Renewable energy

Leslie Williams
Parliamentary Secretary

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Renewables in NSW

- Accounts for 12.3% of NSW’s energy supply
- Generation has doubled since 2001
- Drives clean infrastructure and supports over 13,000 jobs
- Provides $8b investment, mostly in regional areas
- 5,700 MW installed (about 25% of all generation capacity in NSW)
Promoting investment in NSW

- 8,396 MW of large scale renewable energy projects in the NSW planning system, representing $13b of potential investment
- Supporting national RET (20%, 41,000 GWh)
Renewable Energy Action Plan (REAP)

- Guides NSW’s renewable energy development and supports RET
- Positions NSW to attract a major share of renewable investment as well as increasing energy from renewable sources
- Plan details 3 goals and 24 actions to grow renewable energy generation
Renewable Energy Action Plan (REAP)

- The plan will:
  - Improve timeliness and processes associated with network connections and appoint a Renewable Energy Advocate
  - Streamline the planning process for connecting renewable generation
  - Promote investment opportunities in NSW
  - Maintain a fair price for solar and provide a sustainable future for the solar industry
  - Build community support for renewable energy
  - Attract and grow expertise in NSW
  - Focus on moving renewable energy technologies from R&D to demonstration and deployment
Renewable Energy Advocate

- Works closely with NSW communities and industry to:
  - facilitate the development of renewable energy projects
  - increase renewable energy generation in NSW
  - promote investment in renewable energy

Amy Kean, NSW Renewable Energy Advocate
Solar power investment

- About 260,000 roofs in NSW (9% of households) have traditional, silicon cells installed
- Next generation solar now a reality, e.g. CRC polymer project
  - plastic, flexible, solar cells
  - low-cost manufacturing techniques
  - low labour input
Moree solar farm

- A joint venture between Pacific Hydro Australia and Fotowatio Renewable Ventures (FRV)
- Plant will cover 350 hectares, 10km south of Moree
- Will consist of 250,000 solar PV panels that can ‘follow-the-sun’
- Potential to produce 30% more energy than a solar farm using fixed panels
- Will have installed capacity of 56 MW, taking solar PV in NSW to over 200 MW by 2016
- Will supply about 15,000 households and create 100 new jobs during construction
Moree solar farm
Broken Hill solar plant

- AGL to build a 53 MW solar energy plant on 200 hectare Crown site in Broken Hill
- Plant will create 150 jobs during construction
- The plant’s 900,000 solar panels will provide renewable energy for 11,000 NSW customers
Nyngan solar plant

- AGL building the biggest solar plant in the southern hemisphere at Nyngan, western NSW
- $300m, 103 MW solar plant
- Contractor First Solar to install over 1.4 million PV panels on a 250 hectare site
- Will create 300 jobs during construction
- Will produce enough energy to power more than 33,000 average NSW homes (equal to taking 53,000 cars off the road)
Nyngan solar plant
Wind energy

- NSW Government will continue to support wind energy development and mitigate community concerns around health.
- NSW PAC approved a 55 megawatt wind farm near Collector late last year, finding turbines would not adversely impact on human health.
- NHMRC: no reliable evidence that wind farms cause health problems is an important win for the wind energy industry.
- AMA: evidence does not support that wind farms as currently regulated in Australia, cause adverse health effects on nearby residents.
Wind farms

- Wind energy can ‘drought-proof’ farmers who host turbines on their properties
- A 50 MW wind farm can provide up to $250,000 to farmers and an ongoing community contribution up to $80,000 pa for the life of the project
Biomass industry

- Minister Roberts recently announced changes to the *Protection of the Environment Operations (General) Regulation*, allowing two additional types of biomaterials to be burnt to generate electricity

- Additional biomaterials: invasive native species, tree heads and off cuts of trees used for sawlogs, trees that might otherwise be made into pulp for paper production

- Biomaterials must be legally cleared in accordance with relevant approvals to be used to generate electricity

- Operators to keep detailed records of biomass received (to be audited by EPA)
Energy Efficiency Action Plan

- Provides the right structures, tools and incentives for product and service providers to help NSW customers use energy more efficiently

- Plan provides 30 actions across five streams and will:
  - realise annual energy savings of 16,000 GWh by 2020
  - support 220,000 low income households to reduce energy use by up to 20%
  - deliver high-standard building retrofit programs so 50% of NSW commercial floor space achieves a 4-star NABERS energy and water rating by 2020
Energy Efficiency Scheme

- Key tool to delivering on the targets in the Energy Efficiency Action Plan
- Mandatory for electricity retailers and other participants under the *Electricity Supply Act*
- Reduces energy consumption by creating financial incentives to invest in energy savings
Thank you