

Energy Consumer Reference Council

Meeting 38, December 2020





Item	Topic
1.	Welcome
2.	Safety moment
3.	Review and ratify minutes of meeting 37
4.	ECRC member updates
5.	Distribution System Operator Strategy
6.	Evoenergy Summer Readiness and Operations
7.	Bushfire and Vegetation Risk Management
8.	Tariff Trial Update
9.	GN21
10.	Other business
11.	Close

Safety moment

A close-up, slightly blurred photograph of a person wearing safety equipment. The person is wearing a white hard hat, a high-visibility orange safety vest over a dark long-sleeved shirt, and a grey safety harness with a large white plastic buckle. The background is a solid dark blue.

Michael Lloyd
Acting Group Manager, Customer Delivery

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Placeholder capex inputs

- For the 2021-25 period Envestra's capex program is:
- aligned with the growth in new infrastructure expenditure on capital, net of capacity development
- Envestra's placeholder capex forecast for 2021-25 is:
- aligned with the capex forecast in the capex plan
- aligned with the capex forecast in the capex plan



Minutes, actions and updates

- Review actions and ratify minutes from meeting 37
- Member updates

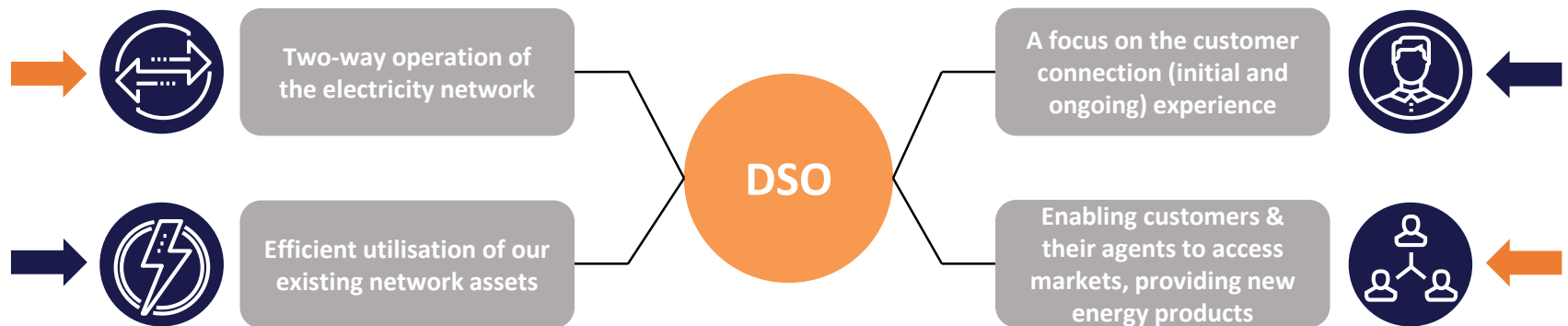
ACTION	OWNER	DUE
ECRC presentation on electrification of the ACT	TBC - potentially coupled with site visit	2021 agenda (TBC)
Presentation / information on Evoenergy's Roadmap to 2045	TBD	2021 agenda
Respond to the question regarding the recently announced instant asset write-off measure in the 2020-21 federal budget and impact on the coming regulatory period for Evoenergy's gas network.	Gillian Symmans	November 2020 ✓
Jules to set up meeting with Geoff to discuss consumer understanding of peak demand tariffs	Giuliana Baggoley	December meeting ✓
Circulate GN21 stranded asset risk deep dive outcome summary to ECRC members	Gillian Symmans	December meeting ✓
Responding to planned outage complainant	Allan Williams	December meeting ✓

Distribution System Operator

What is a Distribution System Operator?

The term Distribution System Operator or 'DSO' is used differently across the industry, for the purposes of this strategy the concept of 'DSO' refers to:

“Two-way energy market for customers that enables efficient utilisation of customer and network assets, to both generate electricity and access new energy products”

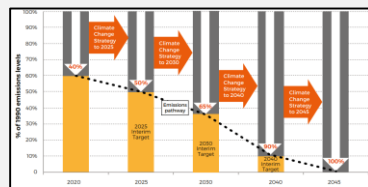


The primary aim of the DSO strategy is to **manage the integration of distributed energy resources** (DER) within the Evoenergy network.

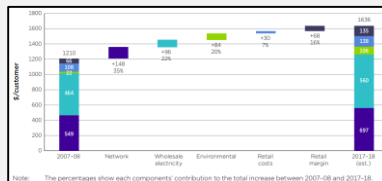
The Energy Landscape

There are several drivers that have resulted in and increased uptake of Distributed Energy Resources (DER), including batteries, in the ACT.

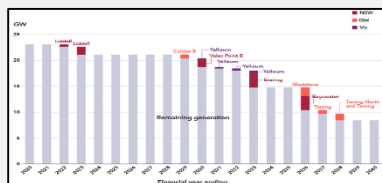
Drivers



Emission Reduction Targets



Rising Cost of Energy



Decentralisation

Election Commitments



\$100M in battery incentives



\$50M in electric vehicle incentives

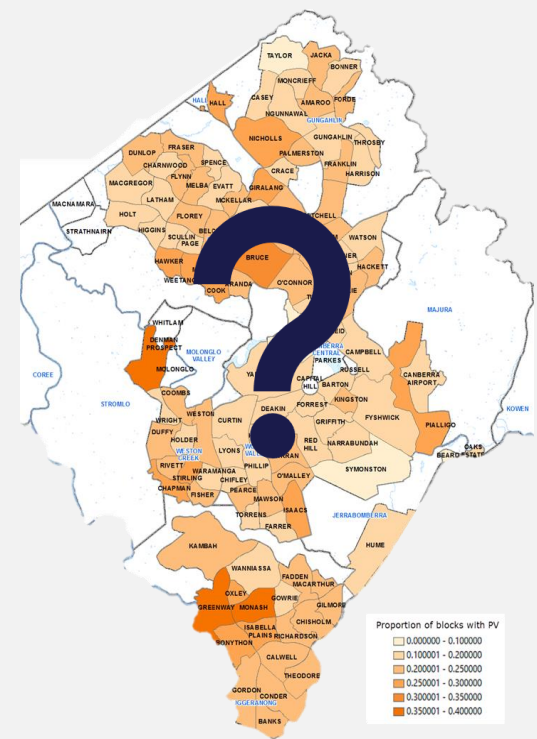


\$150M in low interest solar loans



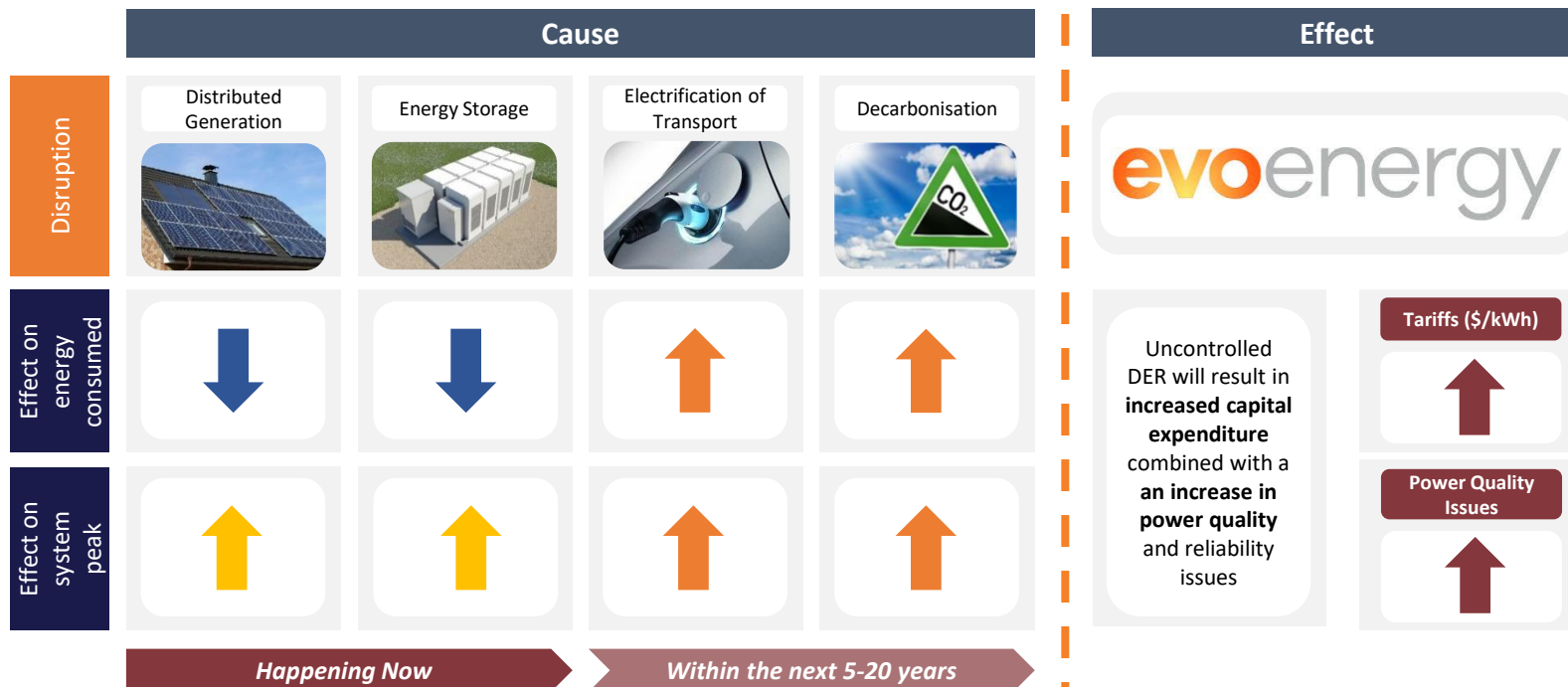
90 all-electric buses

Effects



What is the problem?

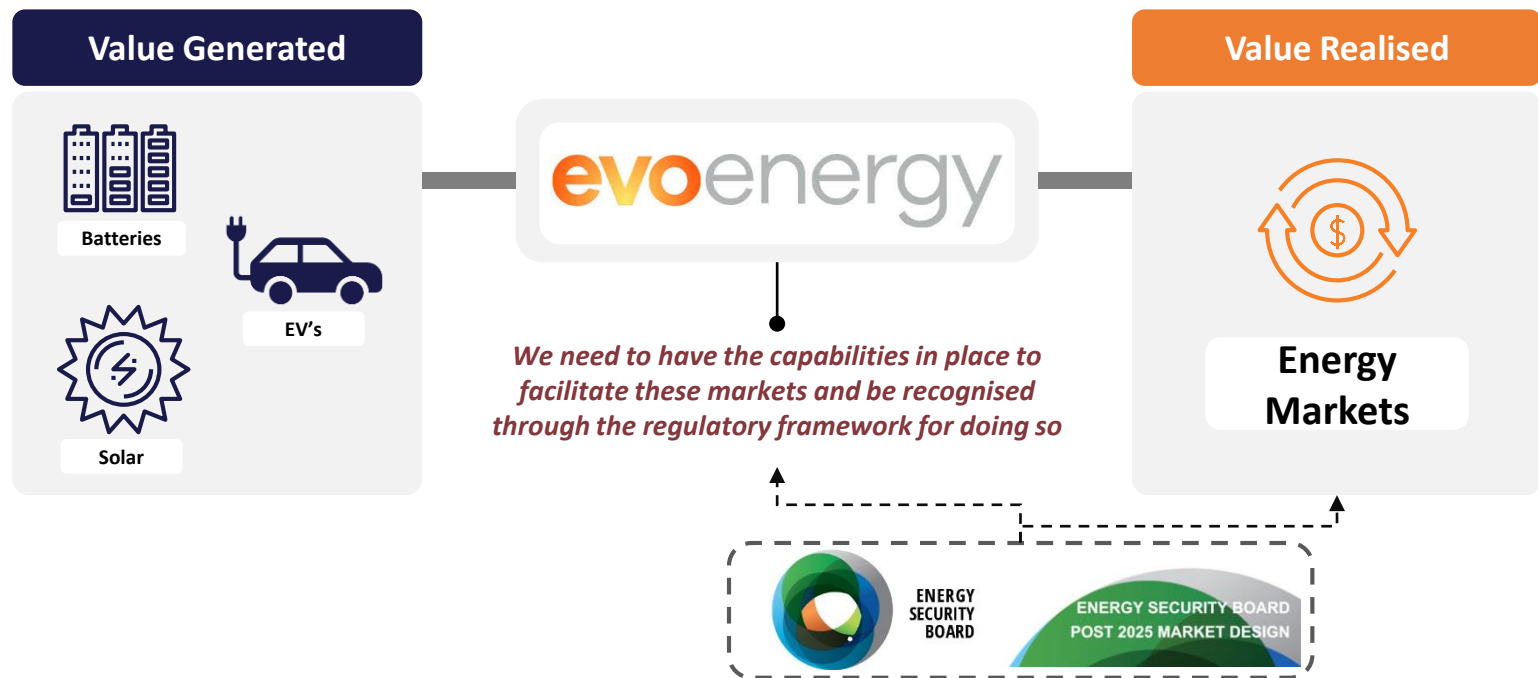
There are several technical issues associated with **uncontrolled** uptake of DER in the ACT.



Across the NEM, networks are finding that network investment is increasingly being **driven by generation** and no longer just load.

Where are the opportunities?

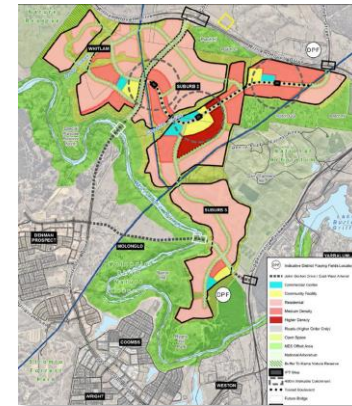
The opportunity for Evoenergy is to be ready for these changes in a manner that is determined to be prudent and efficient by the AER and supports new market structures.



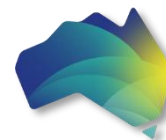
This will enable Evoenergy to manage DER integration within the technical limits of the grid while enabling customers to access new markets and energy products.

What are we doing?

- Active Innovation Projects
 - Molonglo RIT-D
 - Community Batteries – West Belconnen and Jacka
 - Residential Battery Trial – Ginninderry
 - Realising Electric Vehicle-to-Grid Services (V2G)
- Transition to a Distribution System Operator (DSO)
- Industry and Government Activity



Molonglo Development



Energy
Networks
Australia

ARENA



Australian Government
Australian Renewable
Energy Agency

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Questions for the ECRC:

- How would you like to be engaged on the DSO transition?
- What do you want to see as we progress with the DSO transition?
- How do you and your members define value when it comes to DER?
 - Financial
 - Green
- What do you think the potential customer impacts/additional opportunities are of implementing a change like this?
- What does this DSO transition mean to you?

Allan has worked with many different team members over six years



The background of the slide is a photograph of a person wearing safety gear, including a white hard hat and a high-visibility orange safety vest. The person is also wearing a grey safety harness with a large white buckle. The image is partially obscured by a dark blue gradient overlay.

Evoenergy Summer Readiness and Operations

Brad Eagle
Acting Group Manager, Network Services

What's wrong with summer?

- Storm season
- Bushfire season
- Heat - staff and community welfare, TOBAN
- High loads
- Limited equipment ratings – outages have far greater consequences



Early preparation

- Bushfire mitigation - line inspections and patrols, vegetation management
- Review long-term load and weather forecasts
- Works planning (seasonal)
- Limit long outages with high customer numbers
- Limit high criticality works - enables flexibility
- Extra care taken for life support customers
- Earlier outages where possible
- Network solutions - RAPS, reclosers, intellirupters, ABC

In the heat of the moment

Daily stand-ups

- Assess short-term conditions forecast including temperature, winds, TOBAN
- Review planned works
- Review customer situations
- Decision-making

Work crew rotation and increased field support

Default to 'fill-in' works



Community Engagement

Emergencies, faults & outages

Electricity **13 10 93**

Gas **13 19 09**

24/7 hotline

General electricity enquiries

13 23 86

[Online general enquiries](#)

Open between

7.30 am – 5.30 pm

Monday to Friday

Visit our outages section for more information on [planned and unplanned outages](#)

General gas enquiries

13 23 86

Open between

8am – 6pm

Monday to Friday

Media enquiries

0414 515 359

media@evoenergy.com.au

24/7 hotline - for media enquiries only
Outages

Social Media

<https://twitter.com/evoenergyACT>

<https://www.facebook.com/EvoenergyACT/>

<https://www.instagram.com/evoenergyact/>

https://www.youtube.com/channel/UCpc-Kecpse7e_kObl-WIDRg

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Vegetation and bushfire risk management

Bronwen Butterfield
Acting Group Manager Major Projects

Introduction

- Obligations – urban and rural / bushfire zones
- How we execute our hazard reduction programs
 - Working with customers in urban areas
 - Risk mitigation in bushfire zones
- Monitoring and reporting
 - Bushfire Operations Plan
 - Vegetation Works Plan
 - Formal Safety Assessments
- Strategic approaches
 - Asset risk assessments and plans
 - Stakeholder engagement and working together
 - Research



Obligations

Emergencies Act 2004 - Strategic Bushfire Management Plan (ESA)

- All landowners and utilities with assets in the **Bushfire Abatement Zone** to prepare a **BUSHFIRE OPERATIONS PLAN** annually.

ACT Utilities (Technical Regulation) Act 2014 - Utilities (Technical Regulation)
Electricity Powerline Vegetation Management Code

- URBAN AREAS
 - Evoenergy must inspect vegetation near assets in **private property** in urban areas and inform customers of encroachments
 - Evoenergy must inspect vegetation near assets in **public space** in urban areas and maintain safe distances. (Territory owned land)
- BUSHFIRE ABATEMENT ZONE
 - Evoenergy must inspect and maintain safe clearances of vegetation from assets in the **Bushfire Abatement Zone**, and submit a **VEGETATION MANAGEMENT (BUSHFIRE AND ENVIRONMENTAL WORKS PLAN)** to the UTR annually.

- Emergency Service Authority
- Utilities Technical Regulator (ACT)
- IPART (NSW)
- Conservator / PCS
- TCCS (City Services)
- ACT Heritage Council

Working with customers in urban areas

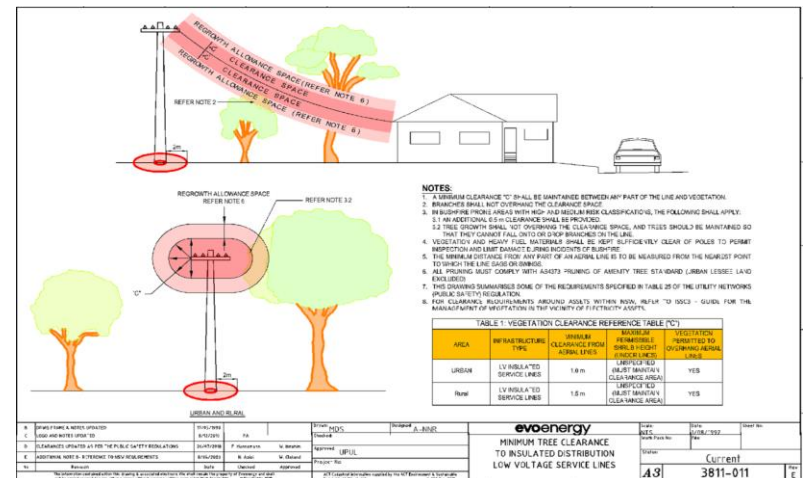
We separate the ACT in three sectors and have a cyclical program to inspect vegetation encroachments.

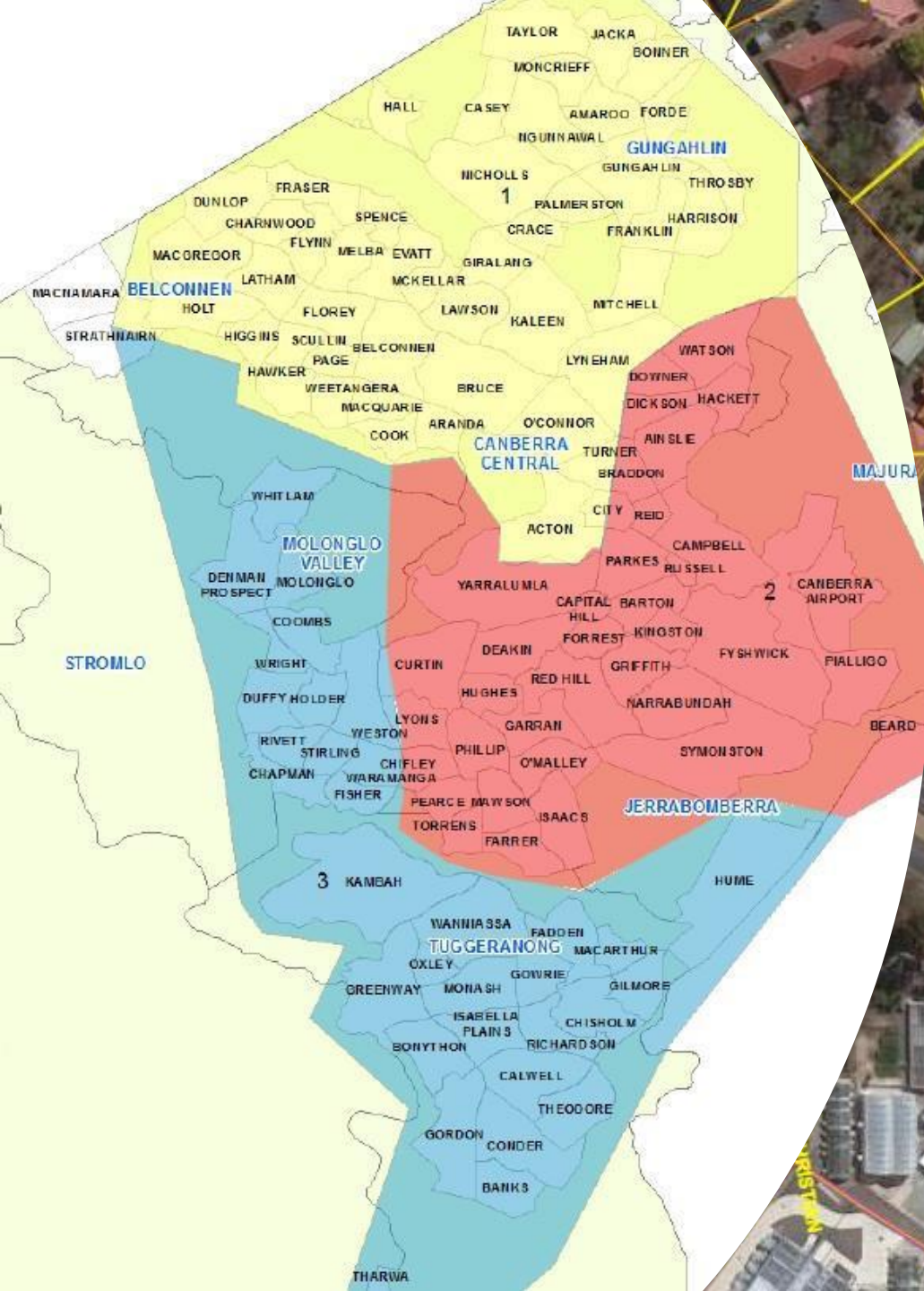
Private land

- Customer's responsibility keep vegetation away from power lines.
- Evoenergy sends letters and reminders to customers.
- If a customer ignores, Evoenergy must remove the hazard and bills the customer.

Territory Owned Land – open space

- Evoenergy maintains vegetation clearances in open spaces.

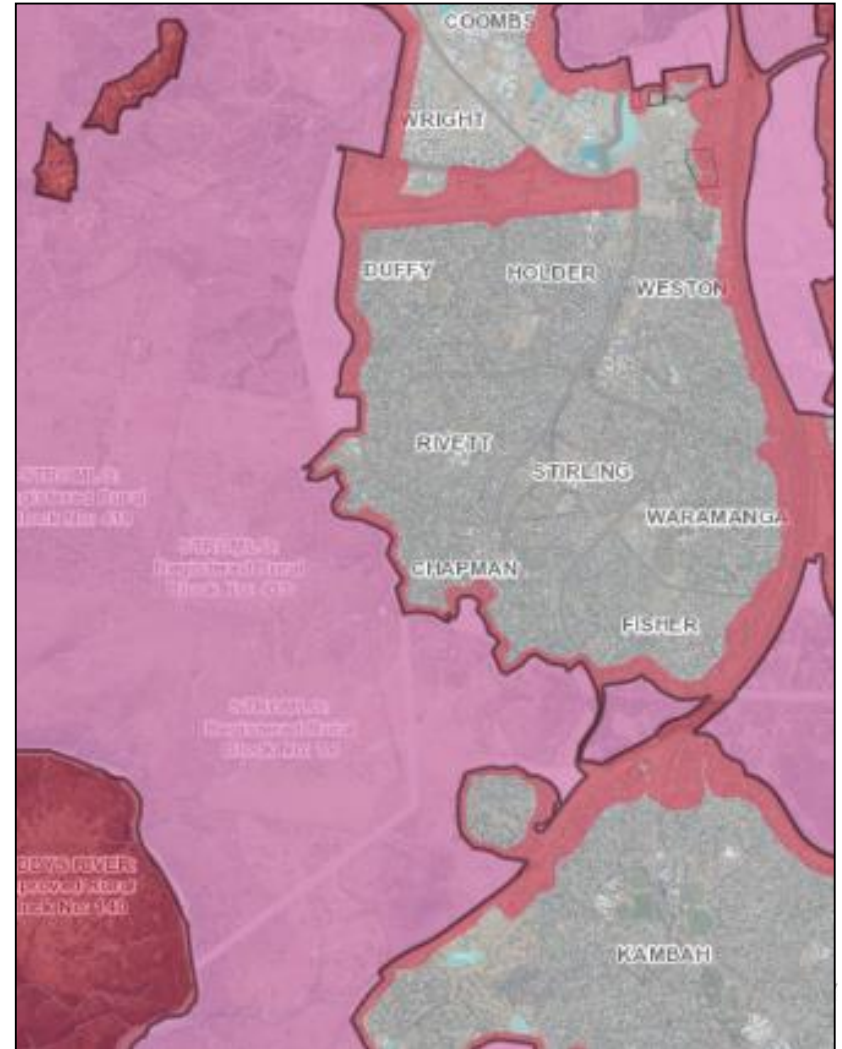
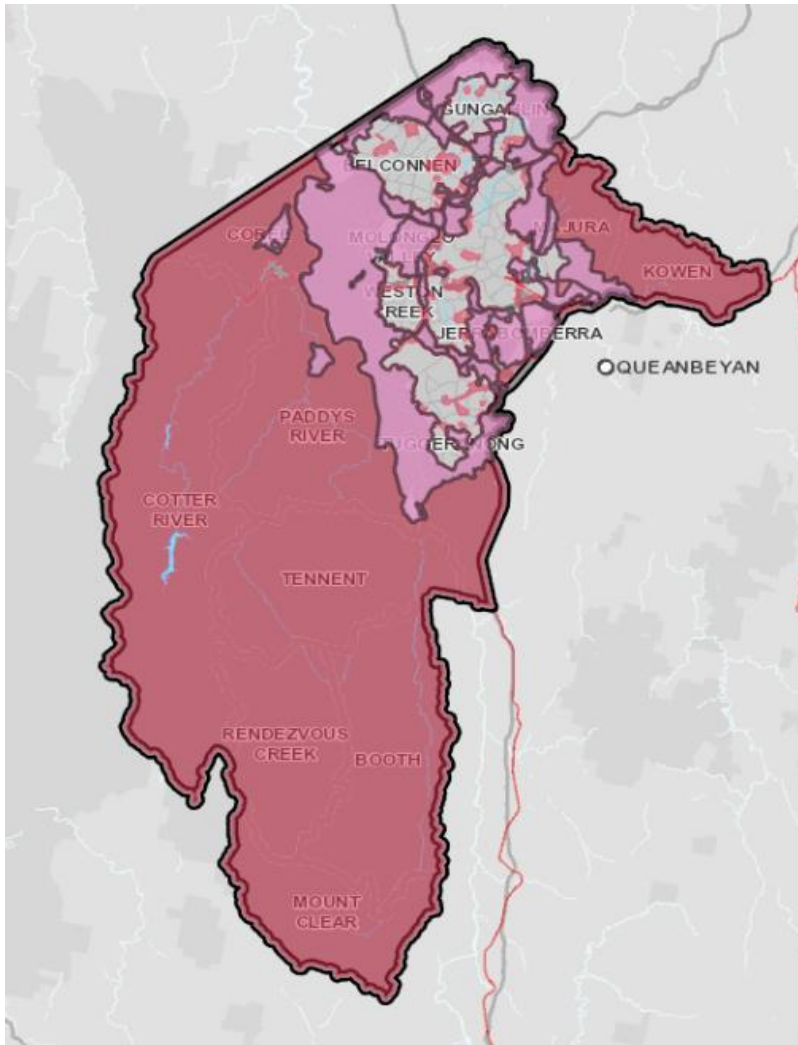




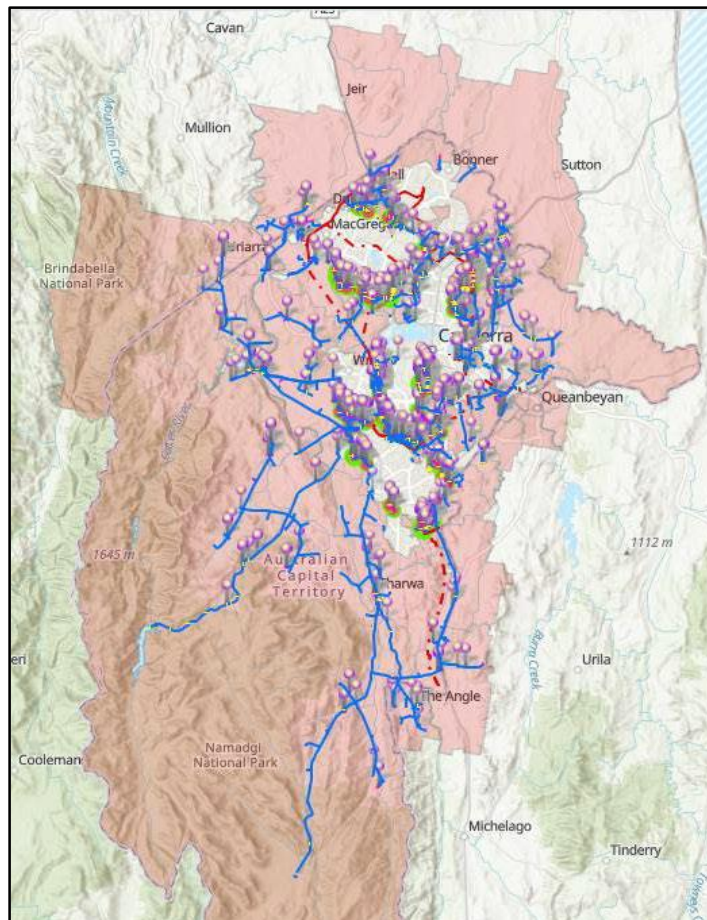
Bushfire risk mitigation

Inspection completed by 30 April annually

Bushfire program vegetation encroachments and pole repairs by 30 October annually

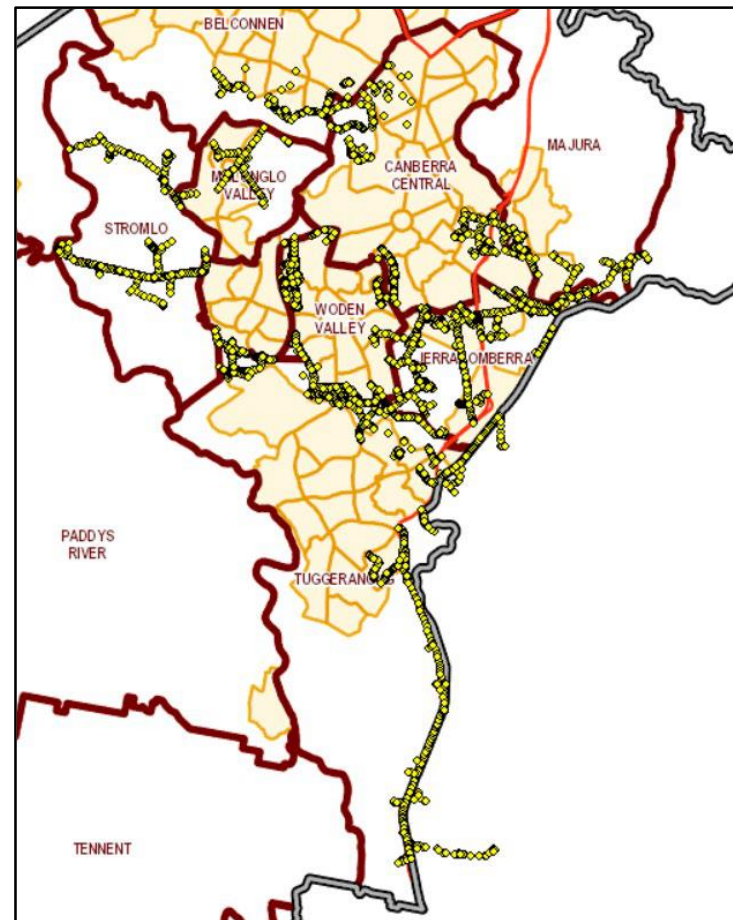


Vegetation encroachments/defects



Area Inspected	# Spans Inspected (Aerial)	Inspected KMs	# BOP Action Level A BAZ - P1 and P2 Defects (Span)
Bushfire Abatement Zone + Rural (unleased land)	4642	388	534
Bushfire Abatement Zone + Rural (leased land)	3140	229	408

Overhead assets defects

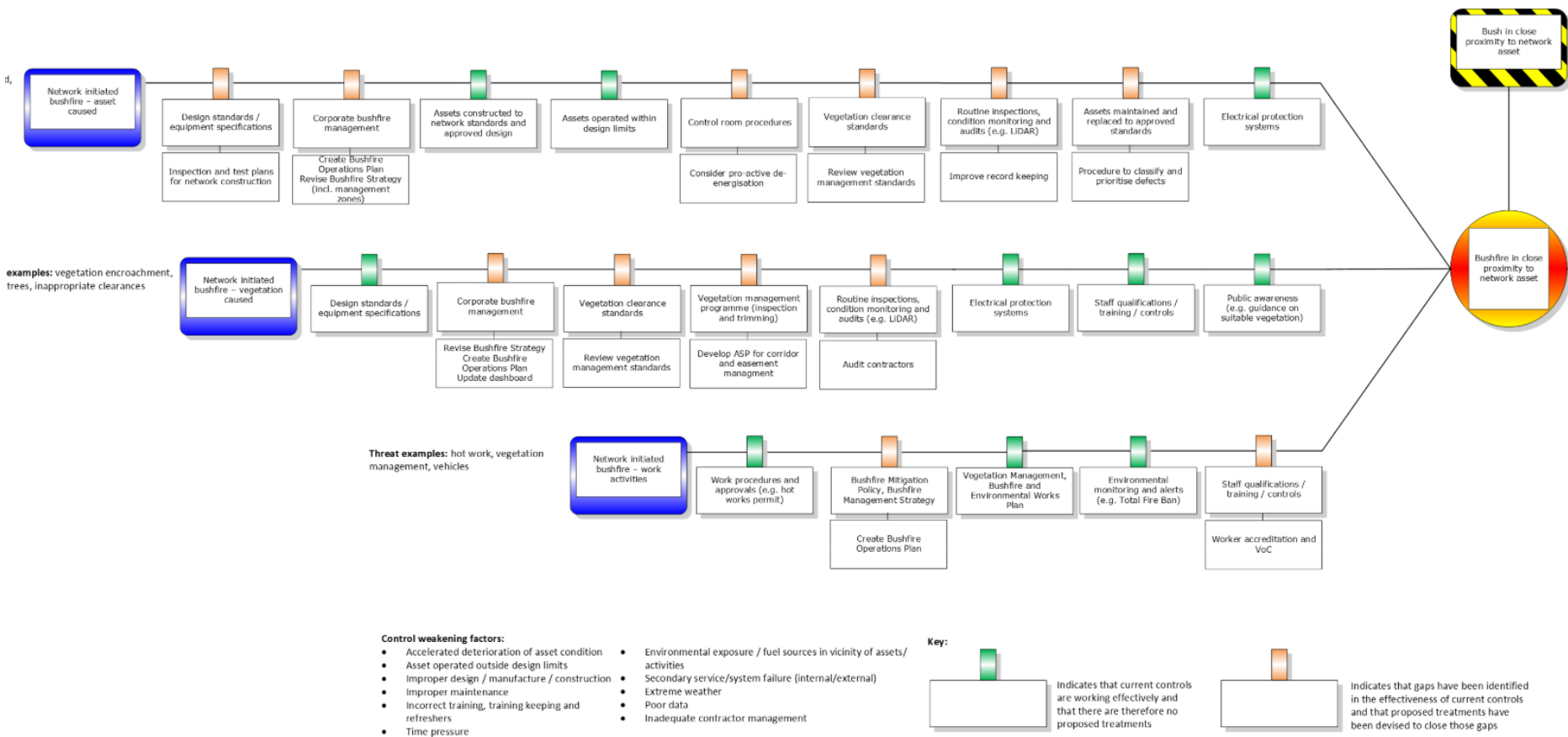


Area Inspected	# Assets Inspected (Aerial)	# Assets Inspected (Ground)	# BOP Action Level A BAZ - P1 and P2 Defects (Job)
Bushfire Abatement Zone + Rural	4834 (Sector A,B,C)	3210 (Sector B,D)	98
Transmission Assets	1479		0

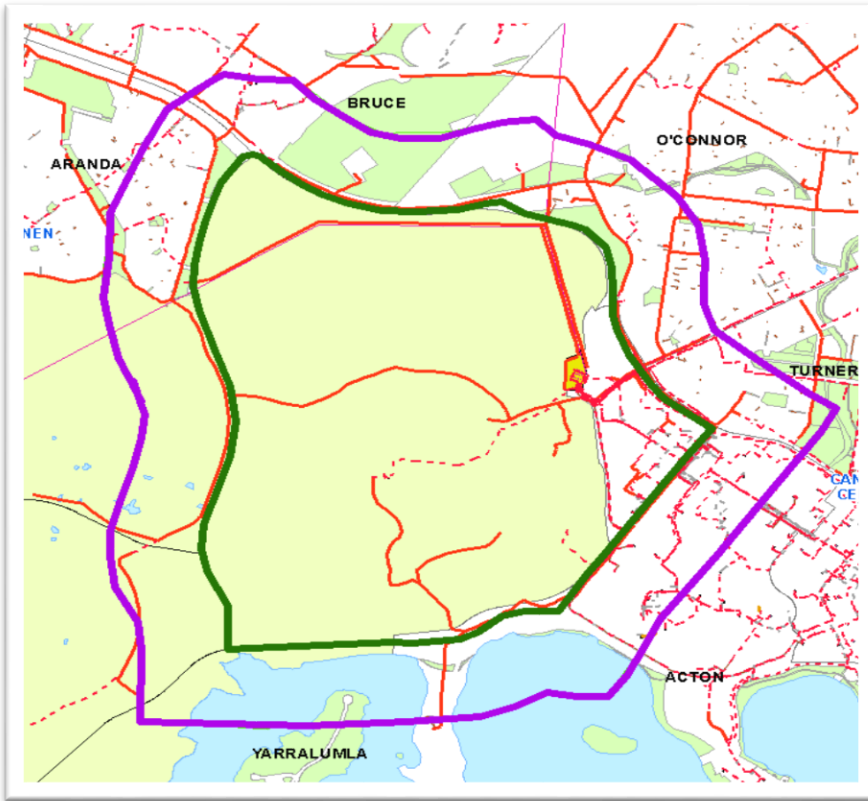
EVOENERGY BUSHFIRE OPERATIONS PLAN 2020 - STATUS DASHBOARD 30 November 2020

Action	Responsible	Timeframe	Status Q1	Comments
			At 22 Sep 20	
Asset Inspections - Aerial	Asset Manager - Asset Inspections and Vegetation Management	By 30 April	Completed 30 April	
Asset Inspections - Ground	Asset Manager - Asset Inspections and Vegetation Management	By 30 April	Completed 30 April	
Review defects, prioritise bushfire works and package	Asset Managers	By 30 May	Completed 30 May	Vegetation defects - 534 network spans and 408 private trees Overhead asset defects - 98
Identify any other asset management works for hazard elimination, engineering or detection controls during the year.	Asset Managers	By 30 May	Completed 30 May	Interruption installed at Black Mountain area.
Implement BOP				
Undertake vegetation defect clearances	Asset Manager - Asset Inspections and Vegetation Management	By 1 October	100% complete 534 spans cut	Completed 26 September 2020
			99% complete 403/408 private vegetation cut	Contractor and outages required
Undertake Action Level A overhead network defect works	Asset Manager - Overhead Networks	By 1 October	94% complete 92/98 jobs completed	Delay due to wet weather creating boggy ground.
Undertake critical asset bushfire hazard management	Asset Manager - Zones Asset Manager - Ground Assets	By 1 October	5 zones for veg cutting completed	(Note: Not in BAZ areas) Completed in November
Implement other asset management works for hazard elimination, engineering or detection controls during year.	Asset Manager	By 1 October	Completed as planned	

Formal Safety Assessment - Bushfire



Protecting critical assets – Civic Zone Substation at Black Mountain Reserve



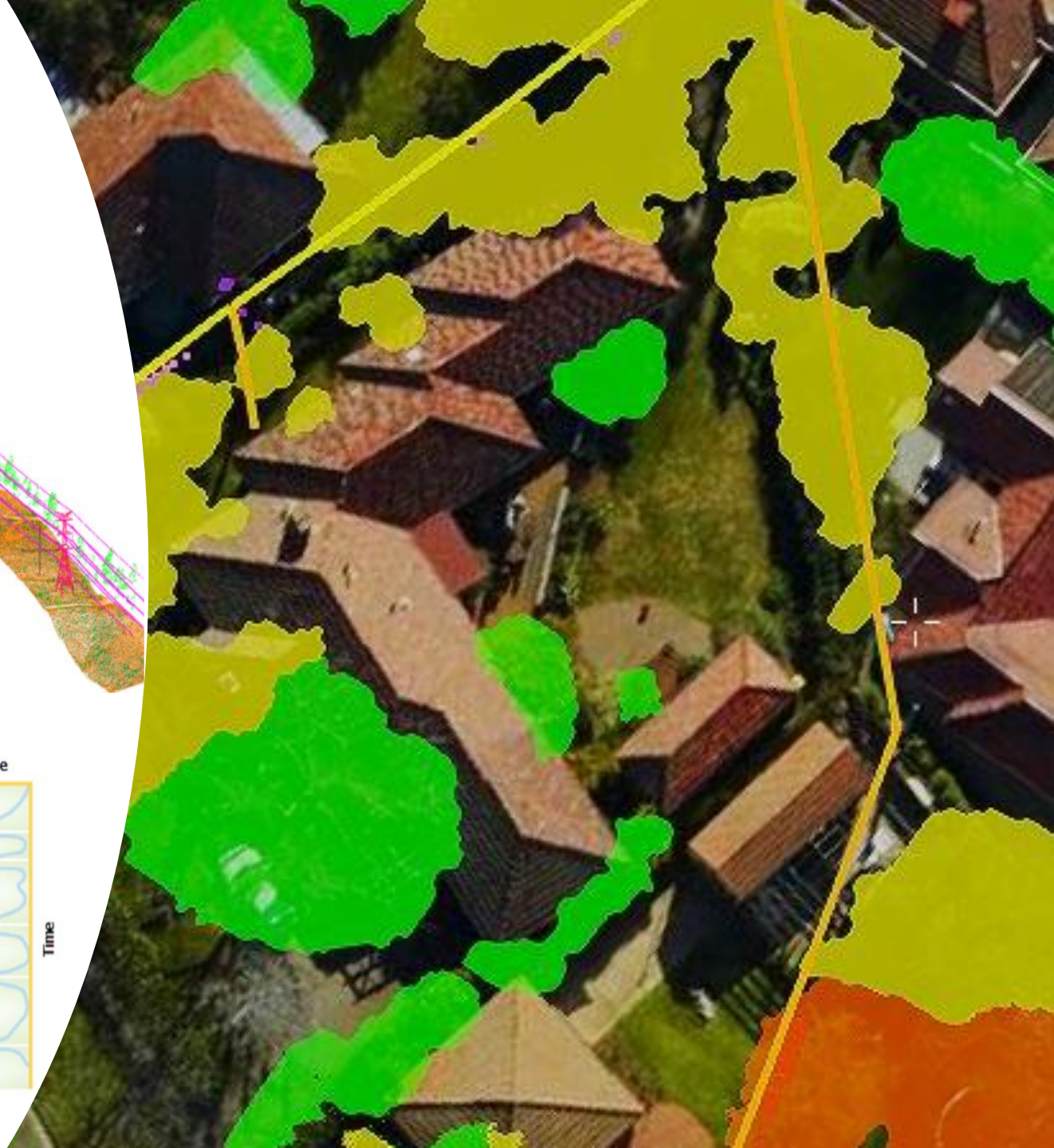
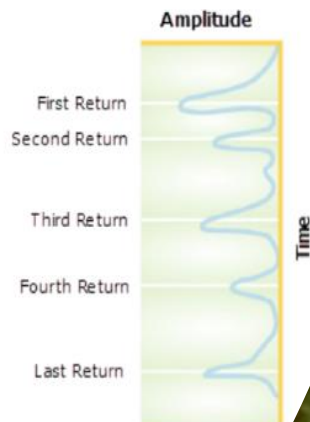
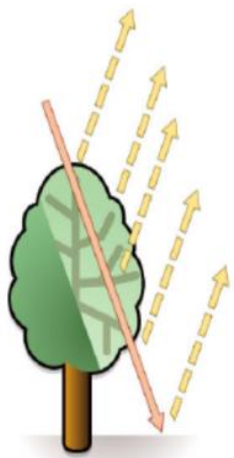
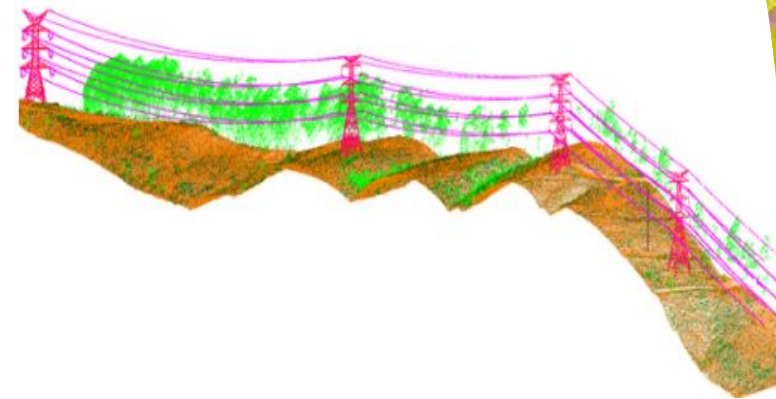
Failure Modes Engineering Assessment

- Zone Substation
- Overhead HV transmission and distribution lines
- Overhead LV lines



- Intelliruptor effective detection
- Vegetation buffer needs expanding
- Engineering options to increase insulation or move overhead lines
- Critical assets recognised in ESA Strategic Bushfire Management Plan

Opportunities with data collection



Research Local

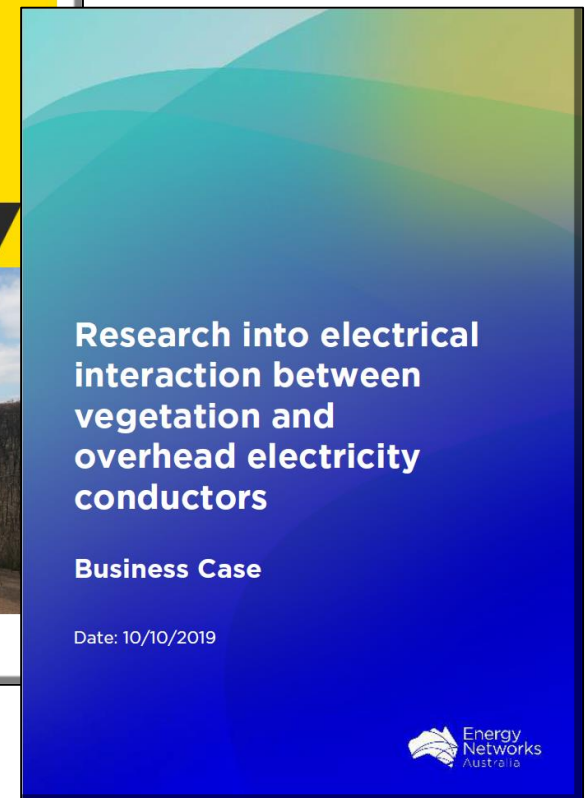
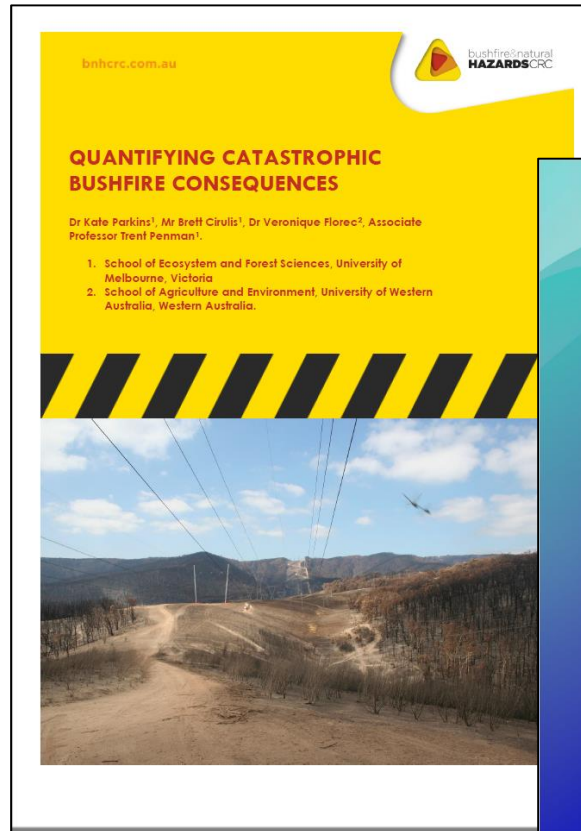
Bureau of Meteorology – damaging Winds project

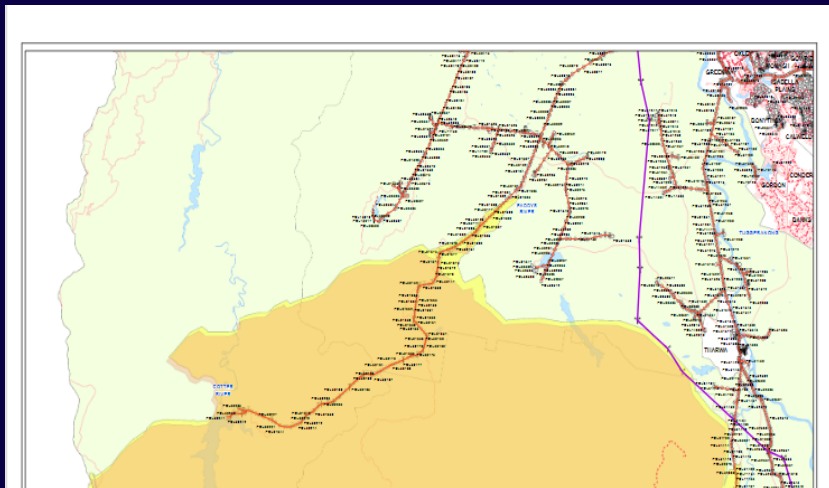
Predict the intensity, geography and seasonality of severe winds across the ACT.

The largest potential for damaging winds would be expected in winter and in areas of elevation above 1000m such as in the southwest of the Territory.

Evoenergy will try to overlay the network and outage data on wind maps, to understand and contextualise the implications before progressing any further research.

Industry





Orroral Valley Fire

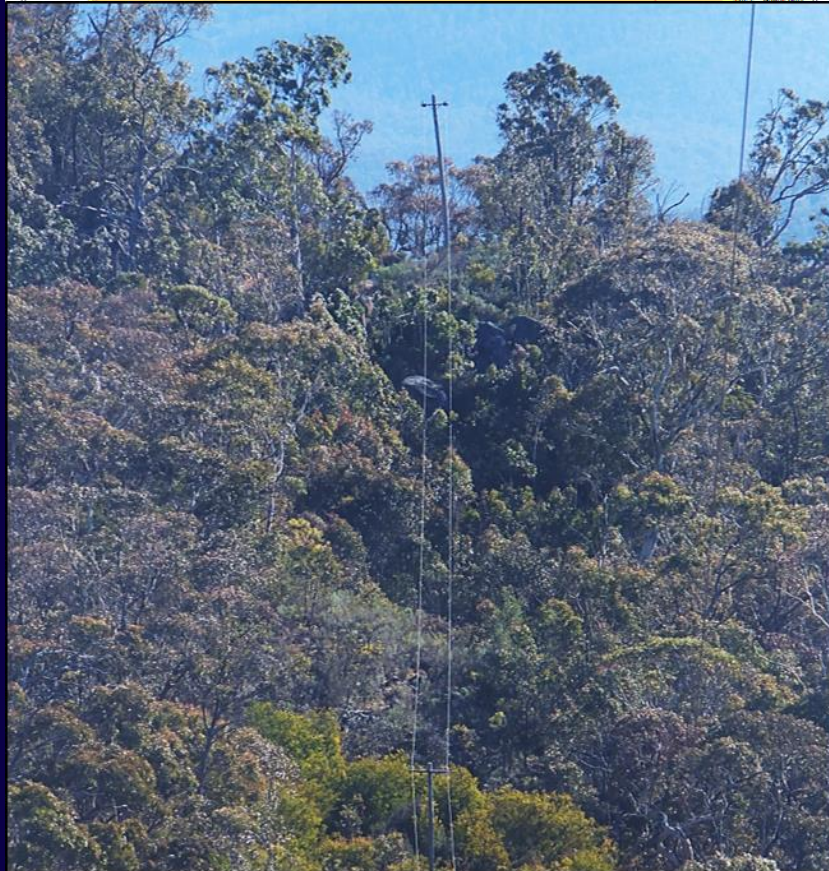
Assets lost/affected – 1 on live network in Corin

Customers affected – 3

Fire size – 86500 Hectares approx

Remote Area Power Supply – Eliminate bushfire hazard

- Gudgenby ~ 7 km of line denergised.
- Corin ~ 8 km of line denergised





Beard



Beard



Corin



Corin



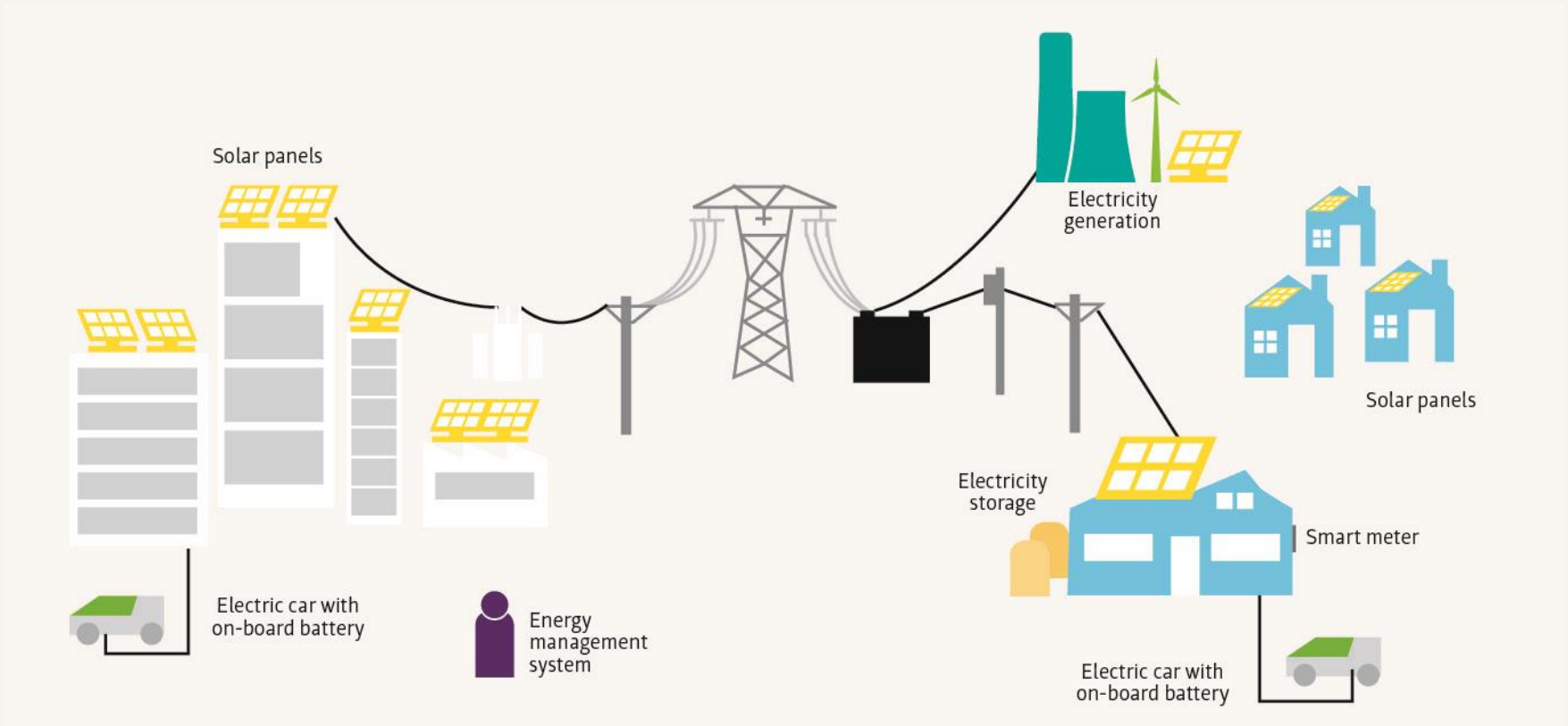
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Evoenergy Tariff Trials - update

Emily Brown
Group Manager, Regulatory Pricing

The electricity network is changing

The network is transitioning from the traditional model to an interactive system.



We want to give our customers the energy solutions they want by driving innovation and technology to meet their changing needs.

Two tariff trials

1. Residential tariff trial

Evoenergy Prosumer Tariff Trial

- Tariff designed for residential customers with renewable technology.
- Explore how renewable technologies can help balance peaks and troughs in electricity supply.

A great opportunity for participants

- Help to improve how we use the electricity network.
- benefit the broader community.



2. Large-scale battery pricing

- Several large-scale batteries to be introduced in ACT over coming years.
- Limited direction on appropriate pricing arrangements.
- Evoenergy is developing a tariff to trial for large-scale batteries.
- Evoenergy intends to engage with ACT Government and large-scale battery operators.



Source: Western Power, 2020, www.westernpower.com.au/our-energy-evolution/grid-technology/battery-energy-storage/

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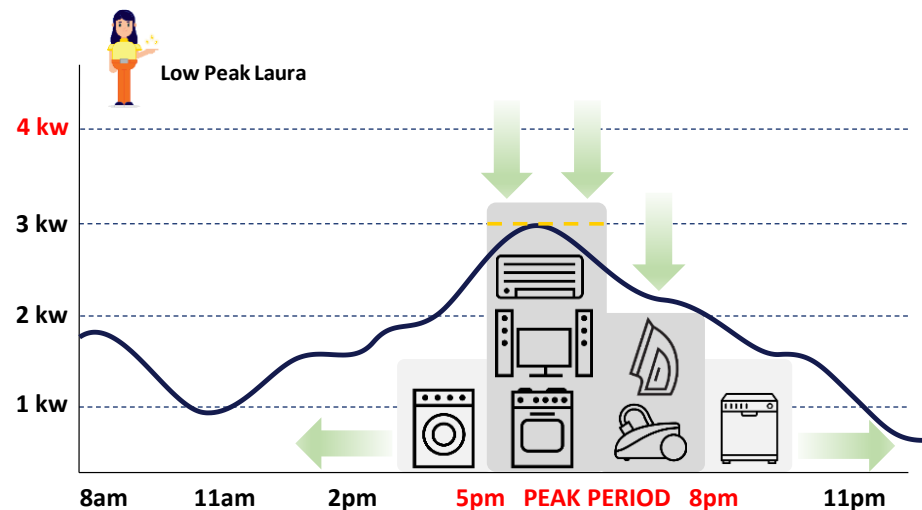
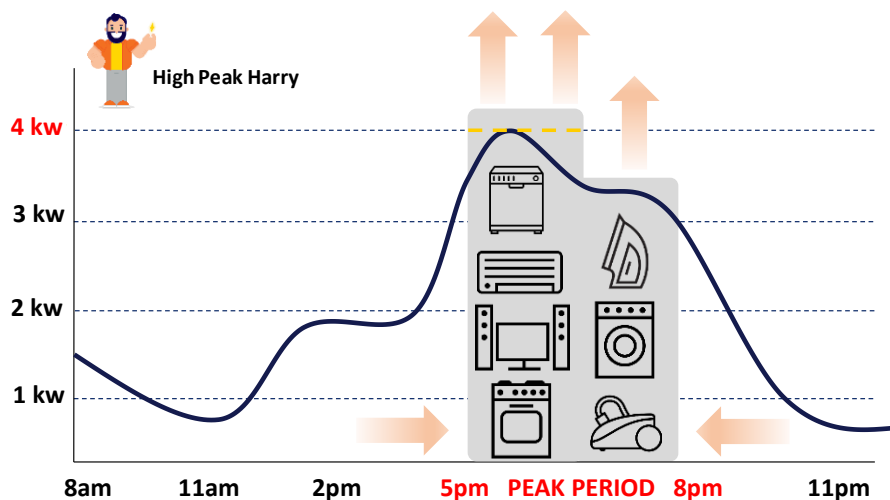
What's driving the change?

- ACT Government:
 - Next Generation Energy Storage Program (Next Gen)
 - Zero-interest loans up to \$15,000 for solar, batteries, electric vehicles, efficient electric appliances.
 - Feed-in tariffs provided for energy exported to grid.
 - 250MW of battery storage in ACT
- Customers in selected blocks within Ginninderry Stage 1A:
 - may be eligible to receive a \$3,000 subsidy on battery storage systems through the Ginninderry residential battery trial.

Cost reflective tariffs

Network tariffs and costs

- Harry and Laura impose different costs upon the network



Non-cost reflective
network bill

\$700

\$700

Cost reflective
network bill

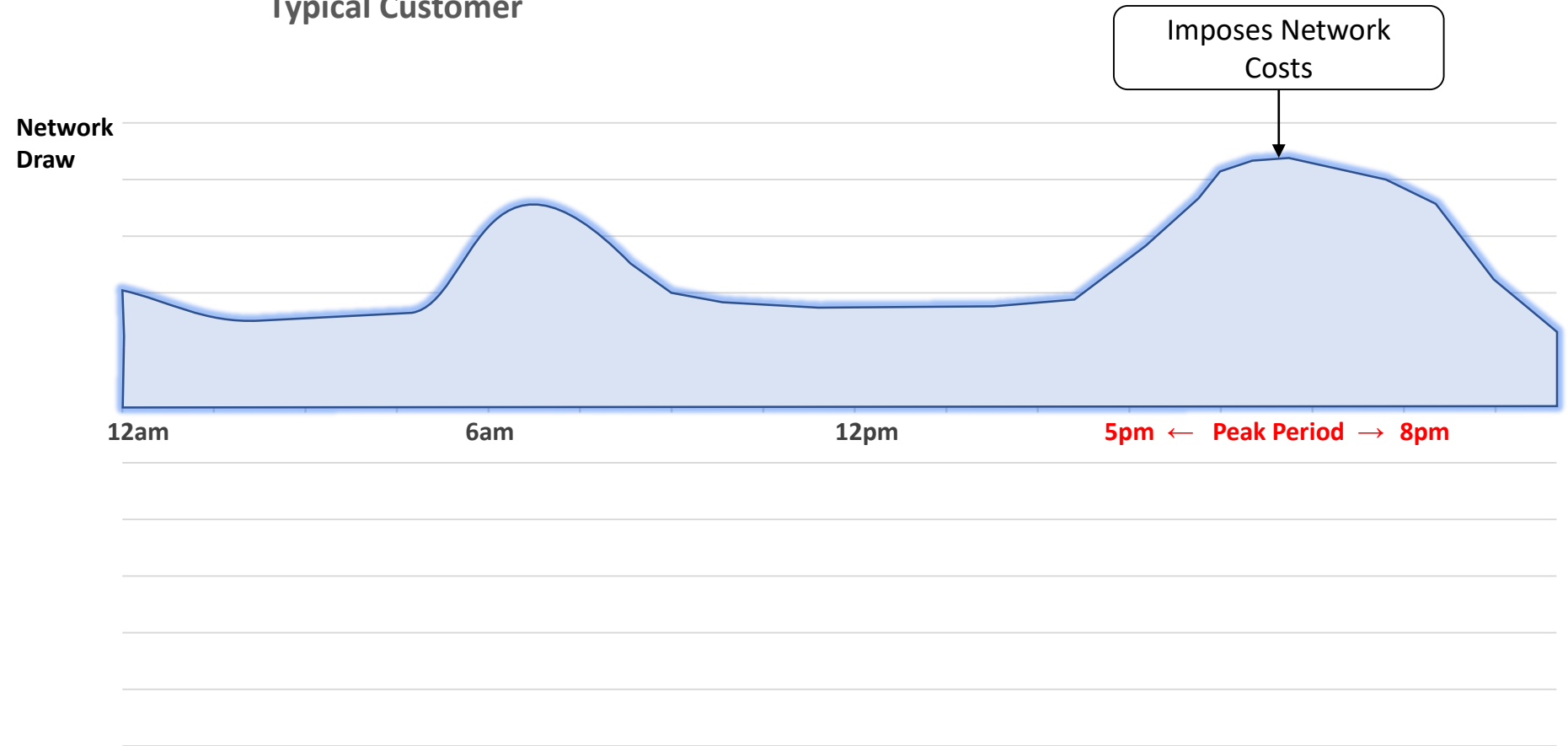
\$750

\$650

Low Peak Laura
benefits on a cost
reflective tariff

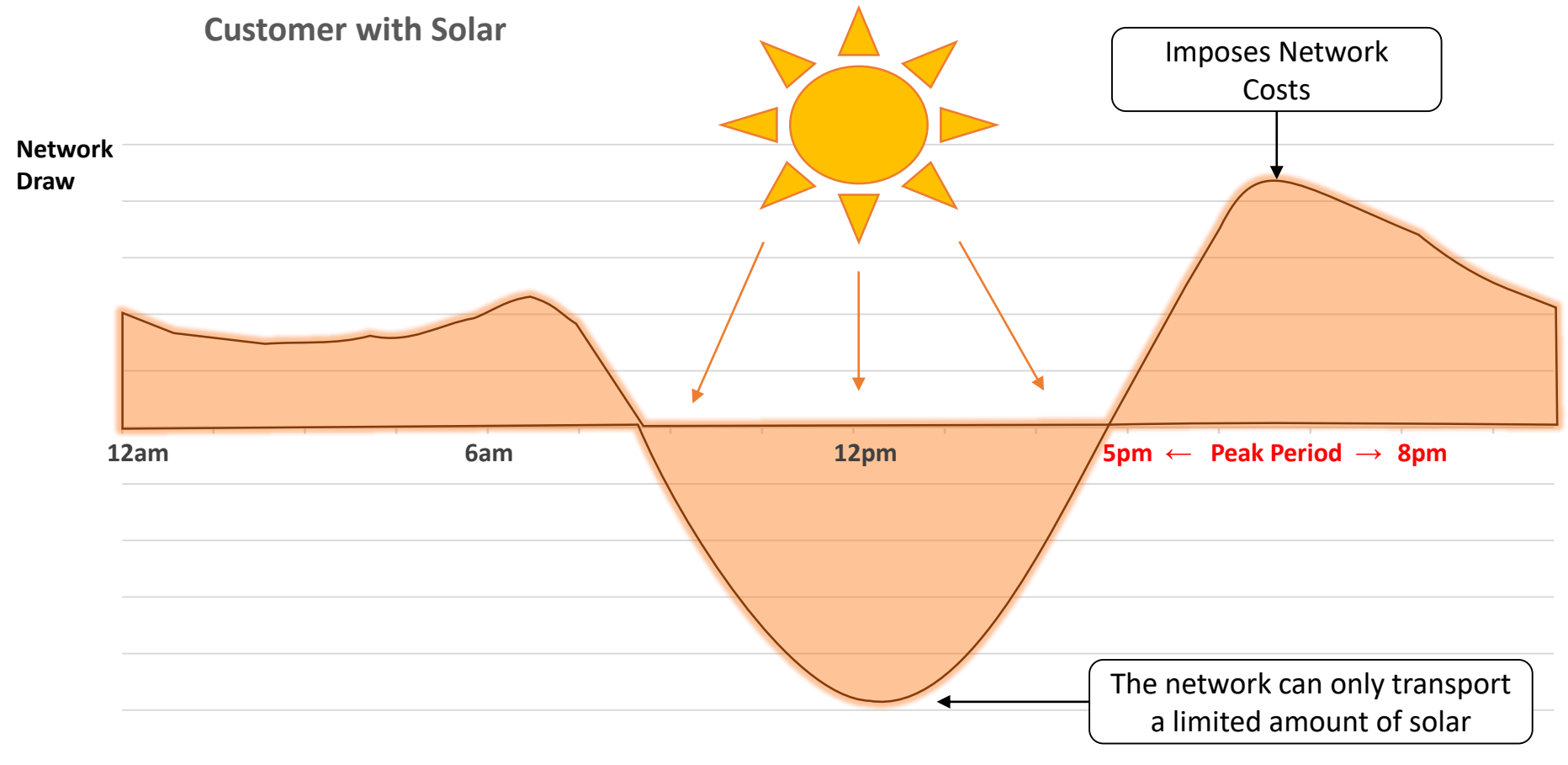
Average daily load profile

Typical Customer



Average daily load profile

Customer with Solar

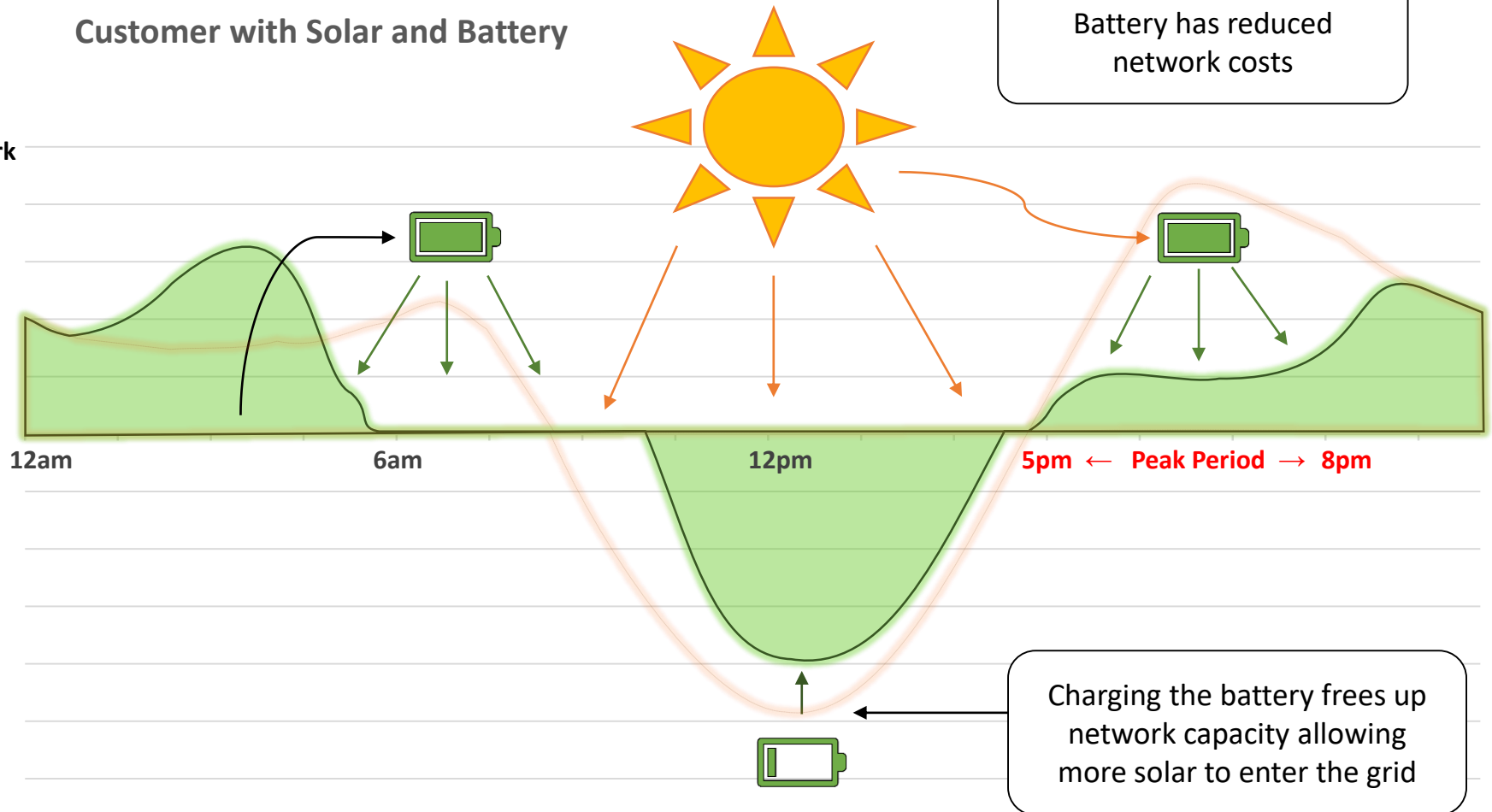


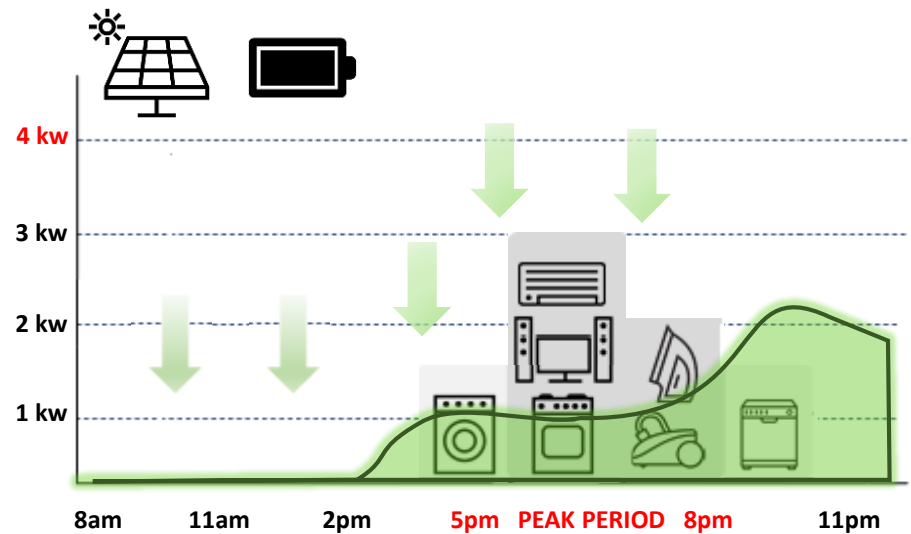
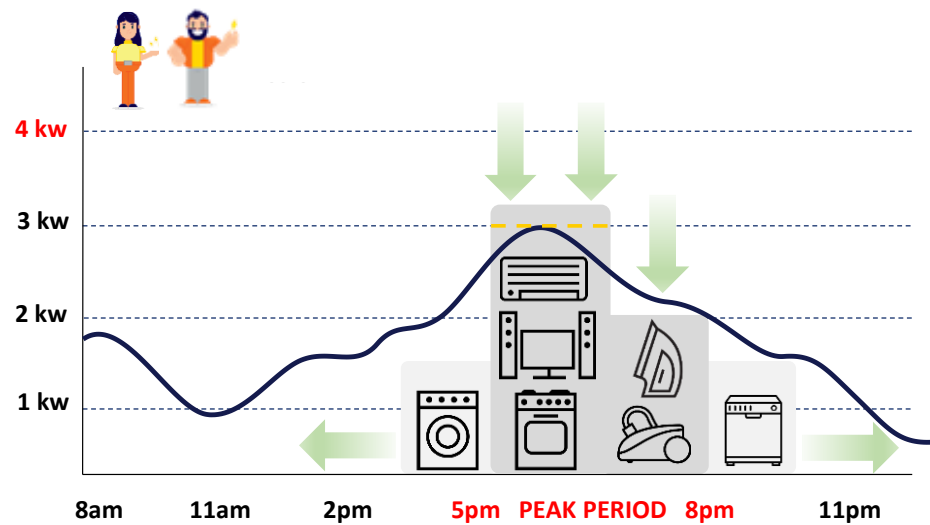
Average daily load profile

Customer with Solar and Battery

Battery has reduced network costs

Network
Draw





Customer vs device response

- Home Energy Management Devices and Batteries allow customers to respond to peak periods without changing their in-house consumption behaviour.
- The tariff that we trial will be cost reflective, enabling consumers to gain additional benefit from their renewable technologies.
- Details of the structure of the new tariff will be available in February. We look forward to discussing the structure with you!

Benefits of Cost Reflective Tariffs

Allows you to make informed decisions about how and when you use electricity.



Helps us understand your priorities which guides our investment in the network.



Promotes an efficient energy system.

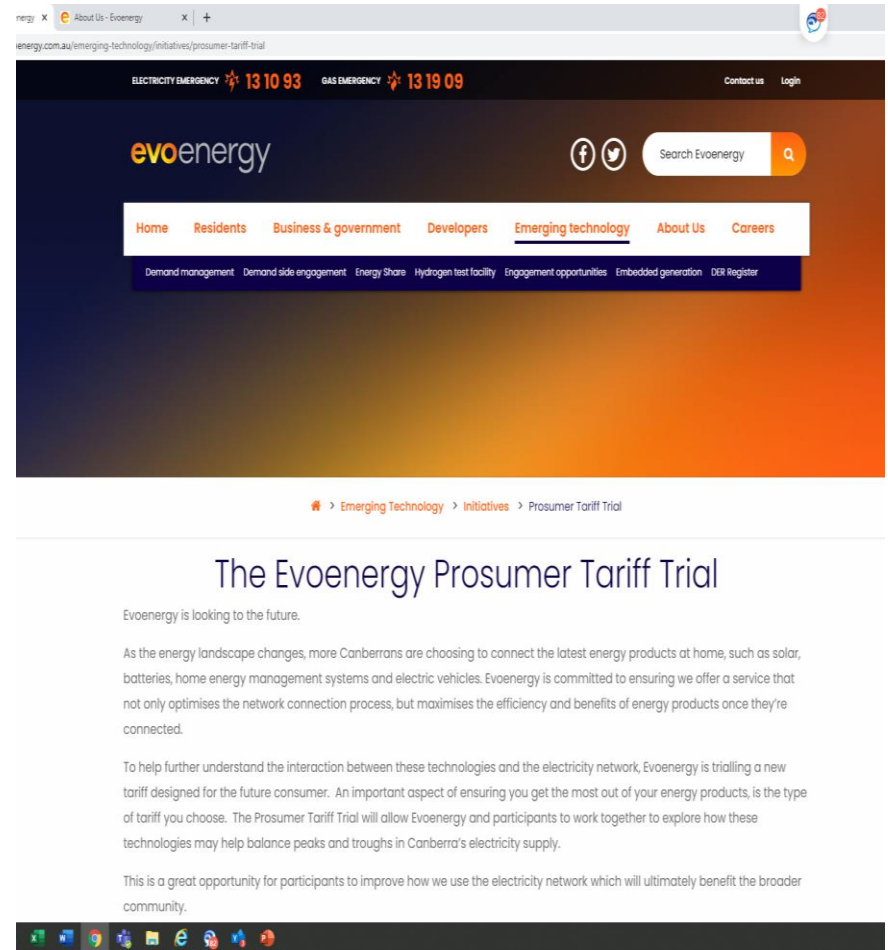


How to get involved

- Register your interest via the Evoenergy website:

<https://www.evoenergy.com.au/residential-tariff-trial>

- Contact Sam Lloyd from Evoenergy
0435 265 889



Next Steps

Register your interest to be part of the tariff trial!

The tariff trial will run from July 2021 to June 2023.

More information about the tariff will be shared early in 2021.





One of the first ECRC meetings

The background of the slide is a photograph of a person wearing safety equipment, including a white hard hat, a high-visibility orange vest, and a grey safety harness with a large white buckle. The image is semi-transparent, allowing the text to be overlaid clearly.

GN21 update ECRC

Gillian Symmans
Acting Group Manager Regulatory Reviews

9 December 2020

AER draft decision released 27 November 2020

The AER's draft decision:

- materially accepts Evoenergy's GN21 plan with the exception of our demand forecast.
- results in forecast revenue for the 5-year period of \$290.6 million in real 2020/21 dollars, or one per cent lower than Evoenergy's proposal.
- would result in an average reduction to gas network charges of \$26 for a typical residential customer and \$232 for a typical small business customer in 2021/22.

Key themes of draft decision:

- ensuring consumers pay no more than they need for safe and reliable gas services
- significant improvements in Evoenergy's consumer engagement approach
- response to jurisdictional emissions reduction targets.

AER draft decision released 27 November 2020

The AER:

- acknowledged a “well-informed proposal, underpinned by significant improvements to Evoenergy’s consumer engagement approach”
- accepted Evoenergy’s 2016-21 capital expenditure (capex) of \$77.1 million (\$2020/21) as conforming capex as a placeholder
- accepted Evoenergy’s proposed 2021-26 net capex of \$66.3 million (\$2020/21) as a placeholder
- accepted Evoenergy’s amended opex proposal of \$171.0 million
- partially accepted Evoenergy’s proposal to shorten asset lives on 80 and 50 year assets (to 50 and 30 years respectively), which was accepted for ACT assets only
- accepted Evoenergy’s proposed revision to the Reference Service Agreement (RSA), subject to addressing two minor items
- accepted Evoenergy’s proposed Capital Expenditure Sharing Scheme (CESS)

Developing our revised GN21 plan

Need to reflect commitments made in ACT Labor and Greens Parliamentary and Governing Agreement (P&G Agreement) – implications for demand and capex forecasts

- i. Implement a program of zero-interest loans of up to \$15,000 for households and not-for-profit community organisations to assist with the upfront costs of investing in: rooftop solar panels; household battery storage; zero emission vehicles and efficient electric appliances. The program will include an education and communications component about energy efficiency and the shift from gas to electric.*
- ii. Progress a project with relevant asset owners and key stakeholders to reduce the emissions intensity of the existing ACT gas network as much as is possible, by injecting zero-emissions gas alternatives.*
- vii. Legislate to prevent new gas mains network connections to future stages of greenfield residential development in the ACT in 2021-22. Future stages of Jacka and Whitlam will be all-electric.*
- viii. Commence a transition project, working with industry and other stakeholders, to advance all-electric infill developments, with a goal of no new gas mains network connections to future infill developments from 2023.*
- ix. Ensure all new ACT Government buildings and facilities are fossil-fuel-gas free, including new leases. All retrofitting in Government buildings and facilities will have a goal of net-zero emissions post retrofit.*

Developing our revised GN21 plan

We are updating our demand forecast to include:

- Latest available consumption and connection data as well as Energy Efficiency Incentive Scheme data
- Findings of market research we conducted
 - Survey of ~1800 customers on their future intentions for the use of gas and responding to Government rebates
- Commitments of P&G Agreement
 - Legislate to prevent new gas mains network connections to future stages of greenfield residential development in the ACT in 2021-22 (already reflected in demand forecast)
 - Goal of no new gas mains network connections to future infill developments from 2023

We are expecting our updated demand forecast to be a steeper decline in demand for gas, which will impact price outcomes

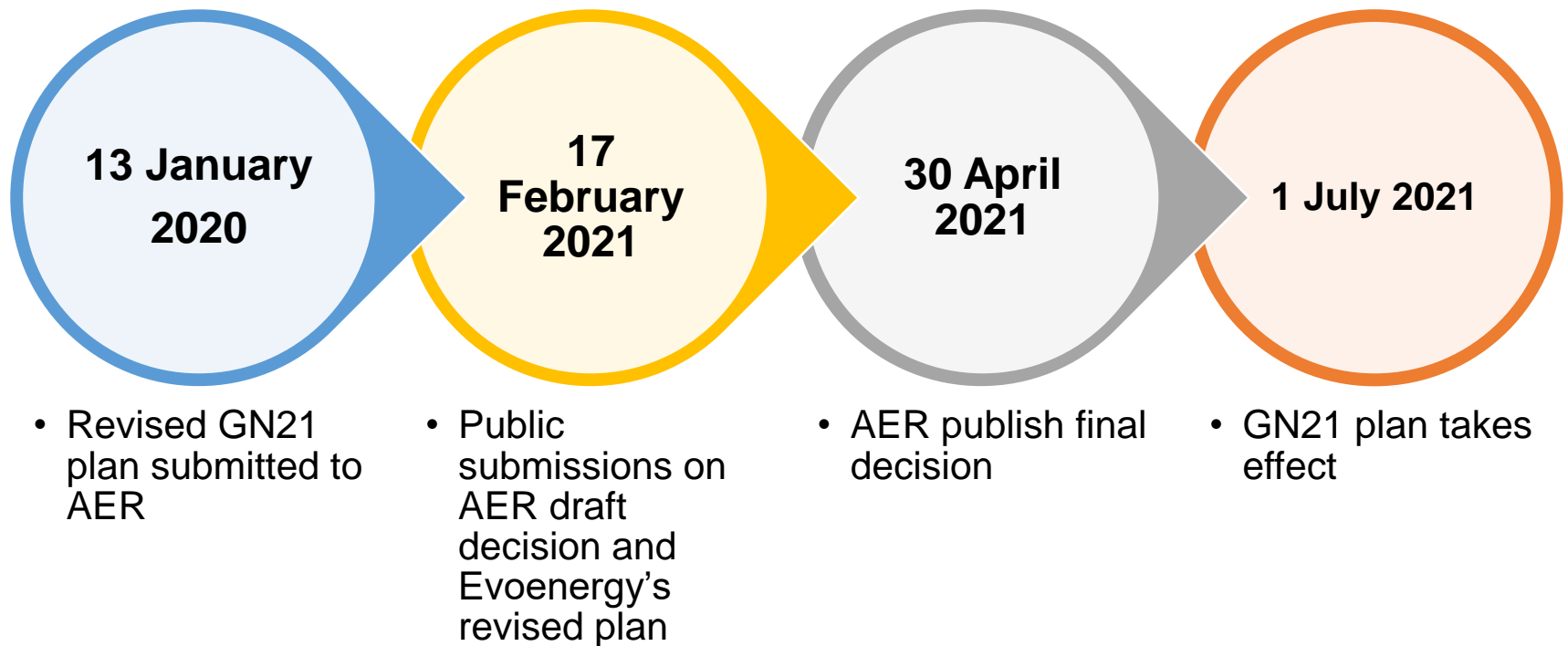
Developing our revised GN21 plan

We want to reflect consumer feedback and the P&G Agreement commitment to progress a project to reduce the emissions intensity of the gas network by injecting zero-emissions gas alternatives by:

- Proposing to include a speculative capital expenditure account (as provided for under Rule 84 of the National Gas Rules)
- Stating our intent to procure zero-emissions gas for some of our unaccounted for gas (UAG) requirements to support pilot projects

Would ECRC members have in principle support for these initiatives?

Next steps





Test facility visit + meeting at CIT



Matters arising

Next meeting February 2021

Evoenergy

