

Energy  
Networks  
Australia

# YEAR IN REVIEW 2018-19





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# YEAR IN REVIEW 2018-2019



**2018-19 truly deserves the title of ‘unprecedented’ in focus on the energy sector. In the midst of the political storm that has engulfed the industry over the past year, Energy Networks Australia has continued to sharpen focus. Advocacy efforts have been stepped up considerably and our work program honed to address areas most critical to supporting the transformation of the system and the reputation of members.**

In July 2018, it was hard to believe energy could become more politicised. The focus was on a Coalition Government divided along climate lines trying to land a combined emissions and reliability policy in the *National Energy Guarantee* (NEG).

Getting energy prices down was an ongoing theme, with retailers, generators and networks all in the frame.

The Australian Energy Regulator’s (AER) draft *Rate of Return* in July and final decision in December reflected this focus, with an outcome considered heavy-handed and focused on short-term price impacts.

The period also saw the release of the ACCC’s widely anticipated final *Retail Electricity Pricing Inquiry Report* with 55 recommendations to improve electricity affordability.

July 2018 saw the launch of the Australian Energy Market Operator’s (AEMO) first *Integrated System Plan (ISP)*, which provided a welcome focus on future planning to better integrate renewable generation into the National Electricity Market as coal is retired.

Then on 20 August, Australian energy policy was turned on its head. Despite almost universal stakeholder support and qualified acceptance by the Labor Opposition, the NEG was dumped.

Four days later, Prime Minister Malcolm Turnbull was deposed.

His successor, Scott Morrison, signalled a more interventionist and populist approach to energy when he nominated Angus Taylor as the new Minister for ‘getting electricity prices down’.

The Government subsequently announced ‘big stick’ legislation aimed at the generation and retail sector to enable forced divestment of energy companies. It also cherry-picked a handful of the ACCC’s recommendations for implementation, including a retail default market offer and a scheme for the Commonwealth to underwrite new generation.

During these months of turmoil, there were four elections adding fuel to the fire - Wentworth by-election, the Victorian then NSW state elections and the federal election on 18 May.



## OUR FOCUS

In this overheated political environment, Energy Networks Australia significantly increased advocacy, political engagement and strategic policy development.

Advocacy objectives were to educate and inform key decision makers about the work networks are undertaking to manage the challenges and opportunities from the transformation of the sector.

The significant fall in network prices over the past four years was also a focus of stakeholder communications.

Strategic engagement in regulatory processes continued, along with maintaining our commitment to building trust with customers. These initiatives included the 'NewReg' program, customer forums and the partnership with Energy Consumers Australia to deliver the joint annual Consumer Engagement Award.

## WORK PROGRAM

### OPEN ENERGY NETWORKS

The *Open Energy Networks* project (OpEN) with AEMO is building on the ground-breaking work of the *Electricity Network Transformation Roadmap (ENTR)*. The project is developing options for how to best integrate household solar and storage with the grid to maximise customer benefits while protecting the quality and reliability of power supply.

Following the release of the consultation paper in June 2018 and receipt of 62 submissions, more than 1,100 industry stakeholders were engaged in targeted workshops across Australia to work through the complex issues involved.

The input from this best-practice consultation has fed into the next stage of the project, the *Required Capabilities and Recommended Actions* report and a cost-benefit analysis by consultancy Baringa (which did the same for the UK's Open Networks Project) and the CSIRO.

### DER CONNECTION GUIDELINES

Complementary to OpEN has been the release of the distributed energy resources (DER) National Connection Guidelines developed with and for our members.

### TRANSMISSION

A key focus in 2018-19 was the 2018 Australian Energy Market Commission's (AEMC) Coordination of Generation and Transmission Investment (COGATI) review, which recommended the Integrated System Plan (ISP) be included in the rules framework. The Energy Security Board has also taken several steps to make the ISP 'actionable' including streamlining a number of post regulatory investment test processes.

The 2019 COGATI, covering dynamic regional pricing, transmission hedging and access rights, is well underway.



### DECARBONISING GAS - FUTURE FUELS CRC

Work in the past year has continued gas decarbonisation initiatives. Our efforts have helped secure more than **\$92 million** over seven years for the Future Fuels Cooperative Research Centre on projects to deliver practical outcomes to further the development of low-carbon and renewable gas in Australia.

### NATIONAL HYDROGEN STRATEGY

Australia's Chief Scientist, Dr Alan Finkel, is leading the preparation of a National Hydrogen Strategy to be delivered by the end of 2019. Energy Networks Australia has supported the development of the issues papers (released on 1 July 2019) and the kickstart project that aims to identify the technical and regulatory hurdles to injecting 10 per cent hydrogen into gas distribution networks.

### RATE OF RETURN PROCESS

A significant strategic regulatory focus in what was a busy year was engagement with the AER and consumer stakeholders around the Rate of Return Review process.

This involved Energy Networks Australia engaging intensively over 12 months in a collaborative dialogue with the AER Consumer Reference Group and other participants to share perspectives, provide relevant information for the process and explore common goals.

### NEWREG TRIAL

This year also saw the commencement of the 'NewReg' trial - the result of a unique partnership between the AER, Energy Consumers Australia and Energy Networks Australia to promote a more customer-centric and responsive regulatory process. AusNet's Victorian electricity distribution process is the first trial of this initiative, which is designed to build learnings for how to improve future regulation of networks by ensuring customer preferences are better reflected in regulatory proposals and decisions.



**ENERGY NETWORKS AUSTRALIA  
SIGNIFICANTLY INCREASED ADVOCACY,  
POLITICAL ENGAGEMENT AND STRATEGIC  
POLICY DEVELOPMENT**



## BOARD CHANGES

We welcomed Tim Rourke, Chief Executive Officer, CitiPower, Powercor and United Energy, as Chair of the Energy Networks Australia Board in November. Tim has served on the Board since 2016. He succeeded long-time board member and AusNet Services Managing Director Nino Ficca, who was Chair from November 2016. Nino has announced his retirement from the energy industry at the end of 2019.



He has made an extraordinary contribution to the energy sector over his long career and was always an active and valued supporter of Energy Networks Australia.

Merryn York and David Smales are also leaving the Board and at the June 2019 meeting, the Board thanked them for their years of service to Energy Networks Australia.

## INTERNAL TRANSFORMATION

With the relocation of our head office from Canberra to Melbourne in May 2018, the past year has seen several new recruits join the organisation.

While the relocation and strategic focus realignment journey has been challenging, it has delivered a great opportunity for the new team to grow together, combining the skills and experience of existing staff with new perspectives and energy.

I am proud of the high-quality policy work produced by our team and of the growing role we are taking in promoting that work and our members' achievements through our advocacy and thought leadership.

The participation of our members, through our working groups, committees, CEO forums and board meetings, is fundamental to our work. Energy Networks Australia can only succeed if our members remain engaged.

I'd like to personally thank all our members for their ongoing collaboration with us and all our staff for their hard work over what has been a challenging 2018-19.

**Andrew Dillon**  
**CEO**



**STRATEGIC GOALS**



**COMMUNITY TRUST**



**POLICY AND REGULATION DELIVERS TO CUSTOMERS AND NETWORKS**



**TRANSFORMING ELECTRICITY AND GAS NETWORKS**



**ENHANCED CUSTOMER VALUE FROM NETWORKS**



# ADVOCACY AND CORPORATE AFFAIRS

**With the appointment of additional corporate affairs resources between March and May 2018, Energy Networks Australia has been able to undertake significant strategic planning and boost communication and advocacy activities over the past year.**

A **major research project** was undertaken in December 2018 using consultancy Newgate Research to survey 'highly engaged' stakeholders about their views of networks and Energy Networks Australia.

These stakeholders included key government representatives, regulators, industry representatives and consumer advocates. The research was benchmarked against similar work done in 2016.

The survey findings included a majority view that the reputation of both energy networks as a group and Energy Networks Australia had improved in the past two years and that policy work by the secretariat was a key strength for the organisation.

The feedback also highlighted that the increased focus on advocacy and media engagement had been recognised.

The results from this work helped inform the development of a new **Communications and Advocacy Strategy**, which was approved by the Board in March 2019.

**Political advocacy** has been a key priority, focused on federal government MPs, including ministers, government backbenchers, opposition members and key officials. State ministers, opposition members and their advisers have also been the subject of engagement. This has occurred in addition to regular meetings with regulators and the market operator.

The key objectives for advocacy have been education about energy networks and to communicate how members are delivering the solutions needed to support the system transformation for electricity and gas networks while keeping costs for customers as low as possible.

Falling network prices remained an important advocacy topic to address misconceptions following the release of the ACCC retail pricing report in June 2018 and its criticism of historic network expenditure in some jurisdictions.

An **advocacy register** has been developed for circulation to members on a regular basis. This lists engagement and topics discussed. Ninety-six advocacy meetings were held across 2018-19.

Energy Networks Australia also undertook a **member satisfaction survey** in January 2019 - the first in several years. This assessed views about our organisation's credibility, effectiveness in advocacy and communications (external and with members), quality of policy work and value of our committees and working groups. The survey returned an average satisfaction rate of 3.98/5 and feedback has helped influence internal communications activities.



Energy Networks Australia Board meeting with then WA Energy Minister Ben Wyatt, September 2018.

## COMMUNICATIONS

Energy Networks Australia's communications activities seek to complement members' strategies, making comment on and advocating for issues relevant to their interests.

Work continues to demonstrate the value to customers of networks in supporting the transformation of the energy system, focusing on key network strengths:

» Australia's electricity transmission and distribution and gas distribution companies provide safe and reliable electricity and gas to almost every home and business across the country;

- » Network prices have been falling across the country for the past five years;
- » Australia's energy networks are working to enable customers' energy choices and power the nation's transition to an affordable, sustainable energy future;
- » Network businesses are working to ensure increasing amounts of household solar and storage and renewable generation can be safely and effectively integrated into the grid for maximum customer benefit at the lowest possible cost;
- » A more interconnected grid will help lower wholesale prices and support reliability as increasing amounts of renewable generation are built into the energy system;
- » Gas has an essential role to play helping Australia transform to a more sustainable energy future while providing reliable, dispatchable power to support increasing amounts of intermittent, renewable generation;

» Hydrogen offers significant opportunities for Australia to use existing gas networks to deliver low-carbon and renewable alternatives to natural gas, supporting the development of a new national export industry.

These messages have been used in the work we have undertaken over the course of the year, including when making submissions and responding to industry-wide issues

Key Energy Networks Australia projects have been promoted through media and owned communication channels (such as digital media, the weekly EnergyInsider newsletter and monthly Energy Networks Update newsletter).

These projects have included: the DER National Connection Guidelines; Open Energy Networks project; the Innovation in Electricity Networks report; Renewable Gas for the Future report; Heatwaves and Energy Supply fact sheet and the Network Opportunity Maps.



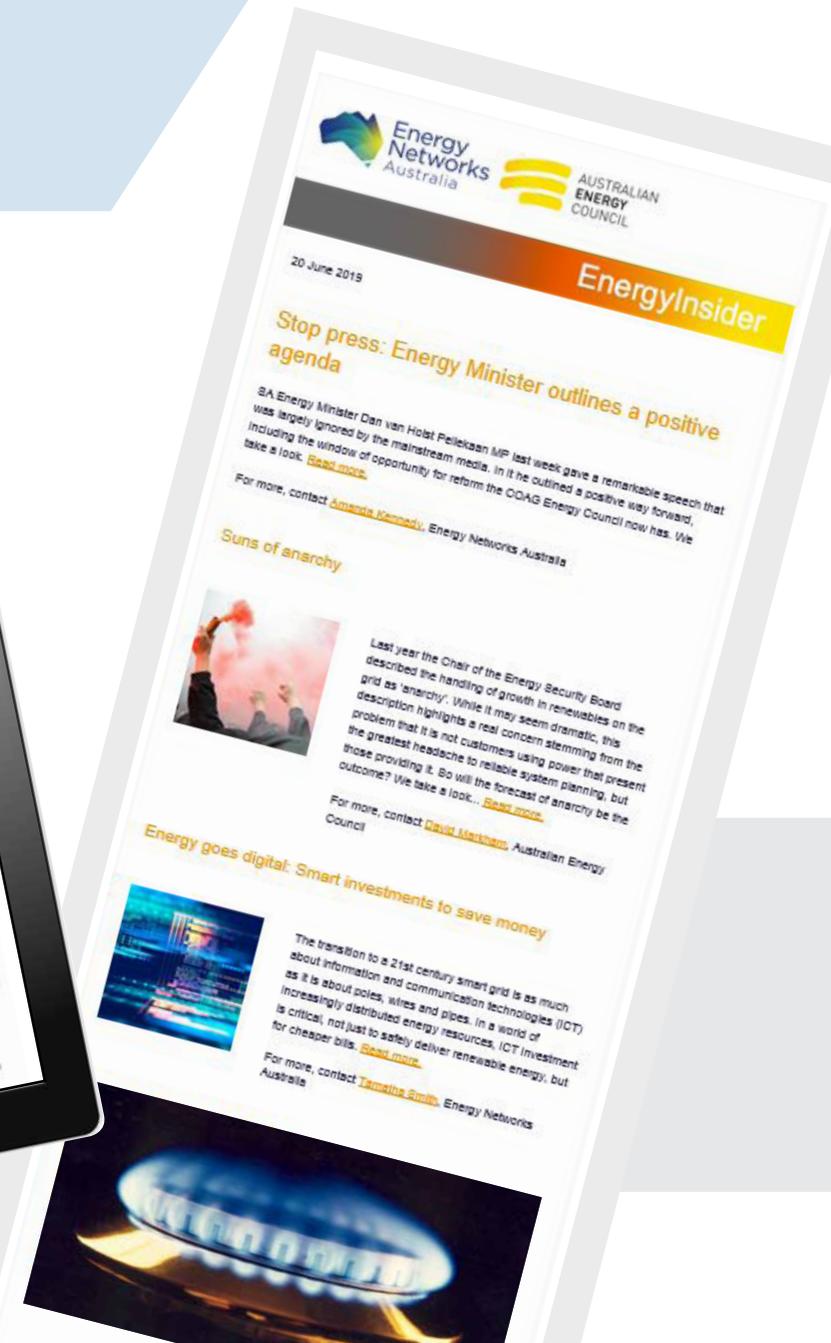
## COMMUNICATIONS TOOLS

Significant effort has been made to refresh and improve Energy Networks Australia's owned communication platforms, which provide invaluable opportunities for advocacy and media engagement.

The secretariat now contributes two articles a week to the **EnergyInsider** newsletter, distributed to about 2500 subscribers, doubling our previous output. These are well-researched, easy to understand articles that utilise engaging images and graphics. The collateral is well-read, with engagement by senior regulators, government stakeholders and others across the sector.

A new **Energy Networks Update** newsletter has also been developed, replacing 'What's New'. This collates relevant external communications and submissions and is distributed monthly to more than 6,000 subscribers, with an open rate consistently over 30 per cent.

**MORE THAN 6,000 SUBSCRIBERS, WITH AN OPEN RATE CONSISTENTLY OVER 30 PER CENT.**



**Key messages** have been developed with member input on common issues to ensure consistency in communications.

A new publication, **Guide to Energy Networks**, has been produced to provide a high-level overview of energy networks to support advocacy efforts. This is distributed via email to members of parliament following elections and is also available on Energy Networks Australia's website.

Energy Networks Australia is developing a **new website** to provide improved user experience and better back-end functionality for staff.

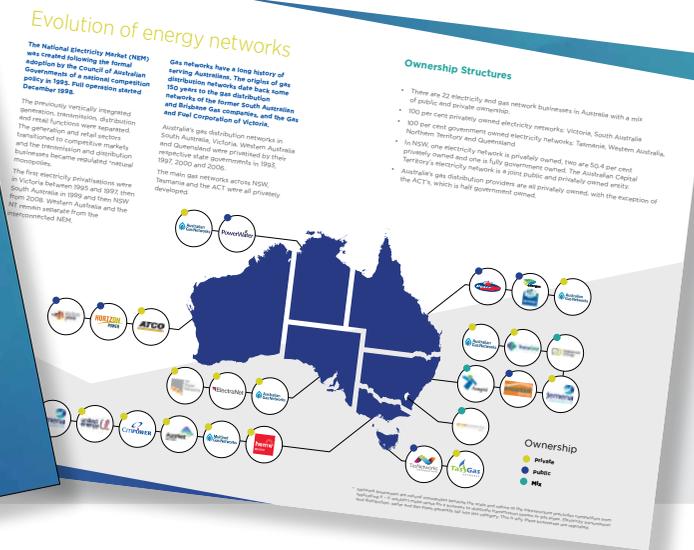
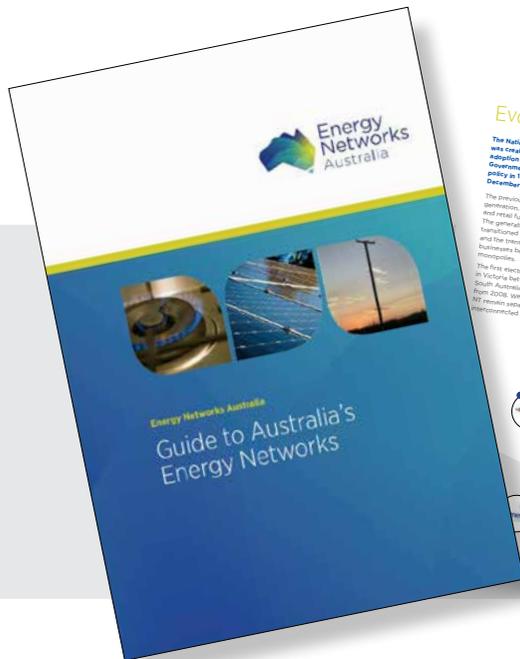
**Digital media engagement has been significantly increased**, with more engaging and regular content (including short videos) produced in-house for LinkedIn and Twitter. The strategy has been to utilise these platforms to promote Energy Insider articles, media releases and media coverage and other work produced by the secretariat that is hosted on the website.

This has multiple benefits in more engagement by stakeholders, growing Energy Network Australia's followers and driving more traffic to the website.

This strategic focus has resulted in an extraordinary increase in engagement and audience over the past 12 months, from 2,986 to 7,362 LinkedIn followers and 3,167 to 3,931 on Twitter.

Average post impressions rates per month on Twitter have increased from 28,217 to 92,612 over 2018-19 with a total for the year of more than 1.1 million impressions.

LinkedIn Impression rates rose over the year from 30,707 in July 18 to 54,736 in June 19 with a total of 416,783 impressions during 2018-19.



## CONSUMER ENGAGEMENT

Engagement with consumer advocates remains a priority for Energy Networks Australia as we work to promote the sector's efforts to enhance customer outcomes from the energy transformation and put downward pressure on network prices.

### CONSUMER ENGAGEMENT FORUM AND THE ENERGY CHARTER

The challenges and opportunities presented by the energy sector transformation were discussed at a professionally facilitated **consumer advocate forum** at SA Power Networks' offices in May.

Consumer advocates from Energy Consumers Australia, Business SA, The Energy Project, Uniting Communities and The Energy Charter attended the Energy Networks Australia event, along with communications and consumer engagement representatives from most member organisations.

With its observer status, the secretariat has also engaged with the **Energy Charter** over the past year. Updates on the progress of the Charter have been shared with all members.



WE WORK TO PROMOTE THE SECTOR'S EFFORTS TO ENHANCE CUSTOMER OUTCOMES FROM THE ENERGY TRANSFORMATION AND PUT DOWNWARD PRESSURE ON NETWORK PRICES



# ENERGY NETWORKS AUSTRALIA INITIATIVES



## OPEN ENERGY NETWORKS

Launched in June 2018, this joint Energy Networks Australia and AEMO project is exploring with stakeholders how to best facilitate the entry of distributed energy resources into the electricity system. It progresses key recommendations from the seminal Energy Networks Australia and CSIRO ENTR.

The consultation process over the past year received 62 submissions and facilitated 16 industry-wide workshops, with more than 20 briefing sessions throughout Australia. More than 1,100 attendees have participated in the consultation.

The next stage of the project kicks off in July 2019 with the release of the Required Capabilities Report. This will detail the critical actions necessary for networks to manage DER integration and provide recommendations to progress this vital work.

## DER CONNECTION GUIDELINES

In March, Energy Networks Australia launched the first of a set of guidelines, developed with all networks, for safe, consistent and efficient connection of solar, storage and battery devices to the grid.

Another key recommendation of the ENTR, this is Australia's first nationally consistent approach for installation of distributed energy resources (DER). The guidelines address low voltage connections applicable to household, commercial and industrial premises.

Work is underway to produce the next set of guidelines to address medium voltage (MV) and high voltage (HV) connections within the distribution system. These guidelines are expected to be released later in 2019.

>1100 ATTENDEES PARTICIPATED

62  
SUBMISSIONS

16  
WORKSHOPS

20  
BRIEFING SESSIONS

## NATIONAL DECARBONISATION STRATEGY

Projects supporting the transformation of Australia's gas networks focused on two elements for the financial year - supporting the development of a future renewable gas industry and continued support for the role of natural gas in the energy mix.

Energy Networks Australia's Gas Committee worked with the CSIRO to develop the National Hydrogen Roadmap and is working with COAG to develop a draft National Hydrogen Strategy. Development of the latter will continue in 2019-20. The submissions made by Energy Networks Australia and its members have been heavily referenced in the recent National Hydrogen Strategy issues papers.

## INNOVATION IN THE ELECTRICITY NETWORK SECTOR REPORT

The Innovation in the Electricity Network Sector report was released at Energy Networks Australia's Future Grid seminar in March 2019. It was an immediate success. The online version has been viewed about 11,000 times - demonstrating the keen interest of stakeholders in members' innovations to support the system transformation.

The report includes 31 case studies from across member networks, highlighting key technical challenges and gaps in innovation needed for grid transformation and optimisation.

Major topics in the report include demand response, voltage management, mini-grids, battery trials, grid transformation, network economics and quality assurance.

# PUBLICATIONS FOR 2018-2019

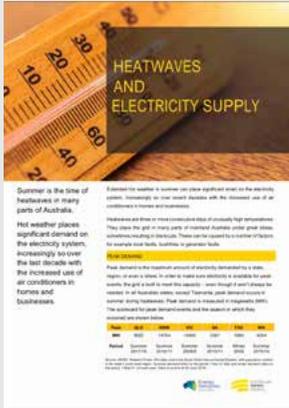


[CLICK](#)

## INNOVATION IN THE ELECTRICITY NETWORK SECTOR

Across Energy Networks Australia member organisations, many innovative projects are being undertaken to address network challenges and improve customer outcomes as the sector supports the energy transformation. Business investment in research and development is being integrated into the system while improving grid resilience at a local and system-wide scale. This report is another product of the ENTR work program.





## HEATWAVES AND ELECTRICITY SUPPLY FACTSHEET

Produced with the Australian Energy Council, this was published in January 2019 to explain the stress heatwaves can place on parts of the grid in summer. It explains peak demand, what happens in a heatwave, the impact of increased solar PV deployment and loss of supply. The fact sheet provides tips for management of power use and how to prepare for summer.

CLICK



## RENEWABLE GAS FOR THE FUTURE

Energy Networks Australia commissioned the *Renewable Gas for the Future* report by Energetics. This report was designed to provide a greater understanding of how renewable gas is being embraced around the world to help reduce emissions in the energy sector. The objective was to also provide options for policy development in Australia to support efforts to decarbonise gas networks. The work is complementary to the National Hydrogen Strategy. The report was formally released at the Renewable Gas in Australia Symposium.

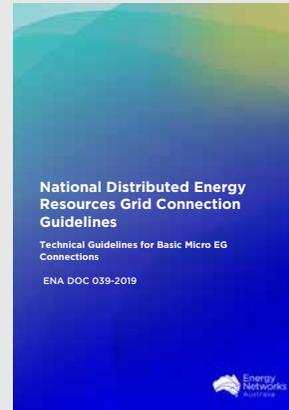
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## BIOGAS OPPORTUNITIES IN AUSTRALIA

Energy Networks Australia also contributed to the report *Biogas Opportunities in Australia*, which was prepared by ENEA Consulting. This report identifies how biogas is creating commercial opportunities internationally and articulates recommendations to encourage the growth of the biogas industry in Australia.

CLICK



## NATIONAL GRID CONNECTION GUIDELINES

Launched in March, these are Australia's first nationally consistent guidelines for the installation of distributed energy resources to the grid. The first in a series, these address LV connections to household, commercial and industrial premises. The guidelines are another product of the ENTR.

CLICK



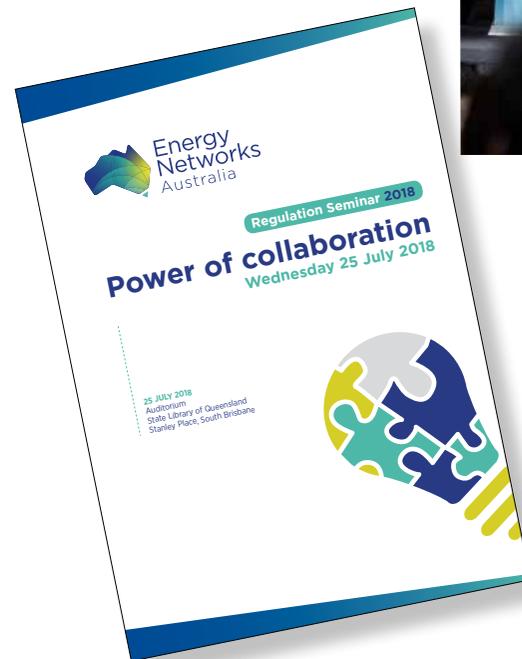
# ENERGY NETWORKS AUSTRALIA EVENTS

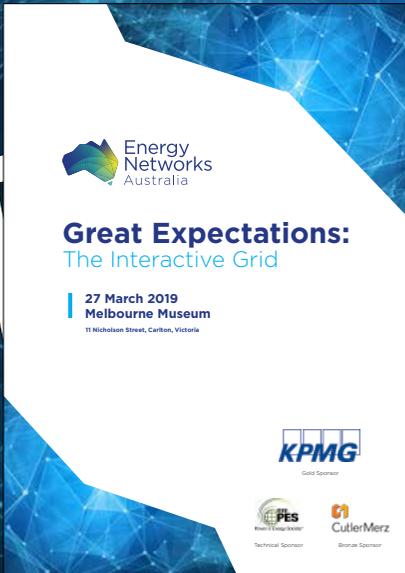
## REGULATION SEMINAR

The annual Regulation Seminar was held in Brisbane on 25 July 2018 at the State Library of Queensland with more than 190 attendees. The theme of the seminar was the 'Power of Collaboration' and the program focused on the role of collaboration in fostering better customer outcomes through the regulatory framework.

It also included a panel session on initial insights from the NewReg collaborative partnership between Energy Networks Australia, Energy Consumers Australia and the AER, which is currently being trialled by AusNet Services.

The international keynote speakers at the seminar were Jon Wellinghoff, former Chair of the US Federal Energy Regulatory Commission. The seminar also heard presentations from Paula Conboy (AER), Tony Robinson (Chair of the AusNet Customer Forum), Allison Warburton (AEMC), Stasha Prnjatovic (AMP Capital).





## THE LINE-UP OF SPEAKERS PROVIDED IN-DEPTH THINKING ON HOW NETWORKS ARE TRYING TO NAVIGATE TO THE GRID OF THE FUTURE

### FUTURE GRID SEMINAR

The Future Grid seminar, Great Expectations – The Interactive Grid, was held on 27 March 2019. The seminar explored the innovations and consideration needed as we move to an increasing number of household solar, battery storage and electric vehicles connecting to the grid.

The line-up of speakers provided in-depth thinking on how networks are trying to navigate to the grid of the future, in the context of Australia being amongst the most decentralised energy systems in the world.

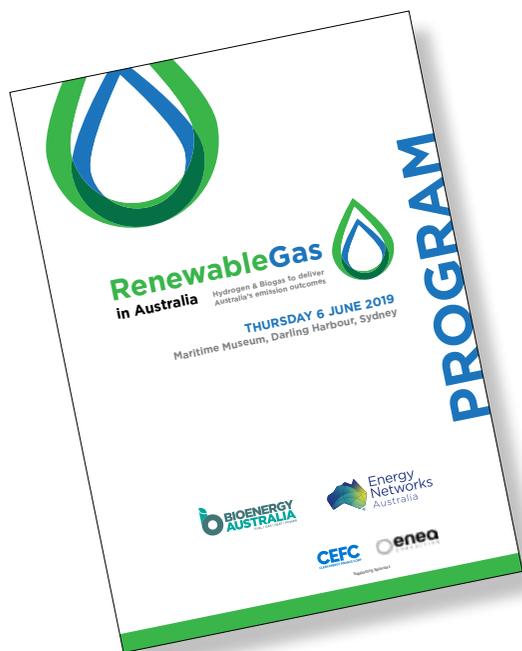
Major topics covered were:

- » Victorian Government message to energy networks
- » The distributed world: Who makes decisions about access and equity?
- » System security and reliability
- » Effectiveness of regulatory environment in driving non-network solutions

- » Distribution network transformation to support DSO evolution
- » Evolution of transmission networks in a distributed energy world
- » Electric vehicles: are networks ready?

The seminar had a stellar line-up of speakers from The Institute of Electrical and Electronics Engineers, the AER, Energy Consumers Australia, Energy Security Board, the AEMC, HoustonKemp Economists, Reposit Power, Tritium, Infrastructure Victoria, networks and EA Technology.

Close to 200 participants attended the event. Overall, the seminar was a major success in terms of speaker content and event organisation.



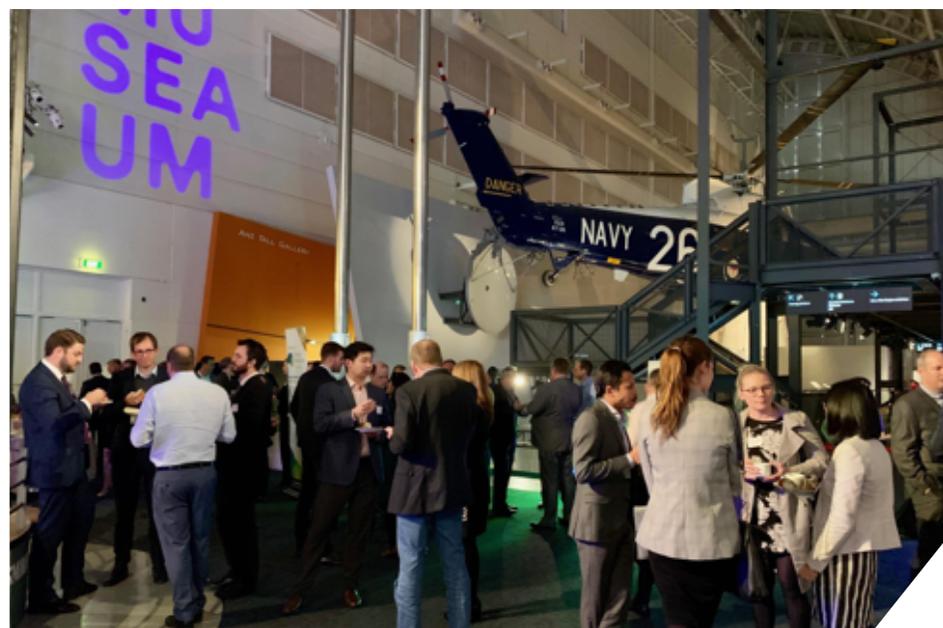
THE EVENT  
SHOWCASED HOW  
RENEWABLE BIOGAS  
AND HYDROGEN  
CAN CREATE CLEAN  
ENERGY OPTIONS

## GAS SYMPOSIUM

Energy Networks Australia and Bioenergy Australia jointly hosted the Renewable Gas in Australia Symposium on 6 June at the Australian Maritime Museum in Darling Harbour, Sydney.

The event showcased how renewable biogas and hydrogen can create clean energy options for residential and commercial customers who use gas while reducing greenhouse gas emissions. Two reports were formally launched at the Symposium, the *Renewable Gas for the Future* report by Energetics, and the *Biogas Opportunities for Australia* report by ENEA Consulting.

More than 100 delegates attended the Symposium. The evaluation showed positive feedback for the program and speakers (rating 4.8 and 4.7, respectively, out of 5.0).



## 2018 ANNUAL DINNER

The Annual Dinner on 27 November provided an opportunity to acknowledge the contribution made by network and industry partners to improve customer energy services in Australia. The dinner was held at the Australian National War Memorial in Canberra and was attended by more than 200 invited guests, sponsored by Zinfra.



A highlight of the annual dinner was the awards ceremony. The annual Industry Contribution Award went to Jennifer Harris from Powerlink for her contribution on regulatory matters and the *Rate of Return Guideline* review work, presented by Ben Wilson, CEO of Australian Gas Infrastructure Group (AGIG).



The Industry Innovation Award was hotly contested this year with the winner TasNetworks receiving the award from the Hon. Angus Taylor MP, Minister for Energy, for its CONSORT Bruny Island battery trial. The runner up was Jemena for its demand response trial: Power Chargers, other finalists were Essential Energy and Evoenergy.





## ESSENTIAL ENERGY WON THE 2018 INDUSTRY CONSUMER ENGAGEMENT AWARD

### CUSTOMER ENGAGEMENT AWARD

Energy Networks Australia's **partnership with Energy Consumers Australia (ECA)** delivering the **annual Consumer Engagement Award** continued for the second year. Essential Energy won the 2018 Industry Consumer Engagement Award for its Customer Engagement Regulatory Proposal.

Western Power's Kalbarri Microgrid project received a highly commended from the judges, other finalists were SA Power Networks, TransGrid and the joint application from Victorian distribution businesses.

The executive level judging panel included ECA Chief Executive Officer Rosemary Sinclair as Chair, Jim Cox from the AER and several leading consumer advocates.

Former Jemena Chief Executive Officer, Paul Adams, was awarded Life Membership of Energy Networks Australia by former Energy Networks Australia Chair, Nino Ficca.

Paul was one of the founding Directors of Energy Networks Australia and served on the Board from 2003 to 2017 in several roles, including Board Chair for three years.



## EN2020 PLANNING

The Energy Networks 2020 Conference + Exhibition (EN2020) will be in Brisbane at the Convention and Exhibition Centre from Tuesday 2 to Thursday 4 June 2020.

Planning is well underway for the event with the launch of the EN2020 website and program development progressing under the Program Development Committee, comprising Energy Networks Australia member businesses. The call for abstracts has opened, with submissions now being received. A new approach has been taken with sponsorship and the exhibition for this event and initial interest for involvement from businesses working within the energy sector has been enthusiastic. The exhibition hall will include more seating areas, industry displays and a prominent area set aside for the poster series. This will include for the first time a student poster competition.

The prospectuses for both sponsorship packages and exhibition options are available at [www.en2020.com.au](http://www.en2020.com.au).



**Energy Networks 2020**  
BRISBANE 2-4 JUNE  
Brisbane Convention & Exhibition Centre

Energy Networks Australia

CONFERENCE + EXHIBITION

**Call for abstracts due by 26 August 2019**

**Sponsorship & exhibition opportunities available and selling fast**

Go to [www.en2020.com.au](http://www.en2020.com.au) to find out how you can get involved.

**This is a prime opportunity to take your place in the transformation of the energy system.**

[www.EN2020.com.au](http://www.EN2020.com.au) #EN2020\_AU

**Energy Networks 2020**  
BRISBANE 2-4 JUNE

**Call for abstracts**  
Conference themes

**Energy Networks Australia's Program Development Committee (PDC) invites you to submit an abstract for consideration for a concurrent session or poster presentation at Energy Networks Conference + Exhibition 2020 in Brisbane, 2-4 June.**

The themes highlight key issues the network sector faces as Australia transitions to a sustainable energy future. The PDC aims to create a program that deals with current challenges but also looks into the future to see how the sector may continue to evolve and change.

Final concurrent session topics and program structure will be informed by the nature and quality of abstracts received.

The PDC is seeking presentations that address new research and insights, case studies, pilots and project results and excellence in technology and service delivery. Those abstracts that are predominantly commercial demonstrations must be able to provide an innovative insight, outcome, technology or service. We encourage abstracts from specialists from across the supply chain and its disciplines and from those with expertise to represent the diversity of interests in the sector.

Please indicate in your abstract submission the related theme or area of interest. You are encouraged to include a video link or file of previous presentations in the abstract submission, however this is not essential.

Theme 1 Customer driven change	Theme 2 Future market design	Theme 3 The evolving role of networks	Theme 4 Our data driven future	Theme 5 The future is coming
<ul style="list-style-type: none"> <li>The role of customers in setting the strategic direction for the network sector</li> <li>Effective customer and community engagement beyond regulatory proposals</li> <li>Customer data and insights leading network design</li> <li>Best practice engagement in core infrastructure activity (social licence)</li> <li>Helping customers understand their energy usage</li> </ul>	<ul style="list-style-type: none"> <li>How data regulation keep pace with changing market conditions, customer preferences and technology changes</li> <li>The current monopoly framework and centralised design - is it working?</li> <li>Can customers and industry collaborate to unlock mutually effective and efficient future regulation?</li> <li>Investability / an "investable" transition</li> <li>National security of critical infrastructure</li> <li>What happens to network costs as electricity and gas demand reduces?</li> <li>ESB post-2025 - do we want a service market?</li> <li>The role of transmission and greater interconnection</li> <li>The role of gas in the supply / demand balance</li> <li>Managing system strength</li> <li>Lessons from other jurisdictions on regulating a system in transition</li> </ul>	<ul style="list-style-type: none"> <li>Managing the integration of solar and storage to maximise customer value</li> <li>Understanding and responding to customer adoption and usage intentions for EV, battery and solar</li> <li>The value of transmission in supporting the energy transformation</li> <li>Maintaining system security in an evolving grid</li> <li>Peer-to-peer trading and other solutions involving groups of customers acting together, independent from networks</li> <li>The rise of the prosumer - individual households and collections of prosumers seeking scale and new opportunities</li> <li>Fringe of grid - stand-alone power system, microgrids</li> <li>Safety</li> <li>Skills gaps</li> </ul>	<ul style="list-style-type: none"> <li>Data as a tool for customers to manage energy in their home</li> <li>The vital nature of data in an increasingly distributed energy world</li> <li>Customer insights and driving business value from data</li> <li>Unlocking data for customer benefit - what is needed for efficient system operation</li> <li>Data protection / privacy</li> </ul>	<ul style="list-style-type: none"> <li>EVs and the transport sector (including fuel-cell vehicles) - threats and opportunities, is the end of the internal combustion engine vehicle nigh?</li> <li>Energy storage to complement intermittent renewable generation</li> <li>Hydrogen - transporting energy through time and space</li> <li>Innovative pilot projects and trials / research projects</li> </ul>

[www.EN2020.com.au](http://www.EN2020.com.au)  
Abstracts due by 26 August 2019

# POLICY AND REGULATION

## NEW REG - INNOVATIVE TRIAL PROGRESSES

The AER, Energy Networks Australia and Energy Consumers Australia (ECA) have continued their joint initiative to explore ways to improve sector engagement and identify opportunities for regulatory innovation. The goal of this initiative is to ensure that customers' preferences drive energy network businesses' proposals and regulatory outcomes.

From March 2018 through to December, the *NewReg Trial* entered its first critical phase of appointment of a Customer Forum and negotiations in the lead-up to the preparation and release of AusNet Services' first regulatory proposal to the AER.

Following release of this proposal further intensive negotiations and wider consultations have occurred before the scheduled formal submission of AusNet Services' next regulatory proposal.

The project partner bodies, AusNet Services, the Customer Forum and stakeholders have also been involved in the ongoing monitoring and capturing of insights from the process.

This will provide a critical foundation of learning to be used in future evolutions of the NewReg model, trials and any associated policy reforms.

**THIS WILL PROVIDE  
A CRITICAL FOUNDATION OF  
LEARNING TO BE USED IN  
FUTURE EVOLUTIONS  
OF THE NEWREG MODE**





## **RATE OF RETURN GUIDELINE**

The AER *Rate of Return Guideline* review process was a major focus of industry coordination and work through to December 2018.

Energy Networks Australia participated in the detailed consultation process around this review. We emphasised the critical nature of sound, well-evidenced and transparent regulatory rate of return decisions impacting on long-lived network infrastructure investment.

Energy Network Australia members also undertook a program of intensive engagement with consumer representatives through the AER Consumer Reference Group (CRG) on the guideline review. This helped deliver the objectives of the *Stakeholder Engagement Framework* industry developed for the review.

As a result of this ground-breaking shared work, networks and the CRG were able to build trust and reach agreed views on some technical parts of the AER's guideline process and estimation approach.

While the final guideline outcomes around estimating the return on equity continue to be of serious concern to networks and investors, network businesses are committed to continuing to work constructively with all stakeholders to ensure issues such as financeability are better accounted for in future reviews.

**WE EMPHASISED  
THE CRITICAL  
NATURE OF SOUND,  
WELL-EVIDENCED  
AND TRANSPARENT  
REGULATORY  
RATE OF RETURN  
DECISIONS**

## **REVIEW OF AER REGULATORY TAX APPROACH**

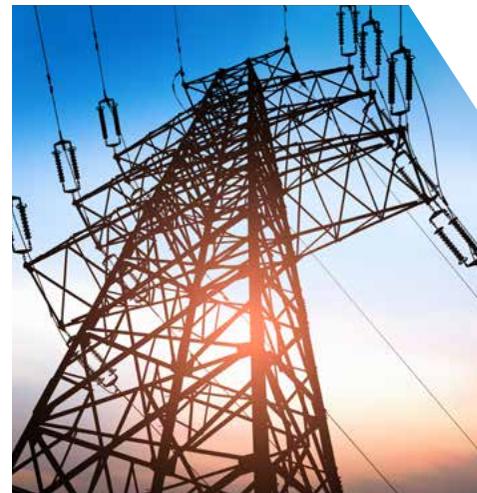
An additional focus through 2018 was the AER's review of its approach to estimating regulatory tax allowances. Some of the key priorities in this review involved ensuring avoidance of measures with harmful retrospective impacts and ensuring the design of future approaches that continue to incentivise efficient decisions which minimise costs for customers.

Energy Networks Australia provided significant policy and technical input into the review on workable approaches to estimating future regulatory taxation allowances. This evidence was considered in the AER's final decision to not develop and implement an actual taxation cost pass-through approach.



## TRANSMISSION RING FENCING REVIEW

The AER has been targeting a review of the transmission ring-fencing guidelines over recent years. Energy Networks Australia requested a delay of this review due to the level of planning and transmission investment reforms underway which could impact it. The AER now expects to start the review in late 2019.



## REGULATORY INVESTMENT TEST (RIT)

Energy Networks Australia responded to the AER's updating of the RIT Application Guidelines for Distribution and Transmission businesses. This response addressed the COAG Energy Council's review of the RIT-T process, the outcomes of the AEMC replex rule change, compliance monitoring of RITs undertaken by networks and provided some recognition of the AEMO inaugural ISP. The AER process was completed at the end of 2018 with improved guidance for the AEMO ISP in the base case and the treatment of high impact, low probability events and improved replex base case definition.

The RIT-T Handbook has been updated and published on the Energy Networks Australia website.

# ENERGY NETWORK TRANSFORMATION

## ELECTRICITY NETWORK TRANSFORMATION ROADMAP

Developed in partnership with CSIRO in 2015-17, work continues to implement the Electricity Network Transformation Roadmap (ENTR). The ENTR defined the approach that will support the huge changes required of Australia's electricity system as we modernise, decarbonise and support customers as they embrace new technologies.

All five priority areas identified in the ENTR continue to be addressed and projects dealing with each are outlined elsewhere in this document. These priorities are:

- » Improving trust with customers
- » Implementing new services to achieve system security
- » Securing a stable carbon policy
- » Incentivising efficiency and innovation
- » Developing essential information tools for a more cost-effective grid

## NATIONAL CONNECTION GUIDELINES

Significant effort and member consultation have resulted in the publication of a set of nationally consistent connection guidelines at the basic and low voltage level for customers wishing to embrace new inverter-connected distributed energy technologies, such as solar PV generation and small-scale batteries.

Guidelines for larger-scale inverter-connected generation and storage will also be released in 2019 for medium and high voltages. Australia's electricity distribution networks will progressively incorporate these national guidelines into their operational practices.

## NETWORK OPPORTUNITY MAPS (NOMS)

Energy Networks Australia, in partnership with the University of Technology Sydney, has released the **2019 update of the Network Opportunity Maps**. These are interactive investment and constraint maps, which identify the most valuable locations to invest in renewable energy and demand management.

This release is part of the continued push by network businesses to improve network efficiency and lower network prices. It also highlights opportunities for the integration of clean energy in the grid, and works towards common digital markets for cost-effective alternatives to building capital-intensive infrastructure, in alignment with the ENTR.





## OPEN ENERGY NETWORKS

Work continues jointly with AEMO on the Open Energy Networks project (OpEn), mapping the capabilities required to facilitate the efficient use of the distribution network and the provision of services to that same network and the wider energy markets beyond.

In the coming year we will update the ENTR, assessing how well the original scenarios used in the CSIRO modelling matched the actual deployment of new technologies, allowing a re-assessment of the journey to a transformed electricity system that maximises the benefits of distributed energy resources and best meets the needs of customers, while ensuring Australia's sustainable future.

## AUSTRALIAN STRATEGIC TECHNOLOGY PROGRAM

The *Australian Strategic Technology Program* (ASTP) is a collaboration between Energy Networks Australia and the Australian Power Institute. The ASTP funds university postgraduate research projects which have the potential to improve asset management and network performance for electricity utilities, as well as exploring non-network solutions.

Under the 2018-19 ASTP, three projects have made significant progress with the final milestone reports due in December 2019. These projects are:

- » Management of Voltages in Low Voltage Networks by University of Wollongong
- » Conductor Condition Monitoring by University of Queensland
- » Quantifying Extreme Bushfire Consequences by Bushfire and Natural Hazards CRC

A one-team approach between universities and networks is working well. Under the 2019-2020 ASTP, two projects have been selected by the Asset Management Committee for scoping. These are electric vehicle integration into the grid and microgrid and edge of grid management. Business cases for these will be developed and universities asked to submit research proposals. Projects will be awarded to the university selected by the scoping working group.



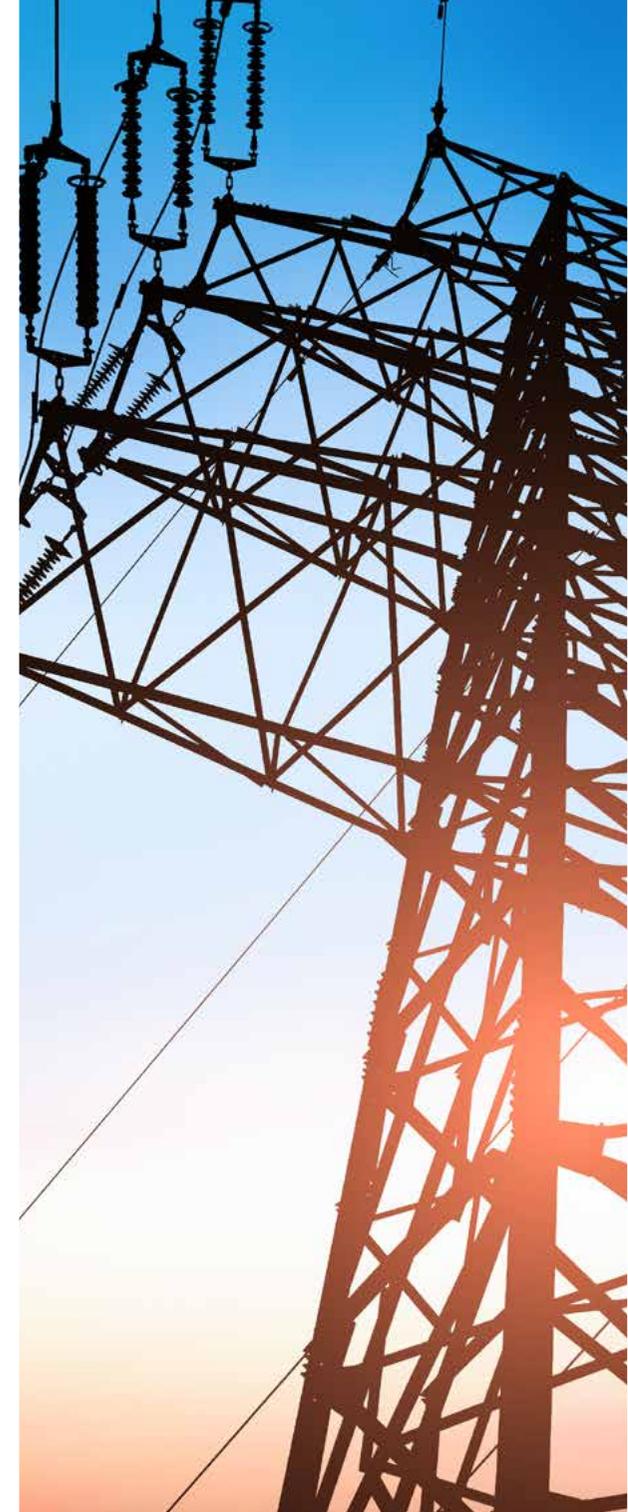
## TRANSMISSION SYSTEM GOVERNANCE

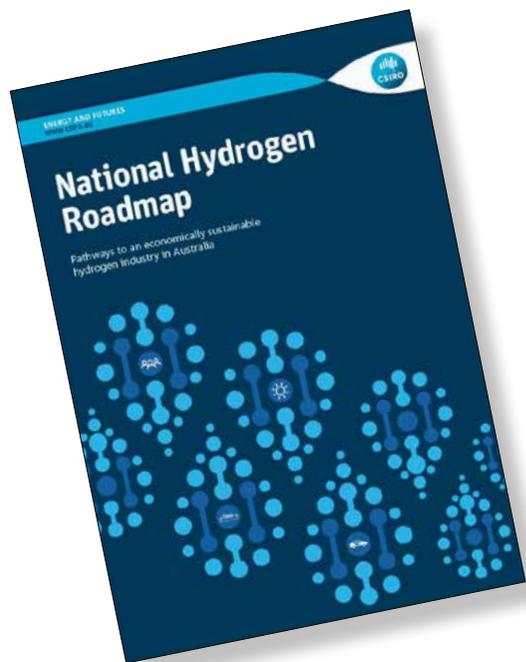
Energy Networks Australia responded to the 2018 AEMC's *Coordination of Generation and Transmission Investment (COGATI) Review* and was successful in influencing a more streamlined ISP framework and RIT process.

The AEMC determined there was no need to increase the level of contestability in the existing transmission framework as this was unlikely to produce a better economic outcome; transmission businesses were best placed to undertake the detailed net benefit test and decide on the best option for ISP projects and TNSPs should remain the party deciding and implementing the investment.

There are at least three significant work programs created by the 2018 COAGTI process in which Energy Networks Australia is engaged:

- » Energy Networks Australia has responded to the Energy Security Board's fast-tracked rule changes to support more timely post RIT-T regulatory processes. These rules have already taken effect and will assist some of the urgent transmission projects outlined in the inaugural 2018 ISP as they complete robust stakeholder engagement and cost/benefit processes in the regulatory investment test.
- » Energy Security Board has undertaken consultation on the governance arrangements for the ISP in the Rules. Energy Networks Australia supports a degree of timing flexibility in the updating of the ISP and the subsequent RIT process, a dispute process for the ISP to ensure the transmission needs identified by the ISP are supported by stakeholders before progressing into regulatory investment tests and no change to the last resort planning powers. Work will continue in this area in 2019-2020 as the Energy Security Board develops the draft rules and any draft law amendments required.
- » The AEMC is reviewing dynamic (sub) regional pricing to provide better locational signals to generators. It has recommended transmission hedging arrangements to ensure generator revenue and financial transmission rights where generators provide partial funding for transmission investment. The report on this review is expected to be provided to the December 2019 COAG meeting. The AEMC proposed timeframes to implement the outcomes by 2022 are considered extremely ambitious. Energy Networks Australia is advocating that any reform in this area should complement integrated system planning (as per the Finkel recommendation) and ensure there is both efficient generation and transmission investment.





## TRANSFORMING GAS NETWORKS

Projects supporting the transformation of Australia's gas networks focused on two elements for the financial year - supporting the development of a future renewable gas industry and continued support for the role of natural gas in the energy mix.

Energy Networks Australia's Gas Committee has worked with the CSIRO to develop the *National Hydrogen Roadmap* and is working with COAG to develop a draft *National Hydrogen Strategy*. Development of the strategy will continue in 2019. The submissions made by Energy Networks Australia and its members have been heavily referenced in the issues papers released on 1 July 2019.

Individual businesses also progressed hydrogen pilot projects. EvoEnergy launched its Hydrogen Test Facility in Canberra on 6 December 2018.

Energy Networks Australia signed two Memorandums of Understanding (MoU) with Bioenergy Australia and Hydrogen Mobility Australia. These MoUs encourage collaboration and information sharing to promote the development of renewable gas.

The other key focus for the year was supporting the role of natural gas in the energy mix. During the year, the committee supported a joint promotional activity whereby gas appliances would be installed and featured as part of The Block TV renovation series. This will air in the second half of 2019.

Energy Networks Australia and its Gas Committee also led the development of a policy paper for the Commonwealth Government to inform the update of the *National Construction Codes*. This engagement resulted in the policy proposal identifying a technology neutral approach to improving the Code.

## FUTURE FUELS CRC

The Future Fuels Cooperative Research Centre (CRC) was formally established in November 2018. The three research programs focus on future technologies for hydrogen production and use, understanding social acceptance of future fuels and applied R&D to ensure gas industry assets can be used to deliver renewable gas in the future.

Energy Networks Australia, through its Gas Committee, worked actively to propose research projects. These efforts have helped secure more than \$92 million funding over seven years, with 27 projects approved as of 21 June 2019. This far exceeded expectations of just one project in each research program.



# GOVERNANCE

## CEO FORUM

The CEO Forum, which comprises CEOs from all Energy Networks Australia Member businesses, provides strategic guidance for the activities of the Board, Secretariat and Member Committees.

The CEO Forum met in November 2018 and in March 2019 to determine the strategic priorities for the Association and form a consensus on industry positions on key matters.

## BOARD

The Energy Networks Australia Board comprises Tim Rourke (Chair), Ben Wilson (Deputy Chair), Lance Balcombe, Rob Stobbe, Frank Tudor, Guy Chalkey, Richard Gross, John Cleland and Stephanie Unwin.

David Smales, former CEO of Energy Queensland, resigned from the Board as of 30 June 2019; David joined the Board in November 2016.

Merryn York will be resigning from the Board in August 2019 before taking up her new position as an AEMC Commissioner.

Nino Ficca resigned from the Board at the AGM on 27 November 2018. Nino had served on the Board since 2010 and as Chair between 2016 and 2018.

Rob Stobbe, CEO of SA Power Networks re-joined the Board as a Director in November 2018. Mr Stobbe is serving as the Energy Networks 2020 Board Representative and as a Member of the Remuneration Committee.

John Cleland, CEO of Essential Energy joined the Board as a Director in November 2018.

Stephanie Unwin, CEO of Horizon Power recently joined the Board in July 2019.





Tim Rourke



Ben Wilson



Lance Balcombe



Guy Chalkley



Merryn York



Richard Gross



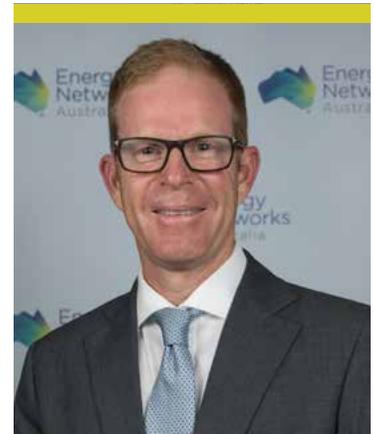
Rob Stobbe



Stephanie Unwin



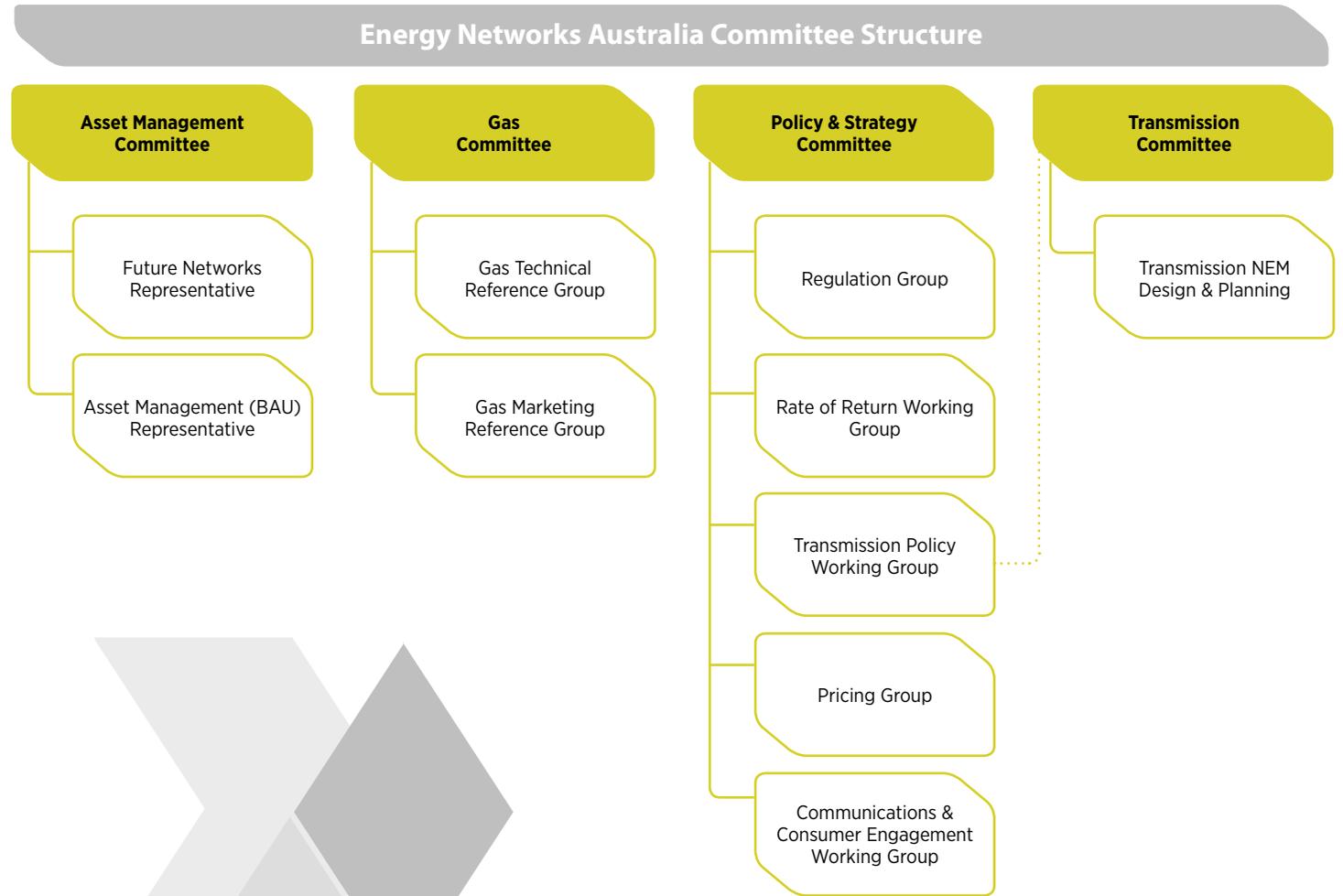
Frank Tudor



John Cleland

**The Board is supported by several corporate governance and policy committees including:**

- » The Remuneration Committee chaired by Tim Rourke
- » The Finance Audit and Risk Management Committee chaired by Guy Chalkley
- » The Policy and Strategy Committee chaired by Richard Gross
- » The Asset Management Committee chaired by Frank Tudor
- » The Gas Committee chaired by Ben Wilson
- » The Transmission Committee chaired by Lance Balcombe



# MEMBERSHIP

As at 30 June 2019, the members of Energy Networks Australia included:

- » ATCO Gas Australia Pty
- » Ausgrid
- » AusNet Services
- » Australian Gas Networks & Multinet Gas Networks (part of the Australian Gas Infrastructure Group)
- » CitiPower, Powercor & United Energy Australia
- » ElectraNet
- » Endeavour Energy
- » Ergon Energy & Energex (part of the Energy Queensland group)
- » Essential Energy
- » Evoenergy
- » Horizon Power
- » Jemena Limited
- » Power and Water Corporation
- » Powerco Limited
- » Powerlink Queensland
- » SA Power Networks
- » TasGas Networks
- » TasNetworks
- » TransGrid
- » Unison
- » Western Power

**Energy Networks Australia**

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