

Planning law challenges and options for Renewable Energy

Dr David Leary
Senior Research Fellow & Convenor Climate Change Law and Policy Initiative,
Faculty of Law, University of NSW
dleary@unsw.edu.au

Overview

- Law and policy context
- Planning law challenges confronting renewable energy
 - Complexity of the planning law system
 - Large scale wind energy
 - Small scale household solar power
- Emerging technologies
 - Ocean energy

Law and policy context

- Carbon pollution reduction scheme
 - Price on carbon and signals to market
 - Design flaws
 - 2013?
- MRET and eRET
 - *Renewable Energy (Electricity) Amendment Act 2009 (Cth)*
 - 45,000 GWh – 20% by 2020 target
 - *Renewable Energy (Electricity) Amendment Bill 2010* (currently before Parliament-expected operation from 1 January 2011)
 - the Small-scale Renewable Energy Scheme (household-small-scale technologies-solar panels and solar hot water systems) and
 - the Large-scale Renewable Energy Target (generation scale-wind farms, commercial solar, biomass and geothermal).

Law and policy context

- National electricity market reform
- Funding for renewable energy research and development
- Feed-in tariffs and other incentives for business
 - Accessibility of information

Planning law challenges -complexity

- Complexity of planning approval and environmental assessment processes one of several factors determining investment decisions
- Systemic complexity
 - One national electricity market (S.A., Vic, NSW, A.C.T., Qld and Tas)
 - But seven plus ** jurisdictions (Cth, S.A., Vic, NSW, A.C.T., Qld and Tas plus ** local government)
 - More than seven plus ** legislative regimes

Planning law challenges -complexity under the EPBC Act

- Legislative complexity at the Federal Level- *Environment Protection and Biodiversity Conservation Act (Cth) 1999*
 - *"The concepts (controlling provisions' etc), organisation and language all conspire to make this Act virtually unintelligible to anyone who hasn't a few days to waste unravelling it...The Act needs an overhaul to convert concepts and principles into coherent and readily understood language"*
Dr Gerry Bates commenting on the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* (EPBC Act) to the Independent Review of the EPBC Act

Planning law challenges -complexity under the EPBC Act

- EPBC Act review identified complexities & inefficiencies within the operation of the EPBC Act arising partly from overlaps with State and Territory legislation
 - Inconsistencies with and difference between State and Territory regulatory systems, creating gaps in regulation and confusion for cross-jurisdictional stakeholders
 - Focus on individual project assessments rather than landscape based assessment
 - Focus on recovery of single species
 - Duplication of processes
 - Regulation by multiple authorities/regulatory agencies, and
 - Lack of suitable standards
- In terms of renewable energy projects these inefficiencies show up, for example, as
 - Inconsistency in requirements for environmental impact assessments across jurisdictions
 - Failure of regulators to take account of acquired 'corporate memory' amongst regulators as to environmental effects and appropriate mitigation measures across jurisdictions
 - Approvals at State level being subject to further challenge at the Federal level under EPBC Act

Planning law challenges -complexity and uncertainty at the State level

- Recent parliamentary inquiries in NSW and Vic have highlighted major problems arising from the complexity of current planning regimes for renewable energy projects
- Industry views on complexity at the State level
 - Time taken for decision making
 - Vic 4 ½ -51 months, NSW 7 months, S.A. 5-6 months
 - Statutory 'time clocks'
 - Numerous government departments and agencies involved in decision making
 - Lack of co-ordination of requirements of decision makers
 - Lack of expertise and resources of decision makers
 - Lack of historical knowledge/'corporate memory' of regulators/decision makers
 - Failure of decision makers to give written comment or advice

Planning law challenges -complexity and uncertainty at the State level

- Industry views on complexity at the State level
 - Lack of clarity/clear guidelines of when environmental impact assessments required and scope of such assessments
 - Government agencies that design the policy and legislative frameworks different from those that implement them
 - Resources and capacity
 - Appeal processes- spurious appeals – length and delay
 - Uncertainty as to when Minister will "call in" proposals
 - Complexity of interaction of native vegetation management regimes with approval process
- Related issue:
 - Security of tenure for renewable energy projects on crown land
 - Nature of title- leasehold or licence

Planning law challenges -moves towards reform

- The nature and extent of these issues varies from State to State
- Most problematic in Victoria as documented in 2010 report on *Parliamentary Inquiry into the Approval Processes for Renewable Energy Projects in Victoria*
- Improvements in other jurisdictions eg NSW
 - streamlining of Part 3A of *Environmental Planning and Assessment Act 1979* (NSW) assessment under Part 3A where capital costs exceed \$30 million (\$5 million in environmentally sensitive areas)
 - Renewable energy precincts?
 - Proposals for 10 day ('complying development') approval process for small wind turbines (i.e. < 10 kW) (Discussion paper April 2010)
 - Proposals for 'exempt' and 'complying' development regimes for PV, concentrating PV and concentrating solar thermal systems (Discussion paper April 2010)



(Images: NSW Planning and Vic Parliament)

Planning law challenges - the case for harmonisation

- Harmonisation= consistency in processes and requirements across the NEM
 - e.g. one single agreed set of guidelines for environmental impact assessment
- COAG and other assessments considering potential for harmonisation of planning law
- Need for detailed studies to test whether harmonisation is:
 - necessary with respect to planning law as it applies to renewable energy projects;
 - Viable; and
 - what it might mean in terms of specific proposals for law reform
- Technology specific regulation- perhaps unavoidable

Planning law challenges - the case for harmonisation

- The template model*: Where one jurisdiction creates a 'template law' which is adopted and applied by other jurisdictions
- Cooperative or complementary schemes*: Where each jurisdiction enacts legislation that implements a particular policy initiative in their jurisdiction
 - e.g. guidelines for environmental impact assessment
- Referral of powers model*: Section 51 (xxxvii) of the *Commonwealth Constitution*; and
- Constitutional amendment*: section 128 of the *Constitution* to confer powers on the Commonwealth to legislate in the relevant area

(HCR SC on Legal and Constitutional affairs (2006))

Planning law challenges -issues relevant to South Australia

- "South Australia's regulatory regime...*comparatively simple, efficient and integrated process.*" Victorian Parliament Inquiry into the Approval Process for renewable energy projects in Victoria (2002) p 89.
- South Australia as a model for the rest of the NEM?
- Scope for further improvements in South Australia?
 - Further simplification of processes under the *Development Act 1993*?
 - Case management scheme vs 'one-stop shop licensing' scheme
 - Are there inconsistencies and overlaps between the EPBC and South Australian legislation?
 - Scope for further reduction in time for decision making?
 - Impact of appeal rights?
 - Offset arrangements and approvals process for clearing native vegetation
- Over-riding policy question- the 'wicked choices' of climate change- should we just accept the inevitable 'negligible' environmental impact of renewable energy projects as 'collateral damage' in the 'war [sic] on climate change'

Planning law challenges -small scale (household) solar

Planning law challenges -small scale (household) solar

- Legislative reform in the area of Solar access rights
 - Small scale (household) solar
 - Extensive academic studies over the last 30 years (e.g. work by Bradbrook 1984; Law Reform Committee of South Australia 1978; South Australia Department of Mines and Energy 1982; Bradbrook 2010)
 - Inconsistency in current approaches by regulators across and within Australian jurisdictions
 - Ad hoc
 - Increased cost
 - Delay
 - A system that is positively discouraging the uptake of solar energy
 - A dual planning law and property rights issue
 - common law property rights-easements, restrictive covenants etc
 - Overseas models- e.g. solar access permits (Watt and Passey 2009)
 - time to turn ideas into action by policy makers and develop specific proposals for legislative reform

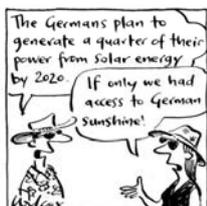
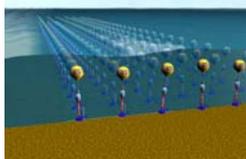


Image: Courtesy Sydney Morning Herald

Emerging technologies -ocean energy

What is ocean energy?

- Renewable energy for the ocean
- Wave energy=energy of surface wind waves is used to produce electricity by devices installed on surface of the sea
- Hydrokinetic energy=energy of ocean (or fluvial) currents and tides captured by devices installed under the surface of the water
- Ocean Thermal Energy= using temperature differential between cold water from the deep ocean and warm surface water
- Osmotic energy= energy generated from pressure differential between salt and fresh water



Crest Energy

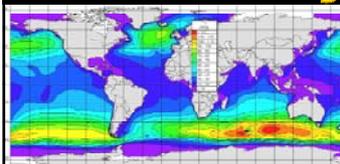


Biopower Systems



Carnegie Corporation

What is the potential of ocean energy?



(Scruggs and Jacob, Science 2009)

- Estimated potential resource
 - Theoretical global potential between 20,000 and 92,000 TWh/year vs current global electricity needs 16,000 TWh/year (Goerensen and Weinstein 2008)
 - But realistically only about 3% of this is in locations where it is useable (World Offshore Renewable Energy Report)
 - UK- 55TWh per year = 14% national energy demand
 - Europe wide ~280 TWh
 - USA- 255TWh per year= 6% of national energy demand (Scruggs and Jacob, Science 2009)



Map source: Carnegie Corporation

Recent proposals for Ocean energy projects in Australia

	SA	WA	NSW	Vic	NT	Tas
Wave projects	•Elliston (Waverider) •Port MacDonnell (Carnegie)	•Garden Island (Carnegie) •Exmouth (feasibility study) (Carnegie) •Albany (Carnegie)	•Port Kembla (Oceanlinx)	•Phillip Island (Carnegie) •Portland (Carnegie) •Warrnambool (Carnegie) •Portland (Carnegie)		•King Island (Biopower systems) •Flinders Island (Biopowers systems)
Tidal projects				•Port Phillip Bay (Tenax Energy)	•Clarence strait (Tenax Energy)	•Banks strait (Tenax Energy)





Source: Carnegie Corporation Source: Oceanlinx Source: Tenax Energy

Emerging planning and other policy issues raised by ocean energy

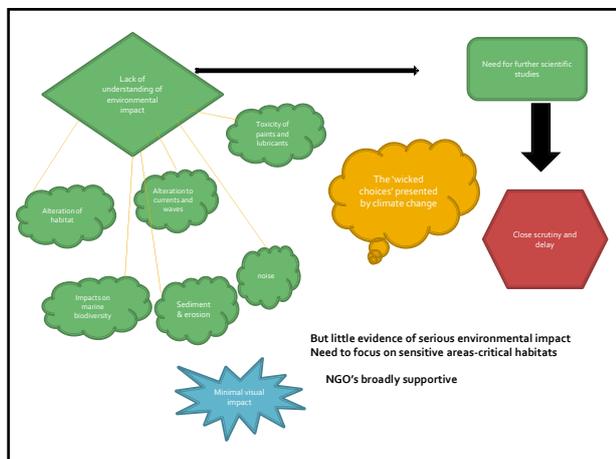
- Regulatory uncertainty slowing down development and commercial roll out
- Lack of experience- means regulators uncertain as to which legislation to apply for development approval and site tenure
- inventing regulation as projects develop has the potential to lead to
 - Delay
 - Inappropriate requirements e.g. detailed environmental impact assessments "just to be sure"
 - Increased costs
- Split Federal and State Jurisdiction
 - Offshore Constitutional Settlement (3 nautical miles)
 - Sea Installations Act 1987 & EPBC Act in areas beyond 3 nautical miles
 - State legislation and EPBC Act within 3 nautical miles
- Multiple legislative instruments and approval authorities
- Need for 'one stop shop licensing authorities'
- Security of tenure/site title
 - Crown land title
 - Leasehold or license?

Emerging planning and other policy issues raised by ocean energy

- "The difficulty with marine energy is that it is the government that is the land-holder. When you apply for a government lease, you effectively have to lodge an environment effects statement or referral, which means you are putting the cart before the horse. You are not doing your feasibility studies before you lodge the documentation. You have to lodge the documentation, then do your feasibility studies or finalise them. If the government does not give you access to the land, then you cannot effectively do your feasibility studies and you cannot commence with environmental approval processing"
 - Tenax Energy Evidence to Victorian Parliamentary Inquiry on Approvals process for renewable energy project s2009

Emerging planning and other policy issues raised by ocean energy

- Processes for reconciling conflict between stakeholders
 - Navigation right under international law
 - Hazards to navigation
 - Fishing
 - Other stakeholders
- Strategic environmental impact assessment/planning for offshore renewable energy
- Overseas experience suggests need to streamline environmental impact assessment processes
 - Uncertainty surrounding environmental impact



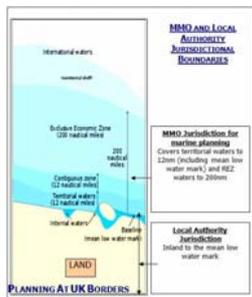
Possible models- U.K.

- Renewable Energy Zone created under Energy Act 2004 (U.K.) claiming exclusive rights out to 200 nm for production of energy from water or winds
 - But still multiple consent authorities under other legislation

"dual licensing of this sort, when both parts actually fall to the same territorial administration, is wasteful and unnecessary. It can cause practical confusion and delay, and can get in the way of considering applications in a joined-up way. Particular confusion can arise if different decisions are unnecessarily taken at different time, not least in deciding whether some factors are relevant to just one of the decisions or to both of them. In addition, laying the cables to take electricity generated by the wind farm, or wave or tidal installation, to the shore is subject to consent under the (Coastal Protection Act)" (2007) U.K. White paper)

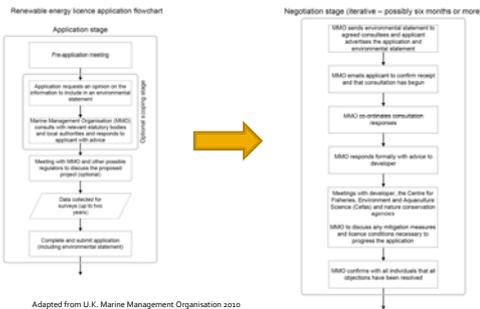
Possible models-U.K.

- Marine Management Organisation created 1 April 2010
- Marine and Coastal Access Act 2009 (U.K.) created a single licensing system for the construction of offshore renewable energy facilities
 - Streamlines environmental impact assessment and stakeholder consultation processes by applying the 'one project, one licence principle'
 - Marine spatial planning - other uses/users of ocean space to be considered



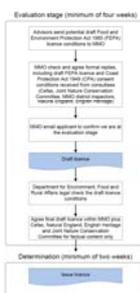
Source: U.K. Marine Management Organisation 2010

Possible models-U.K.



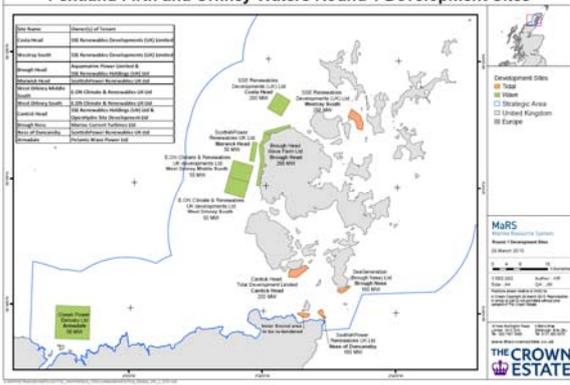
Adapted from U.K. Marine Management Organisation 2010

Possible models-U.K.



Adapted from U.K. Marine Management Organisation 2010

Pentland Firth and Orkney Waters Round 1 Development Sites



Possible models- Portugal

- Portuguese Pilot Zone for ocean energy projects
- Decree Law 5/2008
 - Licensing and concession arrangements
 - Access "strip"
 - Managed by concessionaire including all licensing - another example of 'one stop shop'
 - Different requirements for licensing management depending on stage of development



Figure 1. Localização da Zona Piloto. (Image source wave energy centre 2010)

Other models

- USA - complex but currently being streamlined
- New Zealand - Resource Management Act (NZ) 1991
 - Kaipara Harbour tidal energy project

Conclusion

- The CPRS and the eRet are only just the beginning of law and policy reform relating to renewable energy in Australia
- South Australia as a model for 'best practice' for the rest of Australia
- Priority areas for future research and policy development
 - Addressing regulatory complexity
 - harmonisation
 - Regulatory regimes for:
 - Statutory right of solar access
 - ocean energy
 - Site tenure
 - Clear framework for development approval and other licensing especially environmental impact assessment requirements
 - Managing conflicting claims of stakeholders