ELECTRICITY NETWORK TRANSFORMATION ROADMAP

2017-27

MEDIA RELEASE

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NSW could be key link to keep the lights on in Australia's energy future

New analysis shows that New South Wales rooftop solar panels capacity will increase by more than 400% by 2030, with more than 6,000 MWh in small-scale battery storage, representing both wider customer adoption and larger system sizes as costs continue to fall.

The final report of the *Electricity Network Transformation Roadmap* released today by Energy Networks Australia and CSIRO includes new state by state analysis.

Energy Networks Australia CEO, John Bradley, said New South Wales customers will help drive the transformation of Australia's energy system, with the capacity of the State's rooftop solar panels to exceed 11,000 MW by 2030.

"The capacity of rooftop solar panels in New South Wales by 2030 will exceed its coal-fired capacity today – we need a clear Roadmap to achieve the best outcomes for customers in this energy transition," Mr Bradley said.

CSIRO Chief Economist Energy, Paul Graham, said New South Wales is well placed to support grid stability in the broader National Electricity Market into the future.

"Our analysis indicates that there will be geographic differences in the amount of energy being generated by solar and wind between and within States," Mr Graham said.

"Possible solutions could include increased interconnection across the eastern states to help meet electricity demand during peak periods and support an affordable, secure energy transition for all customers."

The Electricity Network Transformation Roadmap is an evidence-based plan detailing what needs to be done during the next decade to provide Australians with secure and affordable energy and to decarbonise electricity by 2050.

Mr Bradley said the Roadmap forecasts up to 10 million households and small customers will have distributed energy resources like solar, storage, smart homes and electric vehicles by 2050.

"Networks could buy grid support from customers instead of building their own infrastructure– in fact, annual payments to customers could be worth $1.1 billion within 10 years.

"The orchestration of these new energy assets in the 'right place at the right time' could save customers a total of $16 billion in network costs by 2050."

The Roadmap finds it critical to move to fair and efficient network charges for residential and small customers before 2021.

Mr Bradley said tariff reform would ensure a medium size family who can't take up solar and storage is $350 per year better off in 2027.

"The Roadmap is an energy transition plan to save the average Australian household $414 per year in their electricity bills by 2050," Mr Bradley said.

"Work will start in the coming months on the Roadmap's highest priority projects but real action is needed by government as well as industry.

"A national approach to carbon and energy policy will support commercial investment to keep the lights on and bills affordable now and in the future."

ENDS

Energy Networks Australia

CSIRO

A partnership between Energy Networks Australia and CSIRO

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The Electricity Network Transformation Roadmap Final Report is available here.

Regional Analysis Snapshot

	Projected renewable generation mix by state (%)			Greenhouse gas emissions reduction (%)			Installation of rooftop solar by state (GW)			Installation of onsite-battery storage by state (GWh)		
	2017	2030	2050	2017	2030	2050	2017	2030	2050	2017	2030	2050
NSW	14	28	100	8	39	100	2	11	22	<0.5	6	24
VIC	16	40	100	24	54	100	1	6	17	<0.5	6	22
QLD	8	12	100	0	21	100	2	12	26	<0.5	10	30
SA	44	55	100	11	42	100	1	4	7	<0.5	4	9
WA	19	44	100	14	33	100	1	3	6	<0.5	2	7
TAS	86	84	100	20	20	100	0	1	2	<0.5	1	2

Figure 29: Projected renewable generation as a share of state generation under *the Roadmap* scenario.

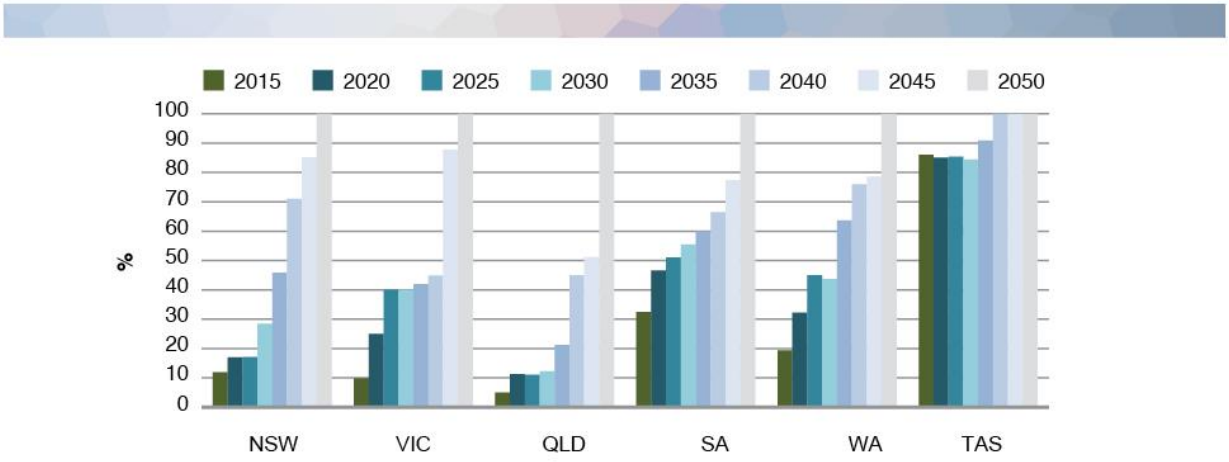


Figure 34: Projected installations of rooftop solar by state.

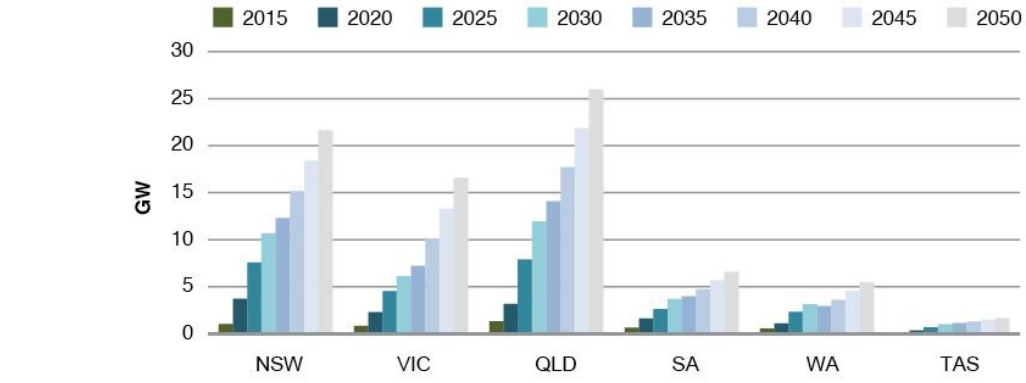
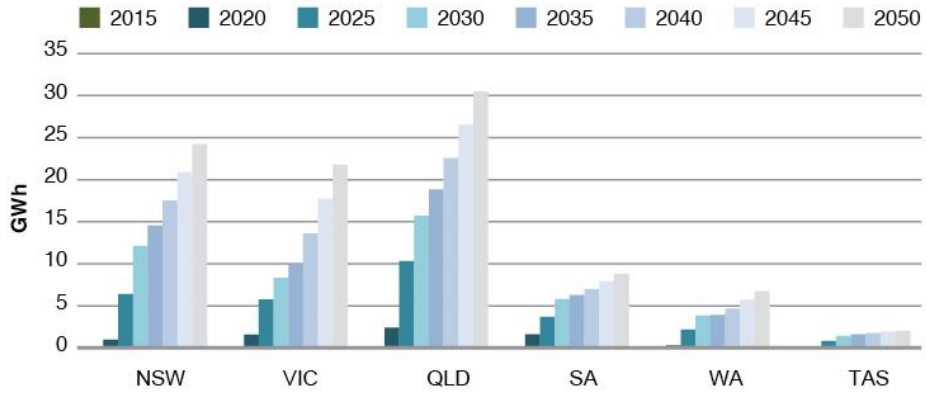


Figure 35: Projected installations of on-site battery storage by state



About the Electricity Network Transformation Roadmap

Australia's national science agency CSIRO and the peak national body representing gas distribution and electricity transmission and distribution businesses in Australia, Energy Networks Australia have partnered to develop an Electricity Network Transformation Roadmap (the Roadmap).

Energy Networks Australia has developed an action plan to achieve the Roadmap's 45 milestones. Networks are currently working on project plans for 11 flagship programs. Work will start on the highest priority projects in the coming months.

The final report is the product of more than two years of collaborative work carried out by Energy Networks Australia and CSIRO. More than 200 different industry representatives contributed at over 14 workshops and webinars held as part of the public consultation process. Information on the Roadmap has been viewed more than 30,000 times during the development process.

For more information go to www.energynetworks.com.au/roadmap