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# Climate Change in the Northern Territory

## Opportunities & Challenges

D e p a r t m e n t o f t h e C h i e f M i n i s t e r



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# Renewable Energy

and the

# Northern Territory

Powercorp Smart Grid Workshop

22 June 2009

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- What is renewable energy?
- Mandatory Renewable Energy Target
- Expanded Renewable Energy Target
- NT options to meet the eRET
- Next steps



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## RELATED DEVELOPMENTS

- Commonwealth Energy Green and White Paper
  - Governance, International Energy
  - Investment, Competitive Markets
  - Realising Australia's Energy Resource Potential
  - Maximising the Value of Technology in the Energy Sector
  - Workforce and Indigenous participation



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### Related developments ...

- National Strategy on Energy Efficiency

**Assist the transition to a low carbon economy by encouraging a smarter and more efficient energy network**

- Implement a smart grid across the energy network in a location of sufficient scale to provide meaningful data, input to government policy and inform future roll out of smart grids.
- Explore links with the National Broadband Network to take full advantage of Australia's investment in this technology.
- Communicate lessons from the trial to industry and consumers
- Work with jurisdictions to reduce regulatory barriers to the full deployment of smart grids.



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## What is renewable energy?

- Hydro
- Solar
- Wind
- Bagasse (by-product of sugar cane)
- Landfill gas
- Geothermal



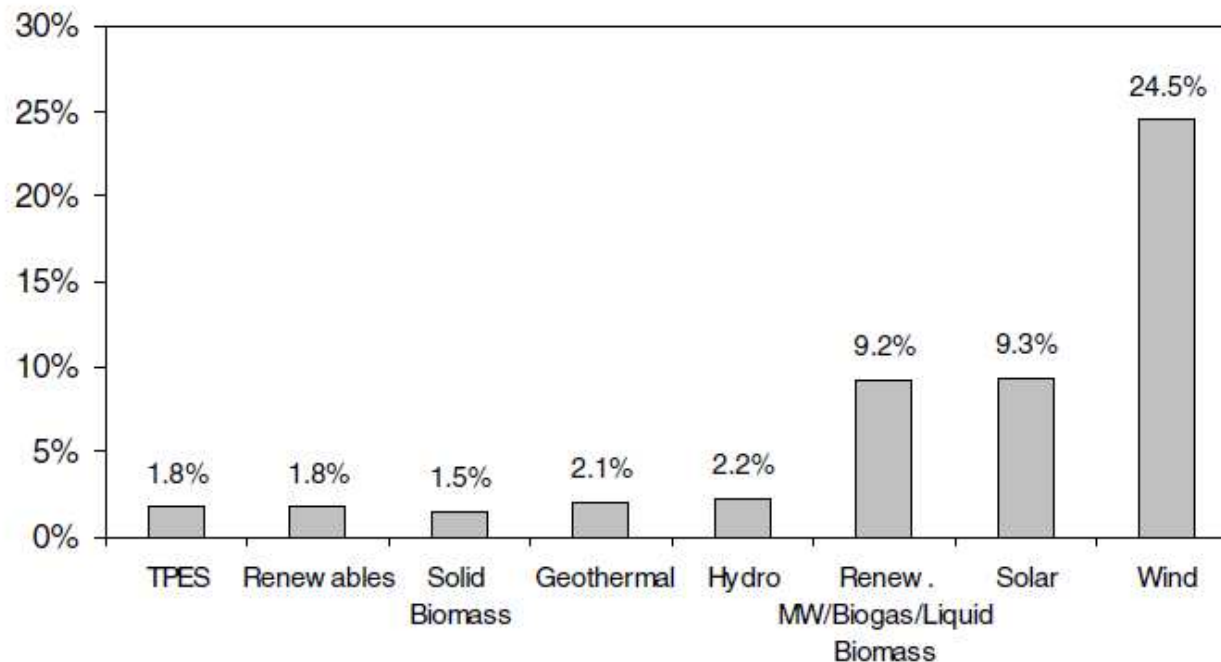
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## Global growth in expenditure on renewable energy technologies from 1990 to 2006





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# The Mandatory Renewable Energy Target

- *Renewable Energy (Electricity) Act (2000)*  
C/w
- 9500 GWh - 2010-2020
- 1 Renewable Energy Certificate = 1 MWh
- Shortfall charge



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# Meeting the Mandatory Renewable Energy Target in the Northern Territory

- PWC 61 500 MWh by 2010
- Sources
  - SHWS 30 000 RECs
  - Landfill 9000 RECs



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# expanded Renewable Energy Target (eRET)

- 20% target
- 9500 GWh to 45 000 GWh by 2020
- Scheme ends 2030, CPRS kicks in
- Certainty for investors, growth in green jobs and renewables sector



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## eRET in the NT

- PWC renewables target increased from 61 500 MWh to 300 000 MWh in 2020
- Total PWC obligation 2010-2020 \$88m



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## Commonwealth Modelling on the eRET

- Energy technology mix
- Electricity prices
- Economic impacts – Australia
- Economic impacts – Northern Territory



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“There is no increase in renewable energy generation in the Northern Territory prior to 2020, but there is some investment in solar thermal generation in the following decade.”

Source:

[http://www.climatechange.gov.au/renewabletarget/publications/pubs/mma\\_ret\\_report.pdf](http://www.climatechange.gov.au/renewabletarget/publications/pubs/mma_ret_report.pdf)



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# NORTHERN TERRITORY OPTIONS TO MEET eRET LIABILITIES

- Acquit liabilities by buying RECs interstate
- NT Government to encourage the growth of renewable and low emissions energy industries and products in the Territory



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## NEXT STEPS

- Most cost effective options for pulling forward investment?
- Northern Territory Climate Change Policy



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