

Landcare: grassroots environmental governance for the Anthropocene?

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Key Points

- This conference is timely and reflection is appropriate
- We are facing unprecedented challenges stemming from the 'converging insecurities': food, water, energy, climate
- These challenges can't be met effectively through centralised, top-down approaches
- Engaged, informed, empowered communities are key to more decentralized governance models
- We've had 30 years or so of landcare 'experiments' in several continents that point to exciting possibilities
- But we should not be starry-eyed – progress has been partial, patchy and slow, and the published evidence base is thin
- **It's time to build a critical mass of knowledge for action**

My journey to here

- Farming background south-eastern Australia
 - Family farming near Cavendish since 1860s, own farm managed since 1987
 - 450ha: 30% farm forestry, 10% environmental reserves, 60% leased for sheep
- Studied forestry and rural sociology (Creswick & Melbourne '78-83)
- Extension Forester (Vic Govt)/Potter Farmland Plan Manager '81-88
- National Landcare Facilitator 1989-92
- Studied Rural Knowledge Systems (Wageningen)
- Environment Australia Executive (Melbourne)
- CEO, Land & Water Australia 2000-06
- Triple Helix Consulting (sustainability)
- Director RIEL, Charles Darwin University
- CEO, Australian Centre for International Ag Research (ACIAR) 2016-



Converging Insecurities

- **Climate change**
- **Energy**
 - the era of cheap, easily extracted fossil fuels is ending
- **Water**
 - Every calorie we consume uses one litre in its production
 - Every litre weighs one kilogram
 - Per capita freshwater availability declining steeply
- **Food** — increase world production up to 70% by 2050
 - Nutrition security (& equity) as crucial as ag productivity
 - Using less land, water, fossil energy and nutrients

Profound technical & policy challenges

1. To decouple economic growth from carbon emissions
2. To adapt to an increasingly difficult climate
3. To increase water productivity
 - decoupling the 1 litre per calorie relationship
4. To increase energy productivity
 - more food energy out per unit of energy in
 - while shifting from fossil fuels to renewable energy
5. To develop more sustainable & resilient food systems
 - in competition for land and water with the resources & energy sectors
 - Improving human nutrition and health
 - while conserving biodiversity and
 - improving landscape amenity, soil health, animal welfare
6. **TO DO ALL OF THE ABOVE SIMULTANEOUSLY!**

We need a third agricultural revolution

— policy elements

Set high level goals for agriculture by 2030: e.g.

- doubling water, energy and nutrient productivity
- becoming a net carbon sink
- becoming a net energy producer (from renewables)

Reposition agriculture as integral to the food, health, energy and water systems

Re-engage urban populations & kids with ag and food systems

Rebrand agriculture as sexy, 'new economy'

All of the above will require a new breed of professionals

We need a third agricultural revolution

— technical elements

- Closed-loop farming systems (water, energy, nutrients, carbon)
- Smart metering, sensing, telemetry, data, robotics, guidance
- Better understanding of soil carbon & microbial activity
- Radically reducing waste in all parts of the food chain
- Integrated production of food, fibre, energy and carbon offsets
- Farming systems producing renewable bioenergy (2nd generation)
- Urban food production, recycling urban waste water & nutrients
- **Detailed product specification and labelling**
- **More accountable agriculture** generating better returns to farmers
- **New marketing models for leading, educating and bringing the community on board**

Planning landscapes & infrastructure

- How can this all 'fit' at a landscape and regional scale?
- The landscape needs to be re-plumbed and re-wired
- We need new planning & development approaches that:
 - are robust under a range of climate change & demographic scenarios
 - treat all land uses equitably – e.g. unconventional gas
 - build in resilience thinking
(e.g. improve flood performance & recovery, ensure habitat connectivity & buffering, protect refugia, don't crowd coastlines)
 - reduce greenhouse gas emissions (energy, transport, food)
 - rethink transport networks (greener, tougher, smarter)
 - safeguard productive soil and allow for increased food production
 - facilitate recycling of water, nutrients and energy
- ✳ **Engaging, educating and bringing the community on board**

Regions around cities are fertile ground for **Landcare**

- Cities suck in water, energy and nutrients from their hinterland
- Much of which becomes waste
- Replumbing, rewiring and recladding is required on a massive scale
- Cities house >50% of people, and are part of the sustainability solution, not the problem
- Landcarers should see cities as allies and supporters
- **Urban and peri-urban landcare have a huge role to play**



Landcare — a transformative reform

- **28 years ago**, Prime Minister Hawke announced the Decade of Landcare and a 30-fold increase in Commonwealth funding for community-based Landcare groups (\$340 million)
- Instigated jointly by the national conservation & farmer bodies
- **A bipartisan political commitment, for a decade**
- **1980s-1990s: the Landcare decades**
 - >6,000 voluntary community groups
 - involving more than one-third of all farming families – **often >2/3**
 - cooperative work across farm boundaries, neighbourhood group extension
 - community-based monitoring (WaterWatch, SaltWatch, FrogWatch etc)
 - Extensive programs in schools
 - Landcare ‘caring hands’ brand recognition >85% in urban communities
 - Considerable corporate investment through Landcare Australia Ltd





Widespread community engagement, with a strong sense of place

In schools, with young people



In community-based monitoring



Farm and watershed planning was widespread

Linking farm-scale actions to watershed outcomes – especially river health

Key principle was community ownership of problems and solutions at local levels – direct engagement in planning & works



landcare achievements

- ✓ **changing social norms**
- ✓ **sharing information, improving skills**
- ✓ **marshalling resources**
- ✓ **enhancing involvement**
 - land literacy
 - some 'non-converted' land users
- ✓ **partnerships**
 - young-old; urban-rural; green-brown; hobby farmers-other farmers; scientists-lay experts; government-community



Further phases of reform

- **1996-2007: move to a regional model**
 - **Scaling up** to the catchment or regional level;
 - 56 regional/catchment bodies
 - Trying a more **integrated** approach at **landscape scale**
 - National investment shifted from millions to billions
 - **BUT: regional bodies often undermined landcare**
- **2007: move to targeted, asset-based investment**
 - National Plan for Water Security, then MDB Plan
 - Identifying environmental **assets** (priorities)
 - **Business plan** approach to investment in the highest priorities
 - **Market-based** instruments, private nature conservation
 - **Competitive** tenders to purchase specific environmental outcomes open to new players

BUT: regional bodies suffered 40% cuts to core funding

Many landcare groups now tired, some moribund



What is Landcare?

- Landcare is many things to many people. Probably an early strength, but is this fuzziness now problematic?
- **Landcare can legitimately be seen as:**
 - A form of participatory research and extension, including farmer-to-farmer extension & knowledge dissemination
 - Community development
 - A framework for subsidiary governance of natural resources
 - Community-based land (& water) stewardship
 - An approach to build social capital in the face of a common threat, or following conflict or disaster
 - A framework for distributing resources, such as grants

What is Landcare?

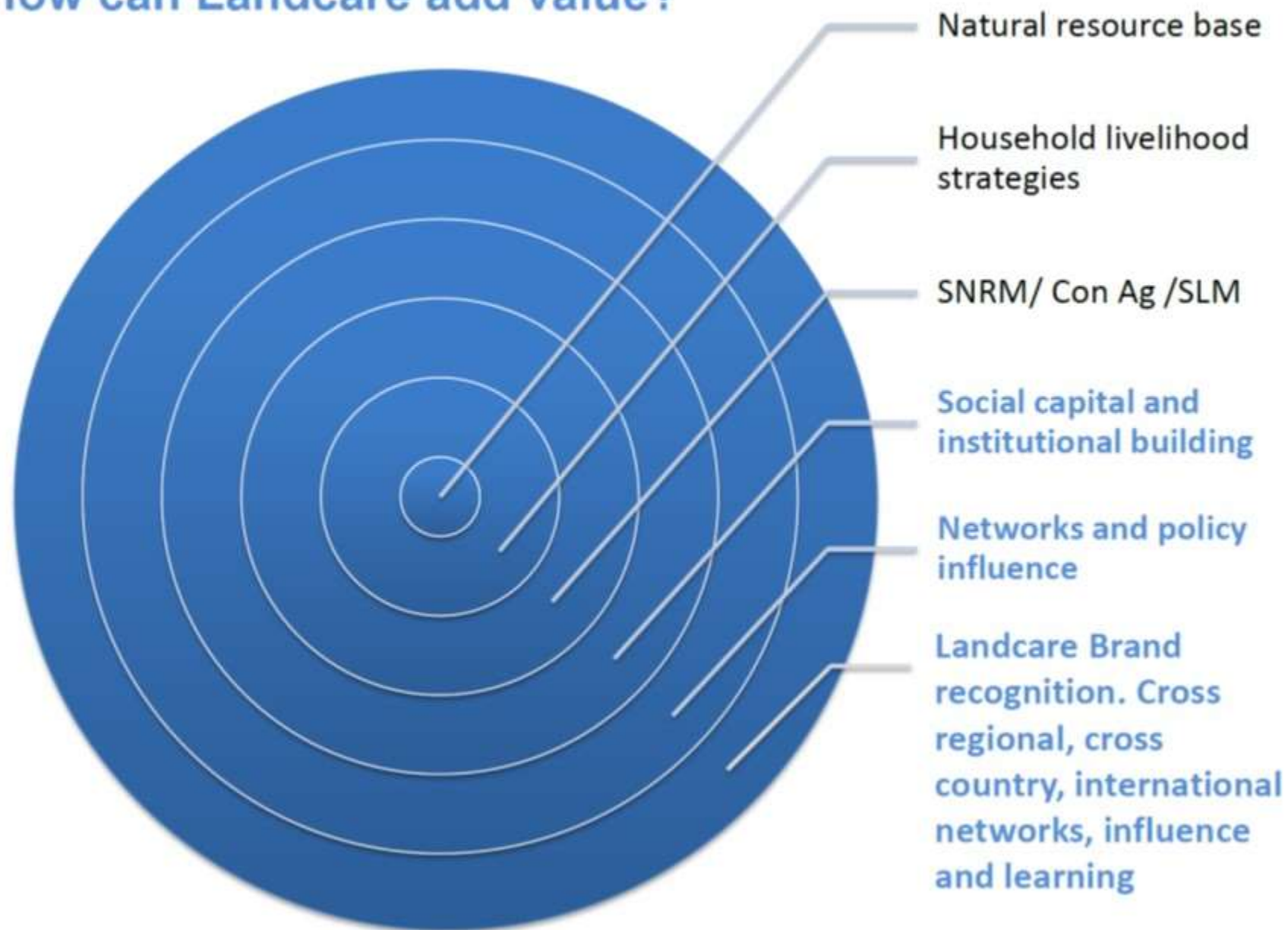
Landcare approaches can deliver:

- Positive behavioural norms, innovation and adaptation (incl. sustainable NRM; & health and nutrition outcomes)
 - Provided innovations are adoptable!
- Efficient collective action at neighbourhood scale
- Cooperation across farm boundaries & landscape-level NRM
- Aggregation for linkages to markets and income generation
- Social protection for poorer and more vulnerable people
- Influence on policies, decision-making & resource allocation
- Meaningful social interaction and mutual support
- Entry points for marginalised groups including women, youth, landless farmers, tail-end irrigators

Landcare Principles (South Africa)

1. Integrated *Sustainable Natural Resource Management* addressing primary causes of natural resource decline
2. *Community based and led* natural resource management within a participatory framework
3. The development of *sustainable livelihoods* for individuals, groups and communities utilizing empowerment strategies
4. *Government, community and individual capacity building* through targeted training, education and support mechanisms
5. The development of *active and true partnerships* between governments, LandCare groups and communities, non-government organisations and industry
6. The blending together of appropriate upper level policy processes with *bottom up feedback* mechanisms

How can Landcare add value?



Source: Julian Prior, Landcare in Africa

Reflections on 30 years of Australian landcare

Three broad approaches 1980s – 2010s:

1. Voluntary, bottom-up, neighbourhood-scale landcare groups (6000+)
 - **A social intervention with biophysical objectives**
2. Regional/catchment (watershed) organisations (56)
3. Targeted investment in environmental assets, and payment for environmental services (PES) through competitive tenders and market-based instruments, complemented by big top down national initiatives (e.g. National Water Initiative, Murray-Darling Basin Plan).

Australian Reflections (2)

- **3 valid approaches.** But implemented in sequence, not in parallel, each displacing/undermining the previous approach, rather than building on it. **STRATEGIC ERROR**
- **These are complementary, not alternative approaches**
- In trying to be more targeted & professional with NRM investment, we often disengaged and disempowered voluntary, grassroots neighbourhood groups
- Compounded by public sector rationalisation and budget cuts at State and Territory levels (cost shifting to Commonwealth)
- **Grass-roots need constant nourishing**



Reform is getting harder



In the Anglosphere, we are seeing systematic attacks on environmental policy of unprecedented intensity, sophistication and comprehensiveness, supported by a loose 'coalition of the willing':

- The fossil fuel sector and some energy-intensive industries
- Older white males with a vested interest in the status quo who feel their values, world view & achievements are under attack and threatened
- Contrarian denialists & genuine skeptics (a much smaller group)
- Media interests aligned with any or all of the above



Reflections of a recent PM

Kevin Rudd's key points

1. Define the problem in ways the community can get
2. Clarify a mandate and be explicit about it - legitimise it
3. Simplify the message - what we will do, what it will achieve and how much it will cost. Measures, rationale, costs, benefits, metrics. Backed up by detail for the policy elites - mutually reinforcing.
4. Identify the economic losers, how appropriate compensation will be realised and how the adjustment process will proceed.
5. Recruit economic winners (direct and indirect) such that they will promote the policy - *“rolling third party endorsements across the body politic are essential” “engaged in the blood and gore of the general media debate”*

Reflections of a recent PM(2)

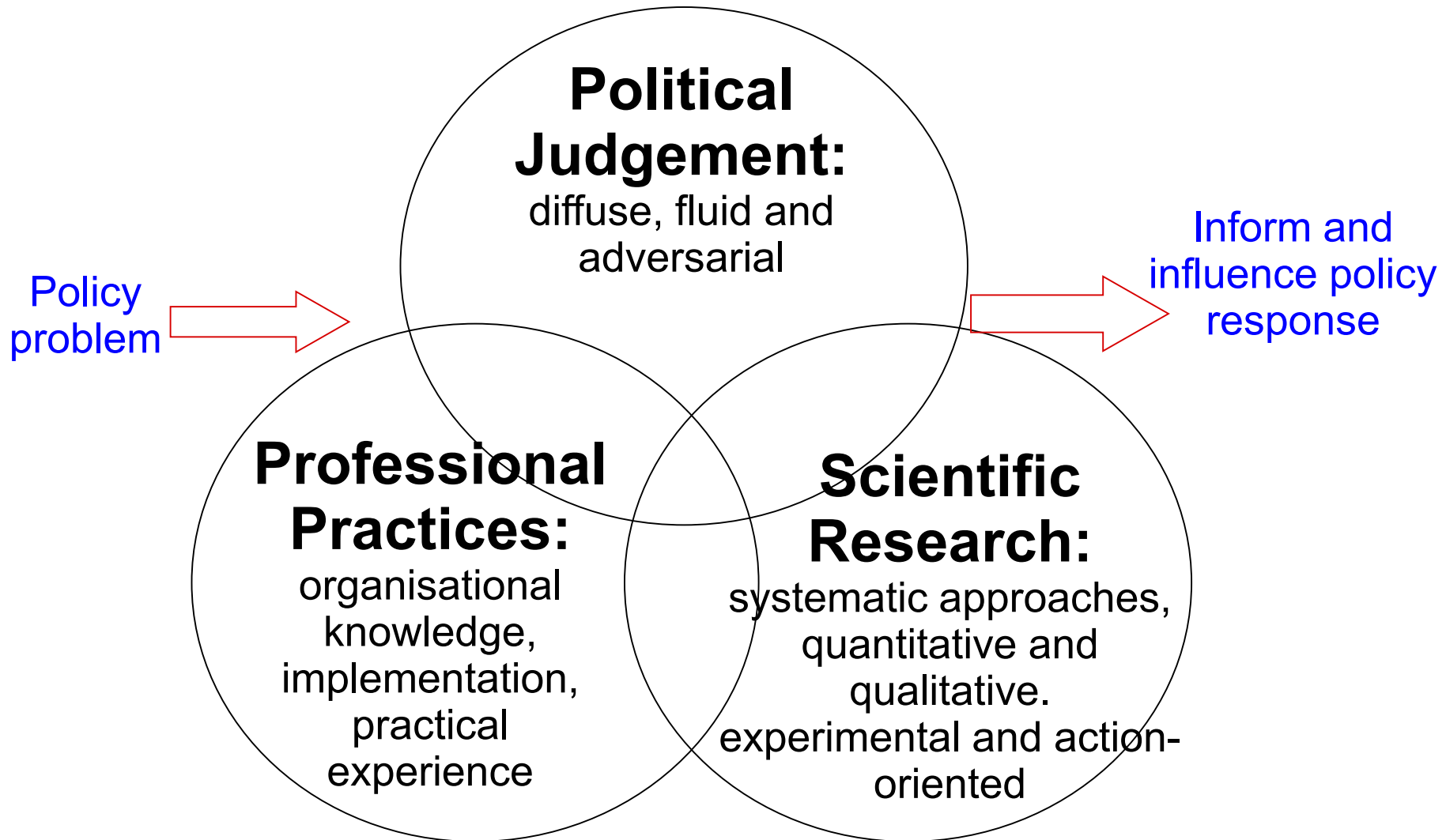
6. Identify ideological opponents and vested interests and design an offensive strategy to deal with the sophisticated campaign coming at you.
7. Comprehensive oversight over the implementation of reform. The detailed practice of implementation provides fertile ground for delegitimisation and second round attacks
(*“we’ll kill this thing slowly”*)
8. Report card “the battle for the data” so that you can point to measurable outcomes - reinforce the legitimacy of the exercise
9. Set a formal date for reviewing the efficacy of the program (formal date, best entrenched in legislation). But beware this being used after a change of government to gut the scheme (**e.g. RET**).
10. Think about the next tranche of structural economic reform.

“What do you have to do to get a transformational policy reform accepted and, in retrospect, be judged to have been successful?”

my ten principles

1. Create a ‘burning platform’ that establishes a compelling rationale for change, and pay careful attention to timing.
2. Marshall the evidence and facts to support your case, but **never assume that facts will suffice**. If the policy reform is perceived to threaten powerful interests, opposition will be well organized, well resourced and politically ruthless.
3. Ensure that the ‘three lenses of knowledge and influence’ (Head 2008) are all considered, mutually reinforcing and well-aligned with the reform agenda.

Three lenses of knowledge & evidence



“What do you have to do to get a transformational policy reform accepted?” {2}

4. Build a **broad coalition of supporting** interests to maximise parents/champions/sponsors. Don't assume that people understand their own best interests. Invest heavily in identifying and resourcing **leaders and champions**.
5. Analyse where opposition is likely to come from, and understand its drivers. What messages/strategies could be effective in defusing or countering opposition?
6. Plan implementation very carefully. There is often a big gap between policy intent and program practice. Ensure that the right people & agencies have the necessary training, resources and instruments to do the job well (technically competent and socially rewarding). **Home insulation scheme a good example.**

“What do you have to do to get a transformational policy reform accepted?” {3}

7. Measure impact systematically from the outset (including on ‘losers’). Have **better empirical data** than anyone else. Understand how implementation works and how success is interpreted against the dominant political discourse. Communicate benefits as early as possible, without over-reaching, and **keep refining the narrative**. Reinterpret the burning platform as necessary. **Assume all wins are temporary.**
8. **Celebrate success** and reward champions at all levels.
9. **Clarify the fundamental policy objectives and principles**, and stay true to them, while being flexible and adaptable in implementation, improvising practice and tweaking the narrative so that it legitimizes practice in the current political context.

“What do you have to do to get a transformational policy reform accepted?” {4}

10. Continually recruit new champions and identify new beneficiaries (while honouring old ones) and help them to see the importance of **sustaining reform**. Ensure that the powerful centre (and wider beneficiaries) understand that the costs and risks of unraveling or undermining the policy far exceed any potential benefit.

BUT, if the evidence is clear that the policy is not working, that the core principles no longer hold (i.e. not just an implementation problem), then analyse why and move on — **disrupt yourself**, start working on and owning the next major reform.

Applying these principles to Landcare

Burning Platform	✓✓
Evidence Base	±
Three Lenses	±
Broad Coalition	✓✓✓
Understand Opposition	✗
Competent Implementation	±
Measure Impact	✗
Celebrate Success	✓✓
Policy Clarity	✗
Sustaining Reform	✗

The imperative

- Rapid, often surprising, on-going environmental change will challenge governments, industries and communities.
- Many responses (proactive and reactive) need to be designed and/or interpreted at regional and local levels.
- Successful implementation depends on community support and, often, community engagement.
- Policy convergence in climate, energy, water, food and health systems requires an integrated planning & delivery framework, with decentralised leadership and decision-making

Australian opportunities

- Re-engage the community sector (landcarers and beyond)
 - **Utilising every technology available to us**
- An environmentally literate (and equitable) regional framework
 - For regional planning
 - For guiding (not always implementing) public & private investment
 - As a bridge between government & community
- Honour the path pioneered by Hawke, Kerin, Cook, Farley, Toyne, Joan Kirner, Heather Mitchell and tens of thousands of volunteers
- R&M of crucial social and environmental infrastructure
- Finally get our act together on knowledge and innovation, moving beyond policy amnesia, adhocery and myopia

Australian Opportunities (2)

- Work hard to rekindle the bipartisan innovation of the 90s
- Especially at policy and institutional levels
 - New wave of reform to design juicier carrots & smarter sticks
 - E.g. tax incentives, carbon pricing, offsets policies, environmental insurance, planning and approvals systems
- Link community action with robust long-term monitoring
 - With TERN etc, we are tantalisingly close to a robust, ‘joined up’ national ecosystem health monitoring system, at least for relatively intact landscapes
- Rejuvenate landcare with explicitly social objectives
 - Framed around building social capital, inclusion, knowledge sharing
 - Be disciplined about learning from what works, and sharing lessons
 - Digital & social media, citizen science, integrated schools programs
 - A broader coalition with renewable energy groups, sustainable communities, slow/local food movement etc (e.g. Intrepid Landcare model)

International opportunities

- Consolidate what we know
- Take nascent international landcare networks to a new level
- Get more discipline and consistency around terminology to better articulate what landcare is (and isn't)
- Make better use of existing well-resourced forums & events
- Highlight the importance of well-distributed social capital for improving livelihoods and taking promising innovations to scale
 - Large-scale sequestration initiatives seem highly prospective
- Build alliances with like-minded NGOs & initiatives
- Get landcare hard-wired into major funding proposals (e.g. Green Climate Fund) as the explicit social dimension

through the macroscope

- We may have lost momentum, but we still have all the elements of a world-leading policy & practice story
- Many countries are embarking on or planning large-scale landscape restoration efforts
- The Landcare experience has much to offer the world
- People in this room & your networks have much to contribute
- But the Australian experience is salutary, and we need to be clear-sighted about success factors
- **It's timely and appropriate to share knowledge, to reflect on lessons and celebrate achievements**
- **Landcare is a platform potentially suited to environmental governance for the Anthropocene**