

SUMMARY REPORT
for the Research Project:



**Local Responses to Climate Change:
using the diverse economy to meet energy needs**

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Introduction

Climate change is widely acknowledged as a global problem in need of rapid and effective solutions; however, processes of national and international climate governance (such as national emissions trading schemes and the Kyoto Protocol) are proving to be "grindingly slow" (Bulkeley and Moser 2007: 1). Focusing on national and international responses to climate change is also an increasingly limiting and misleading means of defining climate governance, as many new actors are now involved in responding to climate change. As Bulkeley and Moser (2007: 1) identify:

In the absence of more effective international action, and cognizant of the big task ahead, alternative attempts at climate change governance and social action have emerged. These approaches recognise that international agreements - if implemented - provide only a partial means through which the mitigation of climate change can be directed, and in turn are reliant on actions in a variety of arenas and at different scales to be effectively implemented.

This Honours thesis explores the role of small, local, grassroots initiatives in climate change governance and finds evidence to support Jagers and Striiple's (2003: 388) claim that climate governance encompasses "all purposeful mechanisms and measures aimed at steering social systems toward preventing, mitigating or adapting to the risks posed by climate change". The alternative attempts at climate governance covered in this research are a range of local level not-for-profit associations, cooperatives and alternative businesses involved in renewable energy related activities. These activities range from bulk solar panel installations for households to a community windfarm to energy efficiency education and retrofitting. Analysis of the case studies also reveals many diverse economic practices that have been uniquely moulded to suit each group's goals, resources and ethical commitments.

Aims & Objectives

The aim of this thesis is:

To explore how local initiatives use diverse economic practices to respond to climate change while also acting on a range of other environmental, social and economic principles.

This aim is explored through four key objectives:

1. To develop understandings of the contribution of **local level responses** to climate change governance.
2. To reveal how local initiatives use the **diverse economy** to develop what they see as an effective and ethical response to climate change.
3. To identify the range of environmental, social and economic **ethical commitments** that are interwoven with local responses to climate change.
4. To use **research methods** that are of mutual benefit to researcher and case study groups.

Research Methods

A case study analysis of seven local initiatives throughout New South Wales and Victoria provides the foundation for this qualitative research. Meeting with case studies initiatives for semi-structured group or individual interviews (depending on response of participants) was the main source of information, supplemented with analysing case study documents and follow-up phone calls or emails if more information was needed. This research has aimed to generate a space for case study initiatives to articulate and reflect on their ethics, practices and projects. In devoting academic inquiry to this field of study, it is hoped that this thesis can contribute to strengthening the visibility and legitimacy of local level and diverse economic responses to climate change.

Overview of Case Studies

(In geographic order from Northern NSW to Southern Vic., and information current at August 2009)

Rainbow Power Company (RPC): an unlisted public company, considered a ‘small’ business with 16 fulltime equivalent employees. Performs small-scale renewable energy (wind, hydro, solar) installations as well as doing aid work overseas installing small-scale renewable energy systems.

Sustainable Living Armidale (SLA): a Transition Towns initiative; formally an incorporated not-for-profit association. Has 4-6 Key Organisers and approx. 200 local members. Performs a wide range of local sustainability and energy related projects.

New England Sustainability Strategy (NESS): an incorporated not-for-profit association with 14 Key Organisers and approx. 600 participants. Key project is the development of a whole of New England region sustainability strategy involving individuals, business and government and non-government organisations. Also organised a local solar bulk buy.

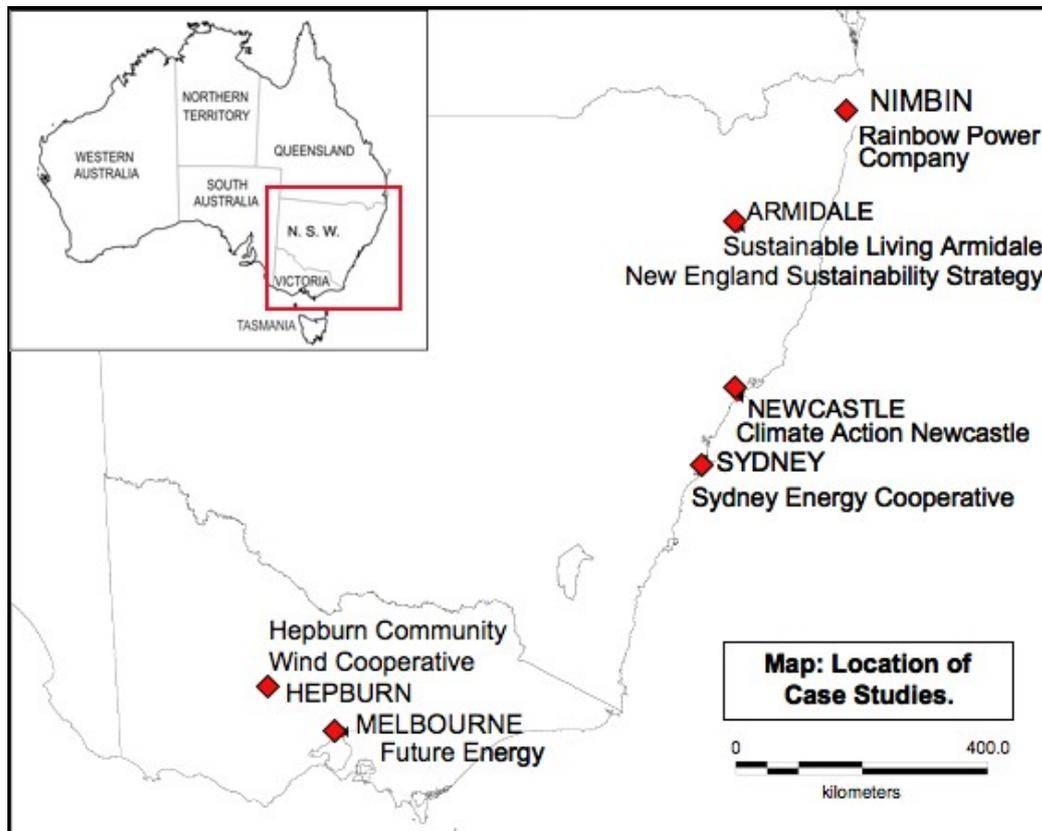
Climate Action Newcastle (CAN): Is a climate action group, formally an incorporated not-for-profit association. Has 4-6 Key Organisers and approx. 400 local members. Main activities include lobbying government, awareness raising and organising a local solar bulk buy project. Part of Climate Action Network Australia (CANA) and Climate Action Network international.

Sydney Energy Cooperative (SEC): Is a registered Cooperative. Has 8 employees and 10 regularly active members. Perform household solar installations and free renewable energy consulting, training and workshops.

Hepburn Community Wind Cooperative (HEP): Is Australia's first community owned wind farm. A registered Cooperative with 800 members and 1 employee. Key activities are establishing a small (Two, two-megawatt turbines; enough to power the equivalent of 2,300 average Victorian homes) windfarm and establishing a model to help other groups do the same.

Future Energy (FE): Is an unlisted Public Company; a 'Small business' employing 5 people. Main activities include the research, proposal development and planning required to establish small and medium wind and solar projects; worked with the Hepburn Community Wind Cooperative in this capacity.

MAP: Location of Case Studies throughout NSW and Victoria.



Map by Olivier Rey-Lescure, School of Environmental and Life Science, UoN.

Findings

Local Responses to Climate Change

The case studies in this thesis demonstrate the ways in which local groups are negotiating the tensions between global climate governance and local action. Case studies are bravely suspending the common belief that nation-states, industry and international level agreements are the only actors in climate governance and seeing what possibilities are available in their sphere of action. Their projects reveal that not only is local level action on climate change important in and of itself, but it also contributes to achieving and implementing climate governance policies established by other actors and levels of governance (such as the federal government).

EXAMPLES:

For example, **Hepburn Community Wind Cooperative (HEP)** felt there was a need to fill a gap that currently exists in Australia between individual and government responses to climate change: for HEP the solution is tangible action on climate change at a local level. Their project is purposefully hands-on and practical, aiming to encourage participants “to become aware of what a community can do together” (HEP Key Organiser B 2009: 1). Essential to HEP is the idea that not only are they making tangible in-roads to local climate action by producing their own wind energy, but also, being the first of its kind, they are able to create a model by which other communities will be able to do similar projects faster and more easily. The local level, thus, is a means for achieving emissions reductions independently and for engaging people in practical climate projects as well as being a site of climate governance innovation that can help other local people do similar things in the future. As HEP Key Organiser C commented (2009: 3): “*We don’t have to wait for the government to make change*”.

The founders of **Future Energy (FE)** believe that the Australian renewable energy sector must and will grow rapidly, and their commitment is to helping it grow at the small and medium scale, in ways that are relevant and accessible to communities. This has led FE to work with community groups, like HEP, helping them navigate the complexities of the wind farm development and approval process. Their ability and willingness to shoulder all the financial risk for projects throughout the development stage also contributes tremendously to the viability of projects like HEP’s.

Local groups contributed significantly to the successful rollout of the Federal Government’s Solar Homes and Communities scheme, which provided the \$8,000 solar rebate to households. For the federal government, this scheme was a means of achieving their renewable energy targets. The six local groups that ran solar panel installation projects contributed to the effective implementation of this policy, bringing their unique networking, outreach, organising and technical capacities to help facilitate uptake of the rebate. The case studies, however, perform this role on their own terms in order to meet their own climate governance goals. For example, the motivation for **Climate Action Newcastle (CAN)** in delivering the ‘Newcastle’s Going Solar’ bulk solar panel installation project was in its potential for community outreach. For CAN, the solar panel installation project is about transforming what is normally a purely individual act (of installing solar panels on your roof) into climate change awareness and networks with the potential for future engagement in climate issues and greater power to lobby national government policy. CAN also used the project as a fundraiser to enable future funding of other projects.

Diverse Economic Practices

The policy responses to climate change being advocated in the Kyoto Protocol and by the Australian government centre on capitalist market-based responses, such as the creation of carbon trading markets. This thesis draws on the works of J.K. Gibson-Graham (2006, 2008) who highlight the potential of recognising the existing diversity of the economy, thereby opening up the range of future possibilities. In analysing local initiatives for economic difference, we find a multitude of economic tools being used by case studies in their various responses to climate change. Through their different transactions, labour arrangements and enterprise structures, the case studies demonstrate the potential of conceptualising ‘the economy’ as a tool and approaching economic practice with creativity and inquisitiveness. With such an approach, groups are able to devise innovative economic solutions that truly fit with their material and ethical goals and their available resources.

EXAMPLES:

The Rainbow Power Company (RPC) is a for-profit company similar to any other business at first glance. However, the RPC’s concern for environmental benefit and care for their staff has also led them to develop some unique labour practices. For example, they have instituted pay equity, at a wage level higher than average, throughout the whole business, from director to office staff to labourers and engineers. Further, their commitment to environmental benefit over profits has led them to keep prices low and only pay dividends to shareholders on three out of 22 years of business.

A similar commitment to environmental benefit over profit has led the **Sydney Energy Cooperative (SEC)** to invest earnings made from doing household solar panel installations into other, more unusual projects. The SEC Key Organiser (2009: 3) describes this unconventional approach to economics:

“We don’t do projects because they’re profitable, we look at what we want to do based on ethics . . . and see how we can do it”.

The more unusual projects include gift-giving of free energy audits to low-income households, free renewable energy-related training and free energy-related consulting. SEC has chosen not to continue installing solar panels under the Federal Government’s new Renewable Energy Certificates program, due to ethical concerns about the environmental efficacy of the new system.

The **Hepburn Community Wind Cooperative (HEP)** have embodied a similar aspiration to SEC in establishing their Community Sustainability Fund, which will channel money raised through the sale of wind power into local community sustainability projects, with annual financial contributions to the fund prioritised over shareholder returns. Also, HEP’s focus from the start has been developing a hands-on energy project as “a means of engagement for communities” on climate change issues (HEP Key Organiser C 2009: 2). Facilitating “wide-scale” and “authentic” community control in the process of developing and running the windfarm project has been a key motivating ethic for HEP (Key Organiser C 2009: 2). Tensions arose as HEP became aware of the economic need to attract some large investments from outside the community. In the end, HEP addressed these concerns via a cooperative legal structure in which one member has one vote, regardless of how many shares he or she owns. In order to ensure and encourage majority local ownership, HEP decided on a differentiated share offer, where shares cost \$1 each but the minimum share package for locals was \$100 compared with \$1000 for non-locals.

Ethical Commitments

The thesis analyses the contribution of groups' ethical commitments to shaping their structures, processes, projects and economic practices. Case studies demonstrate a range of social commitments (e.g. social justice, participatory decision-making, pay-equity), economic commitments (e.g. not-for-profit, profit-for-purpose, financial accessibility of renewable energy technologies, passing on bulk-buy prices), and environmental commitments (e.g. acting on climate change as well as broader issues of environmental sustainability), some which have been touched on in the examples above. In investigating groups' ethical commitments, it was found that the case studies add strength to Bulkeley and Moser's (2007: 4) claim that climate governance offers an opportunity to act on several issues, commitments and ethics at once. The local case studies reveal this in their attempts to find ways of responding to climate change that are consistent with broader ideas for sustainable development. In many cases, climate responses are seen as an opportunity to 'reinvent' society, with people designing approaches and projects as a means to simultaneously act on layers of environmental, social and economic ethical commitments.

EXAMPLE –

For **Sustainable Living Armidale (SLA)** climate change is a problem of being a fossil-fuel-based, consumer culture that idolises infinite economic growth (so much so that we are living beyond the planet's means). They acknowledge the deep personal and cultural transitions that underlie the types of behavioural and social transitions required to holistically and sustainably respond to climate change. In this sense SLA extends the local focus through to the underlying ethic of how one personally relates to climate change and how this then informs collective actions. For example, SLA is not only building renewable energy options in the community but they are also encouraging people to relate to the concept of energy in a new way. For them, it is imperative that people grasp the concept of embedded energy and try to cut down on energy consumption in a holistic way before choosing to purchase solar panels. An SLA Key Organiser (2009: 8) explains that:

We're also interested in the indirect energy savings that everyone can contribute to by not wasting food, by processing things locally, by sharing produce and skills ... these types of things tie into energy saving in the longer term, just as they tie into all sorts of other sustainability issues.

In this way SLA is encouraging people to rethink naturalised ways of relating to the world and to link all of their behaviours to a changed culture of sustainability.

For the **New England Sustainability Strategy (NESS)** climate change and other environmental issues are a result of our culture of 'disconnection' from the world around us, other people and our inner selves. For NESS, then, sustainability is "all about interconnectivity", in which they position themselves "as an organisation and as a process", as "a connector and a linker" (Key Organiser 2009: 6). This context of connectivity then leads NESS to understand that:

*If we aren't culturally well (or) economically viable, the planet will suffer.
If the planet is well but culturally we're fragmented and dysfunctional,
we're not going to be sustainable* (Key Organiser 2009: 3).

This holistic sense of sustainability has informed NESS's structure: the NESS executive has a diverse composition to reflect what they see as the seven facets of sustainability (social, youth, environment, economic, government, indigenous and global). NESS believes that a holistic understanding of sustainability is key to addressing the root causes of climate change.

Conclusion

The case studies included in this research are powerful examples of the possibility of local climate responses. Together these groups contributed thousands of solar panels installed on rooftops and the first community-owned wind turbines in Australia, demonstrating the powerful role that the local level can play in helping transition Australia's currently coal-reliant electricity production to renewable sources. They represent a diverse landscape of climate governance innovation, with vast potential to inspire action within other local groups as well as lead the way to new policy territories for government. Through giving voice to local level climate initiatives within an academic context, it is hoped that this research can help to expand the legitimacy and understandings of the local scale of climate governance. What all the case studies demonstrate, and what brings me joy and hope, is the overwhelming will to act on climate change that is present at the local level and the incredible commitment to making positive change. People are yearning for individual and collective ways to meaningfully address climate change, and they are working together, devising ways to respond that are relevant to them.

References

NOTE: If you would like copies of any of the following journal articles, I can forward them to you in PDF format via email (save you purchasing them).

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