



**The new state
of business**

Renewable energy

Leslie Williams

Parliamentary Secretary

Clean Response Conference

21 November 2014

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



**The new state
of business**

Thank you