision the likelihood of maladaptation, unwanted and unforeseeable consequences must be avoided or at least minimised. If however such consequences do eventuate, an integrated decision making body arguably will be better able to manage such impacts and learn and build from what went wrong to shield off future risks.

Prudent governments will see the benefits of integrating adaptation and mitigation planning as a way to both minimize risks posed by climate change and build the resilience of their communities against these risks. Through an integrative institutional decision making process, governments and planners will have the best chance to safeguard their adaptation gains into the future while simultaneously reducing their emissions.

AWARENESS, RESOURCES, COORDINATION: CLIMATE CHANGE SOLUTIONS

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Climate change has increasing impacts on public safety and property values, in the forms of sea level rise, bushfire, heat radiation, etc. More importantly, due to its uncertain and cumulative nature, climate change has complicated town planning, insurance and legal processes, inducing significant management and liability issues in the past decade during which climate change impacts became unprecedentedly prominent. In my view, three inter-related aspects are emerging in envisioning climate change solutions: awareness, resources, coordination.

Although climate change has been clearly influencing political and legal decision-making processes,[1] the lack of such awareness among communities is prominent, which explains high fatalities in bushfire incidents in Queensland,[2] and uninsured or underinsured private properties along Australian coast. Burton pointed out insurance industries are reluctant to fully acknowledge climate change to provide related insurance products, which I believe is a key segment that should not to be conservative because such phenomenon not only affects community safety but also induces legal risks for uninsured corporations in pursuing development applications.[3] Government should be responsible in promoting and legislating climate legal risk awareness and policies.

Resources determine whether awareness can be translated into actions. For example, insurers are recommended to establish and improve climate change impact assessment methodologies and research,[4] which not all insurers have the necessary capacity to adopt this suggestion. Therefore, how insurance industries negotiate market barriers and pool their resources together (by regions of similar types of climate change impacts for example), and how government is involved to facilitate are of great importance. It is time to manage isolated mitigation mechanisms and think about public-private partnerships in climate change insurance, land acquisitions, and related relocation activities, in order to relieve pressures on government compensations and encourage private channels to create business opportunities and expand their services in an integrated framework.

Coordination emphasizes a shift from ad-hoc climate change assessment and management to a more strategic and collaborative approach. Take bushfire planning as an example; its risk identification and tolerance proposal involves various factors including size of impact area, existing buildings and infrastructure conditions on bushfire interface, state-wide spatial distribution of bushfire fatality incidents and population density in

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1 Mark Baker-Jones, 'Case Note: Conventionalising Climate Change by Decree' (2013) 30 *Environmental and Planning Law Journal* 371.

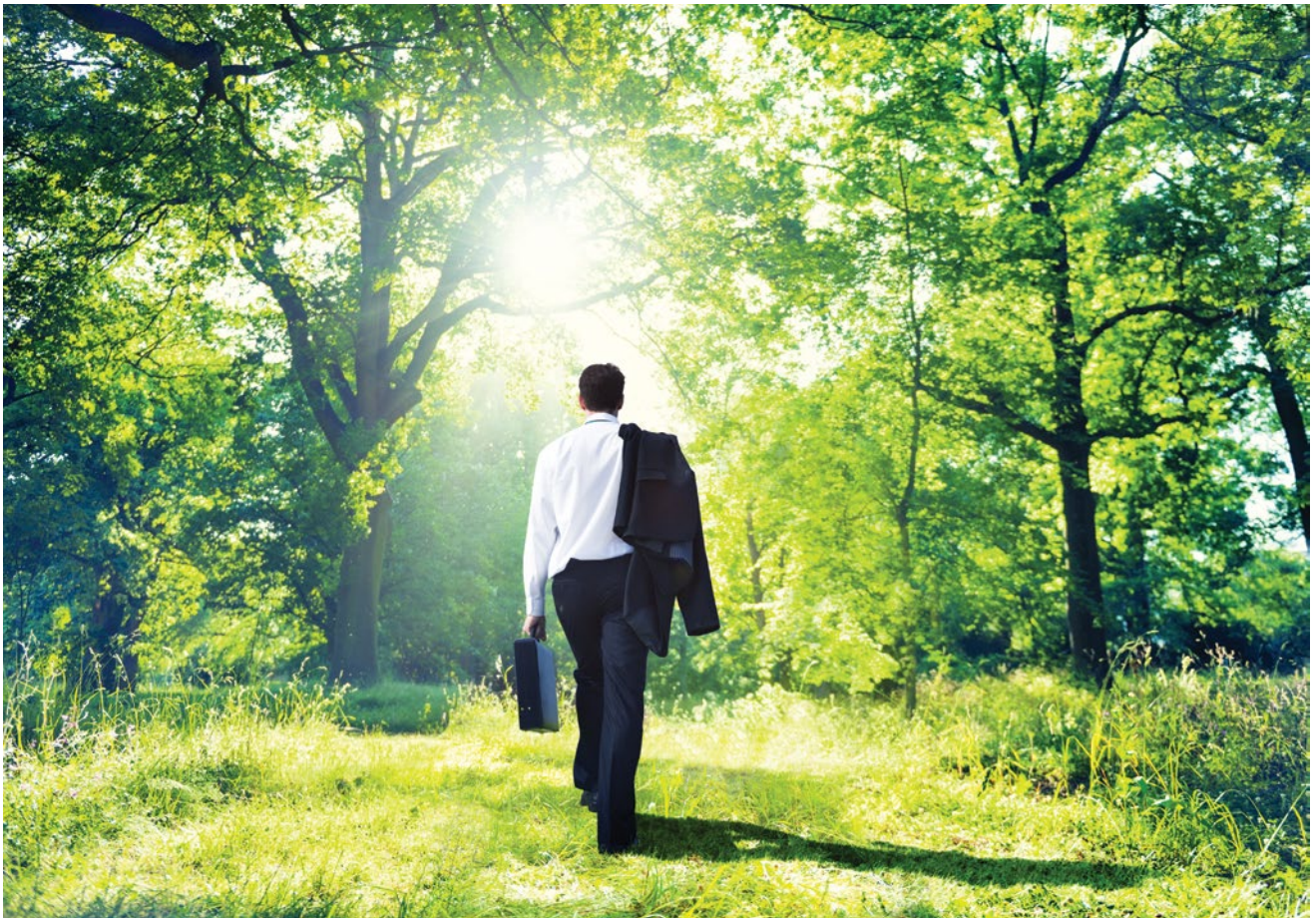
2 Laura Gannon, 'Placing People in the Landscape: Towards a Robust Policy Framework for Bushfire Hazard Planning in Queensland' (Paper presented at 2014 PIA Conference, Gold Coast, 24-26 September 2014).

3 Donovan Burton, 'Climate Change, Planning and the Law' (Speech delivered at the Climate Change, Planning and the Law Conference, DLA Piper Brisbane, 28 November 2014); Ceres Insurance Program, 'Insurer Climate Risk Disclosure Survey Report & Scorecard: 2014 Findings & Recommendations' (October 2014).

4 Burton, above n 3.

impact areas and etc.[5] Such complex and strategic-scale studies are not feasible for each local council to conduct individually. However, local councils should be collaborating with states to prepare unique local bushfire statutory controls based on the strategic guidelines and resources from state provisions. Responsive coordination is then crucial and should replace the current bushfire planning approach: relying heavily on site-by-site analysis that ignores cumulative potential impacts. However, in some cases, site-by-site assessment does fit into local context, as various sites may be subjected to different levels of risks on the coast.[6] Therefore unified approaches (such as building sea walls) are not economically feasible, and generalized qualification on sea level risks impact area may induce unnecessary local horror and property value loss.

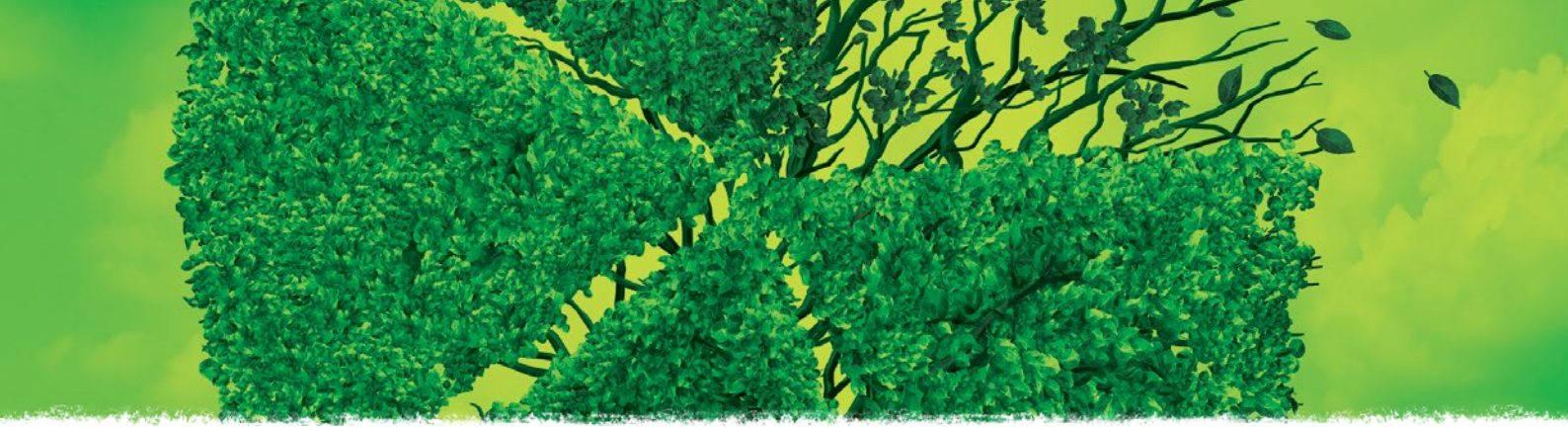
The three aspects discussed are still under established in a state or local level. However, in the long term, climate change management goes beyond nation borders; it is not unimaginable that a 'relative international climate change liability index' framework will ensure better global resource sharing and accountability of climate change compensations in the future.



[5] Gannon, above n 2.

[6] David Ransom, 'Climate Change, Planning and the Law' (Speech delivered day of the Climate Change, Planning and the Law Conference, DLA Piper Brisbane, 28 November 2014).

4. PARTNERS



8 December 2014

University of the Sunshine Coast

Mark Baker-Jones
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PO Box 7804
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Australia

Dear Mark,

Thankyou to you and your team for a great workshop – 'Climate Change Planning and the Law'. These types of workshops are very difficult to plan and bring everyone together for. We regularly take groups of students to Brisbane for professional planning workshops, so USC planning students value these experiences highly and did appreciate your efforts.

While our planning program places quite a strong focus on effects of climate change, the workshop presenters focussed on what is happening in the legal context NOW. This contribution to student education is crucial. In some cases, it reinforces relevance of what is being taught at University. In some circumstances it provides additional knowledge which is a real eye opener for students. For example, USC students were very impressed with Preston's work in international justice issues around climate change. Our students particularly valued the fact that experienced legal and planning practitioners came together to help them understand just how important CC is and that there are legal and planning tools which are relevant now.

Teaching in the USC planning program is based on experiential learning paradigms. Enabling students to go into planning offices and discuss planning issues with practitioners are important steps towards work integrated learning. So your initiative is very valuable to our students from that aspect as well.

I look forward to the next workshop.

Yours sincerely

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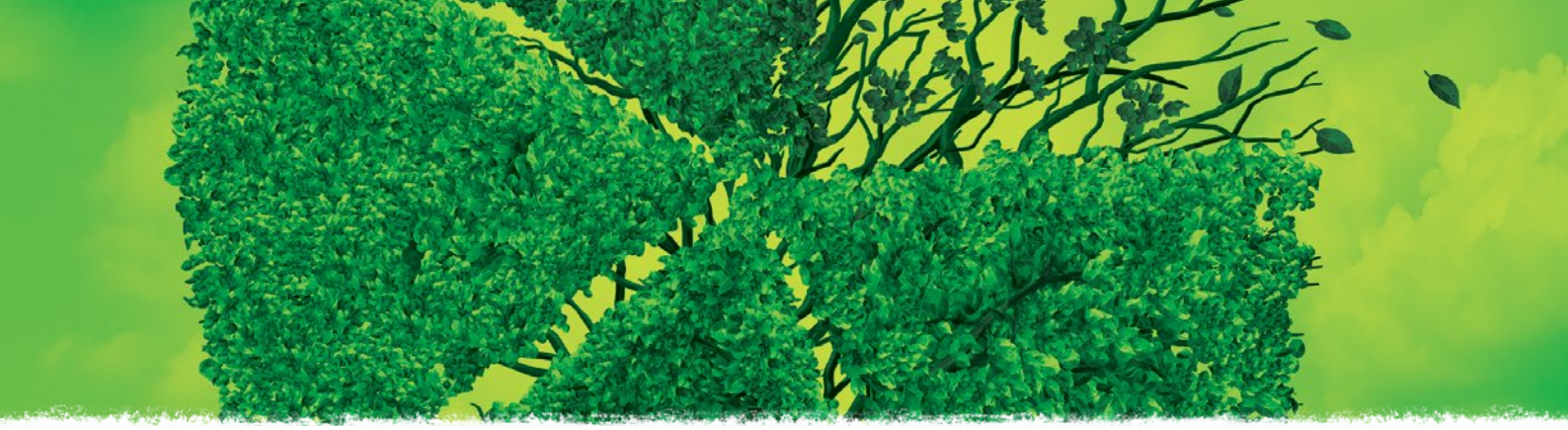

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15 December 2014

Mark Baker-Jones
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DLA Piper Australia
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Letter of support for Climate Change, Planning and the Law Workshop

Dear Mark,

I would like to first congratulate you and your colleagues for organising the Climate Change, Planning and the Law Workshop on 28 November this year. We have received strong positive feedback from our students who participated in it. The workshop has been an excellent opportunity for our students to work together with industry practitioners and gain insights on the legal aspects of climate change and planning. If you are considering another workshop on this theme next year, we would be very happy to support it again.

Yours sincerely,

Professor Raoul Mortley

5. VIEWS ON THE WORKSHOP

INTRODUCTION

We appreciate the feedback given to us orally at the dinner following the workshop; we are even more impressed that many of the participants took the time to provide written feedback. The following is a summary of the feedback which we will take into account when planning and preparing for future workshops.

COMMENTS FROM THE WORKSHOP PARTICIPANTS

I just want to thank you again for such a lovely conference today. It was eye-opening and inspiring to hear from all of the guests and I enjoyed the session about comparing climate change litigation around the world. From my perspective, the day was a success and I hope that it will be held again so other students in the future can gain such wonderful insights and have an opportunity to discuss the issues.

I really liked the breadth of presenters – as a law student, I hadn't really thought of these issues from a planning and local government perspective and Mr Burton had some very good practical insights into these matters. The reading material also gave a good range and depth of the issues. It was nice talking to the speakers in a more relaxed environment at Stellarosa's. I really liked the format of most of the sessions, where the presenter would speak for a while, and then there would be time for discussion and questions. I liked how Dr Bell had prompt questions to discuss on her slides and that gave me a minute or two to ponder some answers and other questions; Judge Preston's speech and rhetorical questions were amazing; Mr Burton's questions to the other speakers were very good; Mr Ryan's discussion of the background of the cases that I read was very insightful, as I didn't realise the whole picture from reading the cases alone.

Anna Simpson
University of Queensland

These types of workshops are very difficult to plan and bring everyone together for. We regularly take groups of students to Brisbane for professional planning workshops, so USC planning students value these experiences highly and did appreciate your efforts.

While our planning program places quite a strong focus on effects of climate change, the workshop presenters focussed on what is happening in the legal context NOW. This contribution to student education is crucial. In some cases, it reinforces relevance of what is being taught at university. In some circumstances it provides additional knowledge which is a real eye opener for students. For example, USC students were very impressed with Preston's work in international justice issues around climate change. Our students particularly valued the fact that experienced legal and planning practitioners came together to help them understand just how important climate change is and that there are legal and planning tools which are relevant now.

Teaching in the USC planning program is based on experiential learning paradigms. Enabling students to go into planning offices and discuss planning issues with practitioners are important steps towards work integrated learning. So your initiative is very valuable to our students from that aspect as well.

I look forward to the next workshop.

Associate Prof Johanna Rosier
University of the Sunshine Coast

I thought the format was excellent and the timing of the workshops moved things along well. The diversity of speakers was also fantastic. I thought it might be an idea to consider having fewer conveners and extending the time with each perhaps through hypothetical breakout sessions with groups considering and possibly prosecuting different arguments based on the scenario.

On behalf of the USC Law School delegation, I'd like to thank you again for the opportunity to attend the Forum last Friday. Each of us were privileged to have been given the chance to meet the conveners of the workshops, to listen to their topics and discuss with them the challenging legal dimensions of climate change was a great honour.

Thank you also for the networking opportunity afterwards. It is not often we get to spend time in the company of such inspiring legal minds. I know personally I've been encouraged to further pursue my interests in environmental and human rights law after speaking with people such as yourself and his Honour Justice Preston.

David Knobel
University of the Sunshine Coast

Climate change adaptation is a space that is taking off and it is very exciting to be a law student and young professional hoping to make a career in this field. Although a few speakers couldn't make the event, I still thought the content of the workshop was engaging and served as a good introduction to the various platforms emerging in this area.

Tanya Sinha
University of Queensland

First of all I would love to say thank you again for putting on that workshop on Friday. It was an honour to share a room with so many like-minded people and people renowned for their work in this field. As I mentioned to you, I came along to the workshop sceptical of it all as recently I had lost faith in the ability of other mechanisms of change and had turned my focus to activism. However, after the workshop I was reinspired by hearing about all of the different actions that can be taken and are being taken in the planning and legal professions. Although the scale and urgency of climate change is still daunting to me, I feel like there is much I can do with my degree and my career. It was interesting to hear from different perspectives on this issue. I definitely got a lot out of it. In terms of negative feedback I don't really have any!

Zoe McClure
Griffith University and AYCC Queensland State Coordinator

The environmental law and planning workshop was fantastic! I particularly enjoyed the collaborative aspect that was made available throughout the entire event. It was rewarding to be able to listen and converse with such an experienced group of professionals. Overall, I thought it was a tremendous experience and I look forward to possibly participating in future workshops, huge thank you to DLA Piper!

Krishna Ryan Alister
University of the Sunshine Coast

The climate change, planning and the law workshop was extremely valuable. It presented the opportunity for students with a passion for this area of law to become aware of current issues, especially prevalent threats close to home on the Gold Coast. This highlighted the need to act on these prominent issues, to ensure the changes that are needed to occur will take place. Looking at the broader picture was particularly insightful, including the changes to insurance policies and the steps that need to be taken now, to ensure we coast dwellers are prepared for the unavoidable changes that climate change presents us with. These are complex issues and the opportunity to hear from such distinguished experts in this field provided in-depth insight into these threats and their subsequent management and adaptation strategies.

The workshop presented us with insight into important and relevant climate change issues, in particular the issues of adapting to the risks that climate change is presenting now, and in the future. This workshop emphasized the importance of planning and actively responding to these risks. Living on the coast, our way of life will certainly be irreparably altered in response to the changes that climate change will bring about in the very near future and the changes need to begin now.

In particular, I became aware of the drafting of some relevant legislation, which highlighted the need for changes and a shift towards a focus on ecological sustainability. I believe that this focus is currently not strong enough. The Queensland Plan Bill 2014 holds no direct reference to climate change and the *Water Act 2000* (Qld) holds no reference to ecological sustainability; certainly alarming considering the prevalent nature of climate change threats and the important environmental protection these Acts should provide. For me this drafting highlights the importance of the many changes that need to occur, perhaps the influential people within our generation will shift the focus and allow many desperately needed changes to occur. This workshop challenged my current perceptions of climate change and planning issues and strongly inspired me to pursue a career in this increasingly important field of law.

Lili Moran
University of the Sunshine Coast

I found the workshop really informative and there were a lot of issues raised that I've not previously considered or been exposed to at university. Having had an interest in climate change for a long time for social justice reasons, the workshop opened me up to the practical issues that we will face.

Thank you for hosting this fantastic workshop, I am very grateful for the opportunity to attend and I learnt a lot. I will be applying to volunteer at the EDO next year or do a placement there through university next semester.

Phoebe Kelly
University of Queensland

The workshop's greatest feature was the line-up of speakers, who could only be referred to as the 'rock stars' of the climate change legal world. Hearing how each speaker was working to improve our approach to climate change was refreshing and re-assuring, as we tend to be bombarded by the negatives in the media. The speakers were all amazing, and the question time was also very interesting.

Flynn Rush
University of Queensland

The workshop was a terrific forum that made me look at the legal angle of climate change as I was solely looking at the planning direction all this while. In that sense, it was truly an eye opening experience. I can't thank DLA Piper enough for this progressive initiative and the leadership shown in bringing together industry experts and future planners like me.

Kayal Chandrasekar
Master of Sustainable Environments & Planning, Bond University

SUGGESTIONS FOR MAKING THE NEXT WORKSHOP EVEN BETTER

- having one or two interactive activities for the participants with activities like challenges, speeches, or debates that involve some of the speakers
- next time there could be some group breakouts where with five to ten participants
- in order to ensure a more in-depth discussion, perhaps it would be good to reduce the number of speakers, and to extend the time allocated
- it might be useful to ask participants about their dietary needs as the vegetarian options weren't extensive
- use discussion layouts where students sit in groups and discuss with each other before engaging with the speaker and more breakout sessions for students to talk to each other
- students were not sure which of the 150 pages of reading was to be used. They thought this could be improved by an introductory section summarising the importance of each section of reading and suggesting priorities – I am afraid none of the planning students read **all** of the readings
- there be an additional session which referred to social justice issues with Australian law relating to climate change
- to help with time, maybe some students can read the material and e-mail some questions or some prompt discussion points to the workshop or to the speakers in advance in order to facilitation more discussion and to prevent students from asking similar questions framed in different ways

6. CONCLUSION

For university students, climate change presents a daunting and yet exhilarating challenge. How the issue of climate change is dealt with may very well depend on the actions of these students as they advance through their professional careers. Whereas organisations such as the Planning Institute of Australia, have established climate change policy and focus groups for their members, lawyers and planners have generally taken a conservative and languid approach to climate change. The fact that proposed amendments to planning legislation in Queensland that removed reference to climate change and ecological sustainable development went unopposed by the professions is an unfortunate testimony to this. More can be done. It is the duty of the legal and planning professionals and their peak bodies to establish mechanisms through which future professionals can seek to address the issue of climate change.

Internationally, organisations like the International Bar Association and legal interventionists like Client Earth, through research, advocacy and litigation, provide examples of proactive, innovative and intelligent approaches to the impacts of climate change. Professionals in Australia should consider the work of these international organisations, and the work of the few planning and legal academics and practitioners in Australia that are actively working on solutions to the problems that climate change is presenting, and consider how they can provide greater acknowledgment, more assistance and better guidance to future planning and law professionals.

The workshop arose out of a concern by students that they would not find support to deal with climate change once they commenced their careers. We were fortunate to be able to bring together some of those in the professions that have accepted the challenge to deal with the issue and who were willing to pass on their knowledge and experiences. We hope that it will not be long before many more in these professions become willing to assist, nurture, and work with students; to help them with the difficult challenge with which they are confronted; to help them develop their responses to climate change.