The Roadmap Final Report

Based on two years work and extensive consultation the Roadmap identifies the complex challenges facing Australia’s electricity system in the face of diversified energy supply and identifies a strategy for the future, as well as a deliverable plan to achieve it.

The report finds that with a co-ordinated plan in 2050:

- Customers retain security and reliability essential to lifestyle and employment
- Networks pay distributed energy resources customers $2.5 billion per annum for grid support services by 2050.
- Electricity sector achieves zero net emissions by 2050
- $16 billion in network infrastructure investment is avoided by management of distributed energy resources like solar and batteries
- Reduction in cumulative total electricity network expenditure of $101 billion by 2050
- Network charges 30% lower than 2016
- $414 annual saving in average household electricity bills (compared with roadmap counterfactual, business as usual, pathway)
- A medium family who cannot take up distributed energy resources is over $600 p.a. better off through removal of cross subsidies.

![Rooftop solar and battery storage adoption](image)

![Carbon abatement](image)

![Savings for customers](image)

![Electricity generation mix](image)
Residential bill outcomes for selected Australian household types in 2050 under the counterfactual and Roadmap scenarios

Regional Analysis Snapshot

<table>
<thead>
<tr>
<th>State</th>
<th>Projected renewable generation mix by state (%)</th>
<th>Greenhouse gas emissions reduction (%)</th>
<th>Installation of rooftop solar by state (GW)</th>
<th>Installation of onsite-battery storage by state (GWh)</th>
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<td>TAS</td>
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</table>

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