MEDIA RELEASE

27 October 2016

New Rules and Tariffs could unlock 'Off-Grid' value

Grid companies could save customers over $1.7 billion in costs and provide more reliable service to rural customers if they can make smarter use of off-grid technology.

Analysis released by the Energy Networks Association (ENA) and CSIRO, as part of their *Electricity Network Transformation Roadmap* program, assesses the role Microgrids and Stand Alone Power Systems could play as alternatives to traditional grid infrastructure.

Speaking at the Re-Powering NSW energy conference, ENA Chief Executive Officer, John Bradley, said the study by Energeia highlighted the need for new rules so that networks weren't forced to connect customers at a higher cost than necessary.

"This analysis to 2050 finds a physical grid connection provides a better service at lower cost for most customers, but the cost and quality of stand alone systems is improving rapidly," Mr Bradley said.

"At the grid edge, almost $700 million could be saved by supplying 27,000 future rural farm customers with a stand alone power system rather than building more poles and wires.

"By 2050 these customers could be supplied more cheaply and reliably with stand alone systems using 2 gigawatts of solar PV or more than twice Victoria's solar PV capacity today and 7.5GWh of battery storage," Mr Bradley said.

Mr Bradley said that if networks connected these customers with stand alone power systems the lower costs would reduce the bills of other customers who cross-subsidise rural connections.

"These rural customers are supplied at the uniform network tariff, which makes it unlikely they will have a financial incentive to install their own stand alone system.

"However, their network provider can support customers at the grid edge in smarter ways with savings to all customers and often a more reliable service for the rural customer.

"Australia's needs modern rules for this to happen as most customers are effectively required to be connected to "poles and wires."

Mr Bradley said the analysis also assesses the scope for general customers to 'leave the grid' finding it could be economic in the 2030s for some customers.

"By 2050, the analysis shows up to 10 percent of customers could leave the grid using a stand alone system and that would result in higher costs for other customers," Mr Bradley said.

"Customers with the ability to self-supply could be offered 'win win' incentives to stay on grid while operating in island mode during peak demand events.

"The analysis finds that incentivizing customers with onsite resources to stay grid connected could save all customers over $1 billion in network charges between 2030-2050, equivalent to 4% per annum on average network bills," Mr Bradley said.

ENDS

Further details and information on the Energeia modelling and Unlocking Value: Microgrids and Stand Alone Systems can be accessed here.
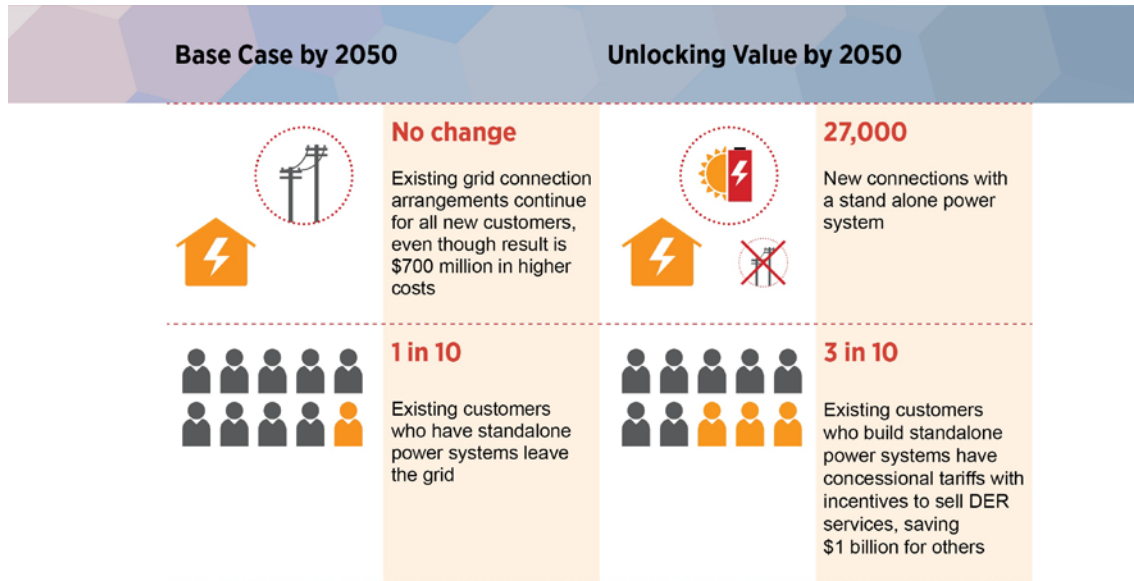
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About the Roles and Incentives for Microgrids and Stand Alone Power Systems Report

To inform the network transformation roadmap the role of microgrids and stand alone power systems in delivering a fair system of prices for all customers into the future was examined. Energeia and CSIRO have developed a joint modelling capacity to test the impact of various policy scenarios on the efficient uptake of microgrids, and its associated impact on customer bills and equity.

The model represents the largest scale, network cost price forecast model known to the authors. Energeia used this model to identify how different tariff structures and incentive arrangements affect the rate of customers or communities disconnecting from the grids (or never connecting in the first place).

Base Case by 2050	Unlocking Value by 2050
No change — Existing grid connection arrangements continue for all new customers, even though result is $700 million in higher costs	**27,000** — New connections with a stand alone power system
1 in 10 — Existing customers who have standalone power systems leave the grid	**3 in 10** — Existing customers who build standalone power systems have concessional tariffs with incentives to sell DER services, saving $1 billion for others

Australia's national science agency CSIRO and the peak national body representing gas distribution and electricity transmission and distribution businesses in Australia, the Energy Networks Associationhave partnered to develop an Electricity Network Transformation Roadmap (the Roadmap). The Roadmap is a two stage process running over approximately 18 months. For more information go to www.ena.asn.au/roadmap