



TransGrid Advisory Council meeting

Thursday 17 June 2021

Welcome and introductions

Paul Italiano, Chief Executive Officer

2023-28 Revenue Reset: Introduction

Paul Italiano, Chief Executive Officer

We need to understand the impact of the energy transition on the revenue reset

The energy transition poses questions and challenges

- What role will global capital markets have in shaping the future energy system?
- How will the current fossil fuel fleet respond to the changing market?
- How will the actions of state governments impact investment? And what impact will this have on the ideals of the NEM?
- What opportunities exist for customers and how can these be realised?
- How will the increasingly variable nature of load and generation impact networks?
- How quickly or slowly will we begin to see the physical impacts of a changing climate?

Introduction to the 2023-28 revenue reset process

- **We have a number of priorities for the revenue reset**
 1. Safe, reliable and secure provision of service to customers
 2. Comply with all legislative obligations and regulatory and compliance standards
 3. Enhance the service provided by current assets, ensuring they are fit-for-purpose
 4. Deliver sufficient capacity to accommodate new low cost generation to support economic growth
 - a) Our proposal must equip us to meet the need out to 2028
 5. Facilitate the transition to a low carbon energy system.

Introduction to the 2023-28 revenue reset process

- **Customer needs will be central to our revenue proposal and consultation process**
 - Consultation has been designed with TAC feedback in mind
 - Expanded TransGrid Advisory Council for the reset duration
 - Draw on broad expertise to inform our consultation

- **Considerations for our reset include:**
 - Impacts of the energy transition
 - AEMO's Integrated System Plan
 - NSW Electricity Infrastructure Roadmap

2023-28 revenue reset: Expanded TAC

As part of our consultation for the 2023-28 Revenue Reset, we will expand the TAC, drawing on broad and diverse sector expertise

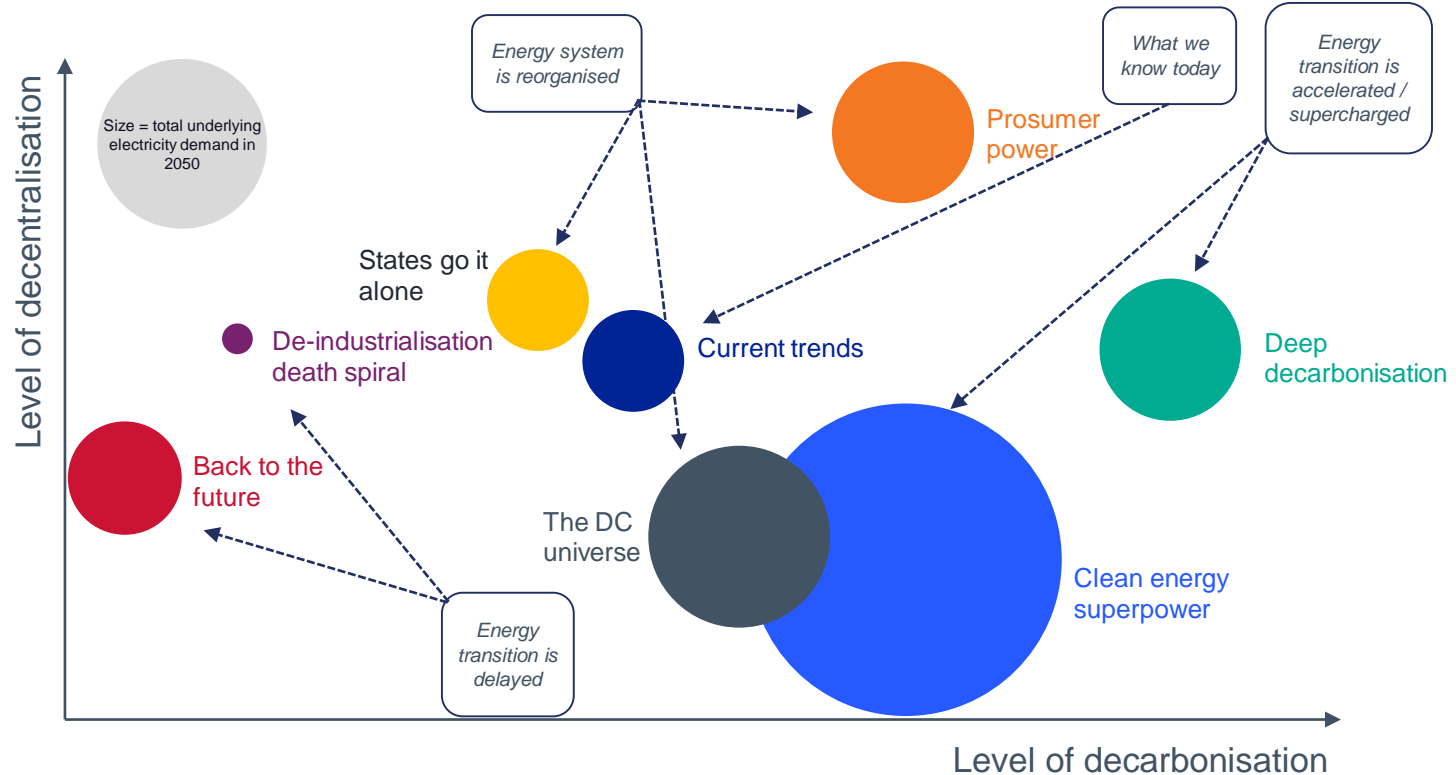
- **Alex Wonhas**
Chief System Design and Engineering Officer, AEMO
- **Michael Ottaviano**
Partner - Australian Renewable Energy, ERM
- **Scott Young**
Executive Director, Commonwealth Bank of Australia
- **Kane Thornton**
Chief Executive Officer, CEC
- **Professor Andrew Blakers**
Director of the Australian National University Centre for Sustainable Energy Systems

2023-28 Revenue Reset: TransGrid's Network Vision

Mike Cleary, Advisor to the CEO

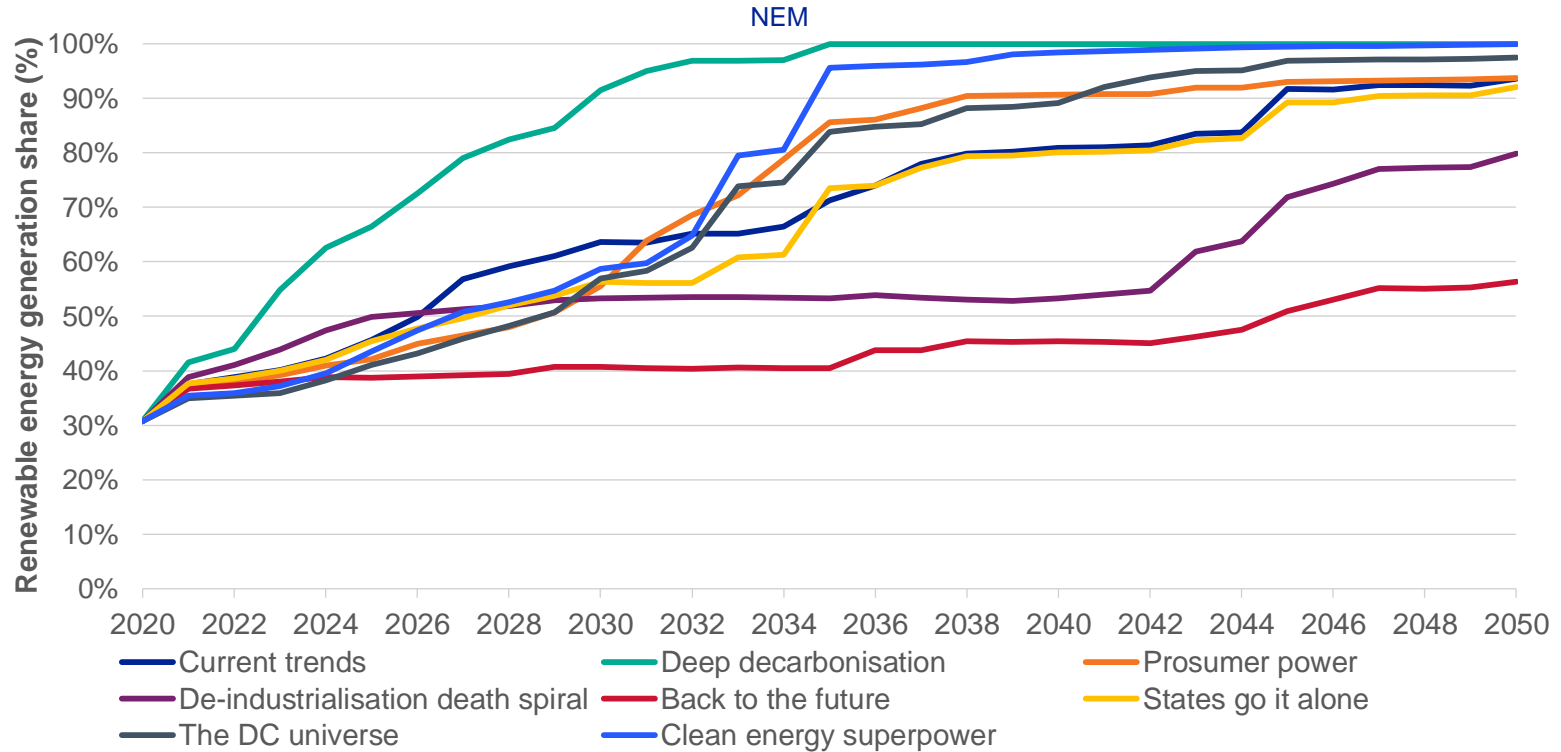
Eight scenarios of the future

The scenarios consider a broad range of socio-political-economic drivers and represent a divergent set of possible future outcomes for Australia's energy system



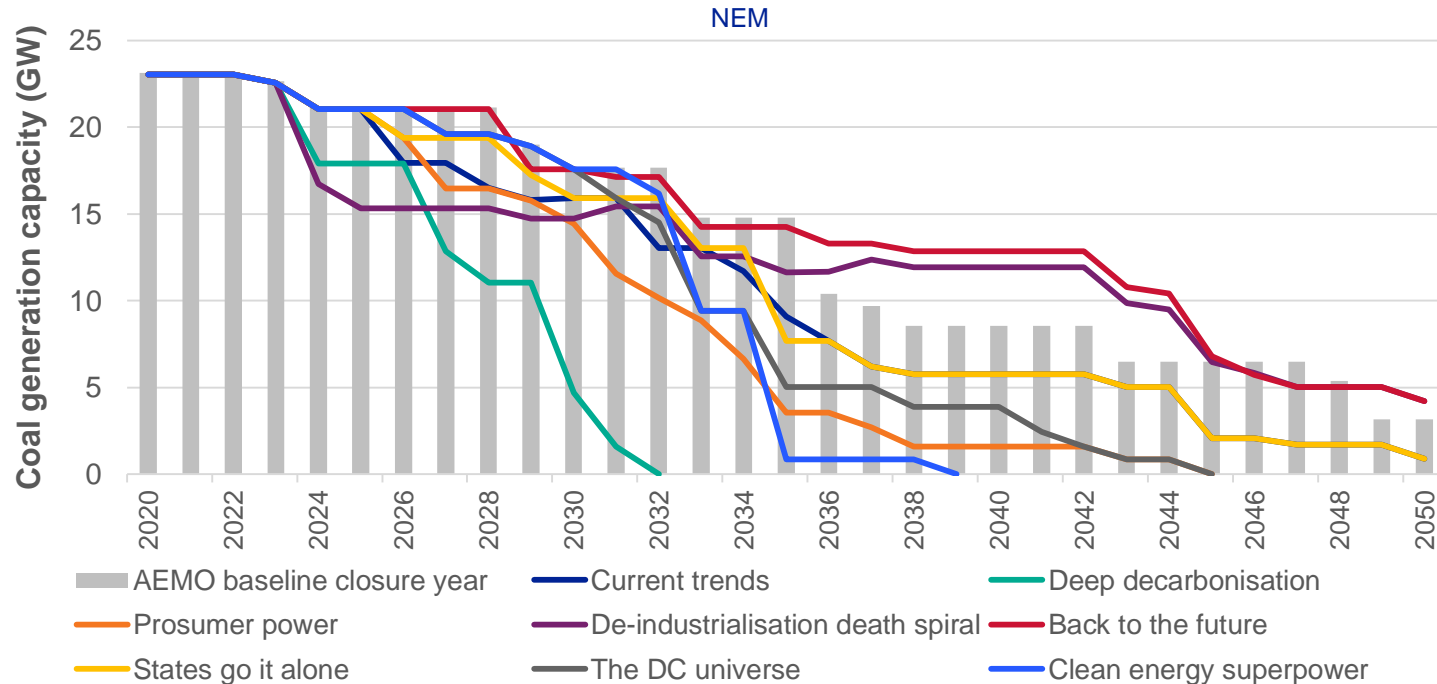
The transition to renewables

Wind and solar are now the lowest cost forms of bulk generation. Analysis shows renewable energy will provide the majority of power required in all scenarios



Early coal retirement is becoming increasingly likely

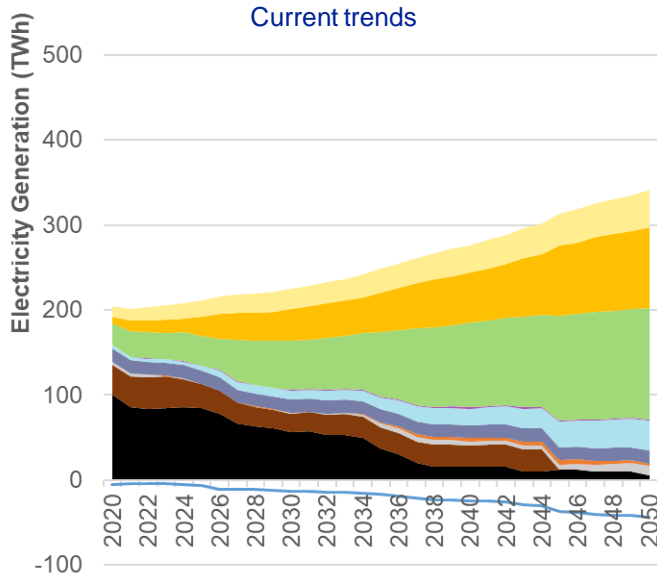
Analysis highlights the potential for the early closure of coal generators. This may result from strengthened climate policies, changing market conditions, increased asset fatigue due to age and ramping or weaker electricity demand



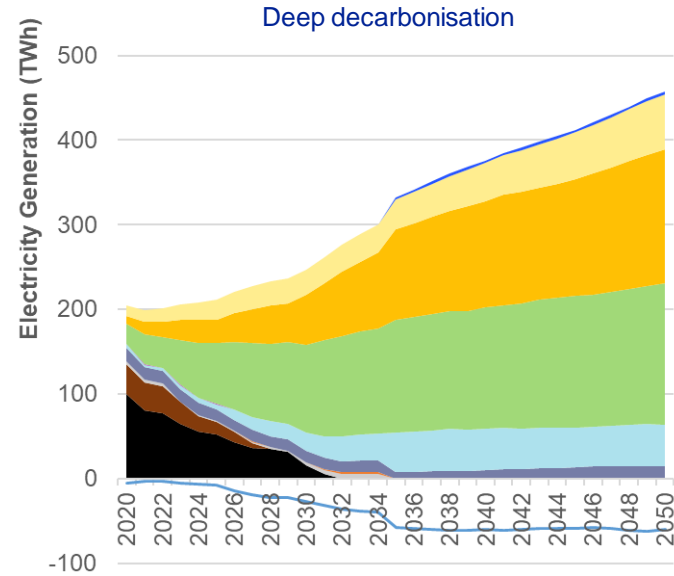
Additional sources: Baseline closure year is sourced from AEMO's latest Inputs and Assumptions workbook (updated to include the 2028 retirement of Yallourn Power station), reflecting committed retirement dates from coal generators or the 50th year of operation, whichever comes first

Generation mix

Electricity generation in the NEM transitions to renewable energy firmed with dispatchable storage under most scenarios; strong decarbonisation accelerates this transition, with electrification driving increased electricity demand



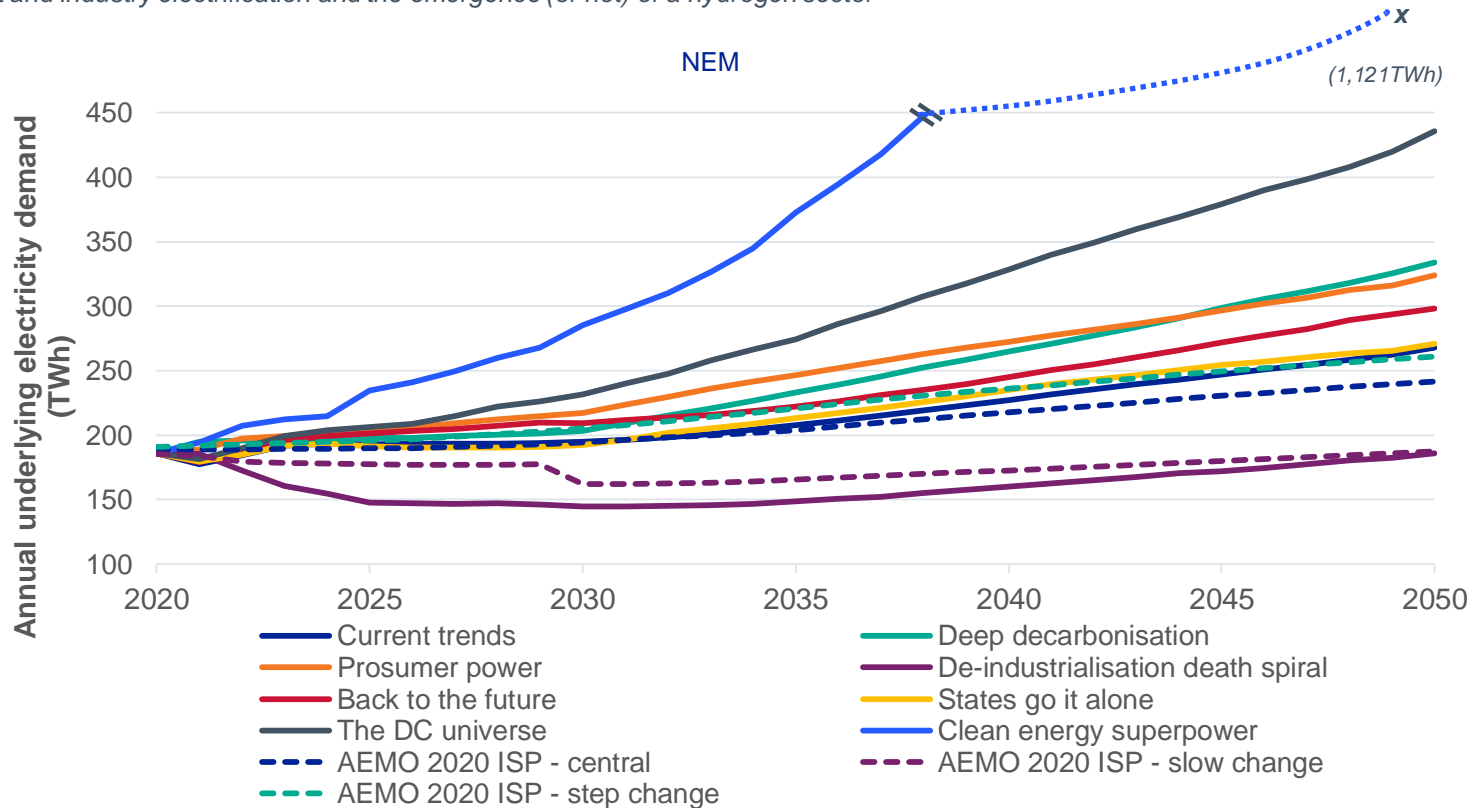
- Black coal
- CCGT
- Hydro
- Behind the meter storage (discharge)
- Solar
- Hydrogen peaker



- Brown coal
- Peaking gas & liquids
- Dispatchable storage (discharge)
- Wind
- Distributed PV
- Dispatchable storage (charge)

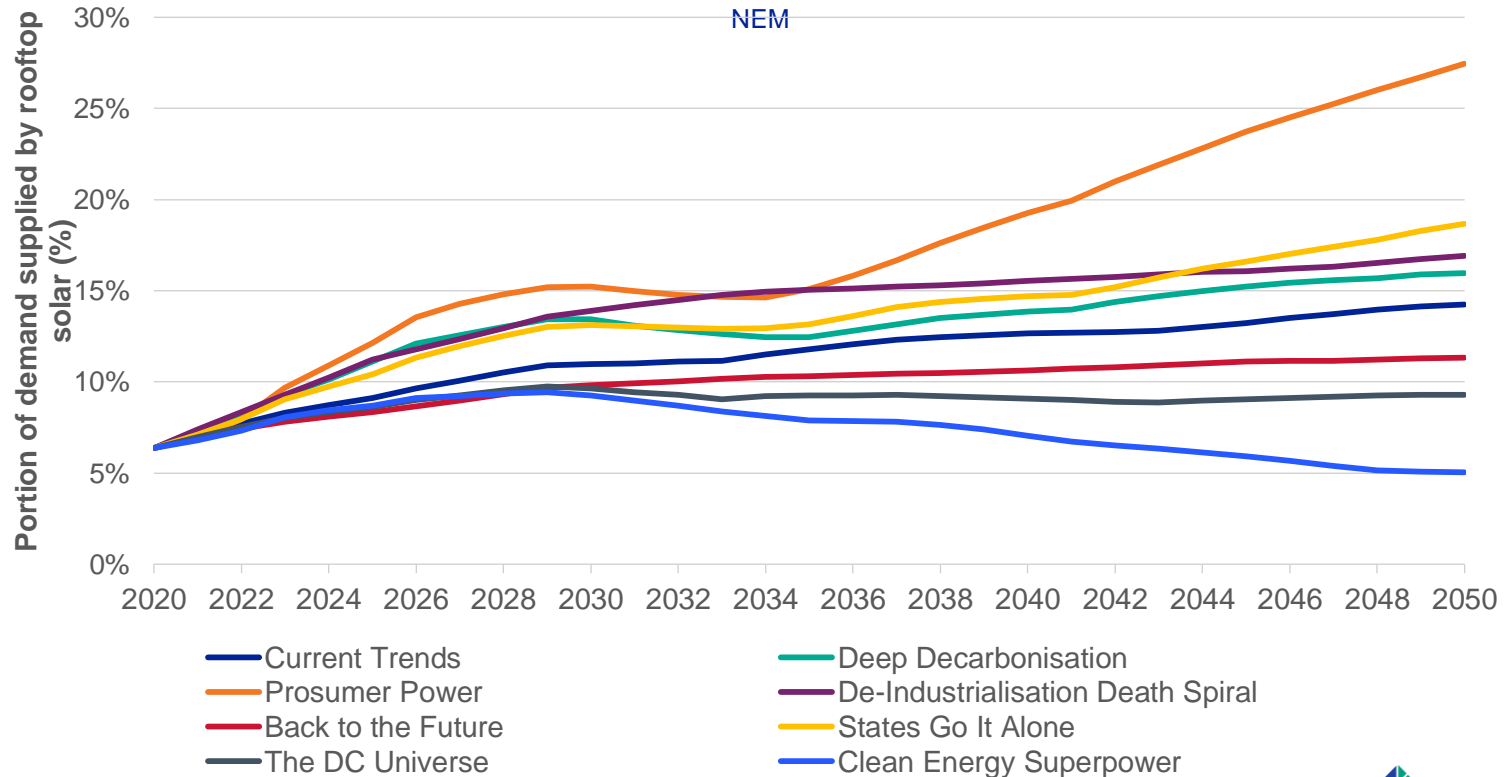
Underlying electricity demand

Electricity demand variance between scenarios is driven by economic and industry assumptions, uptake of energy efficiency, transport and industry electrification and the emergence (or not) of a hydrogen sector



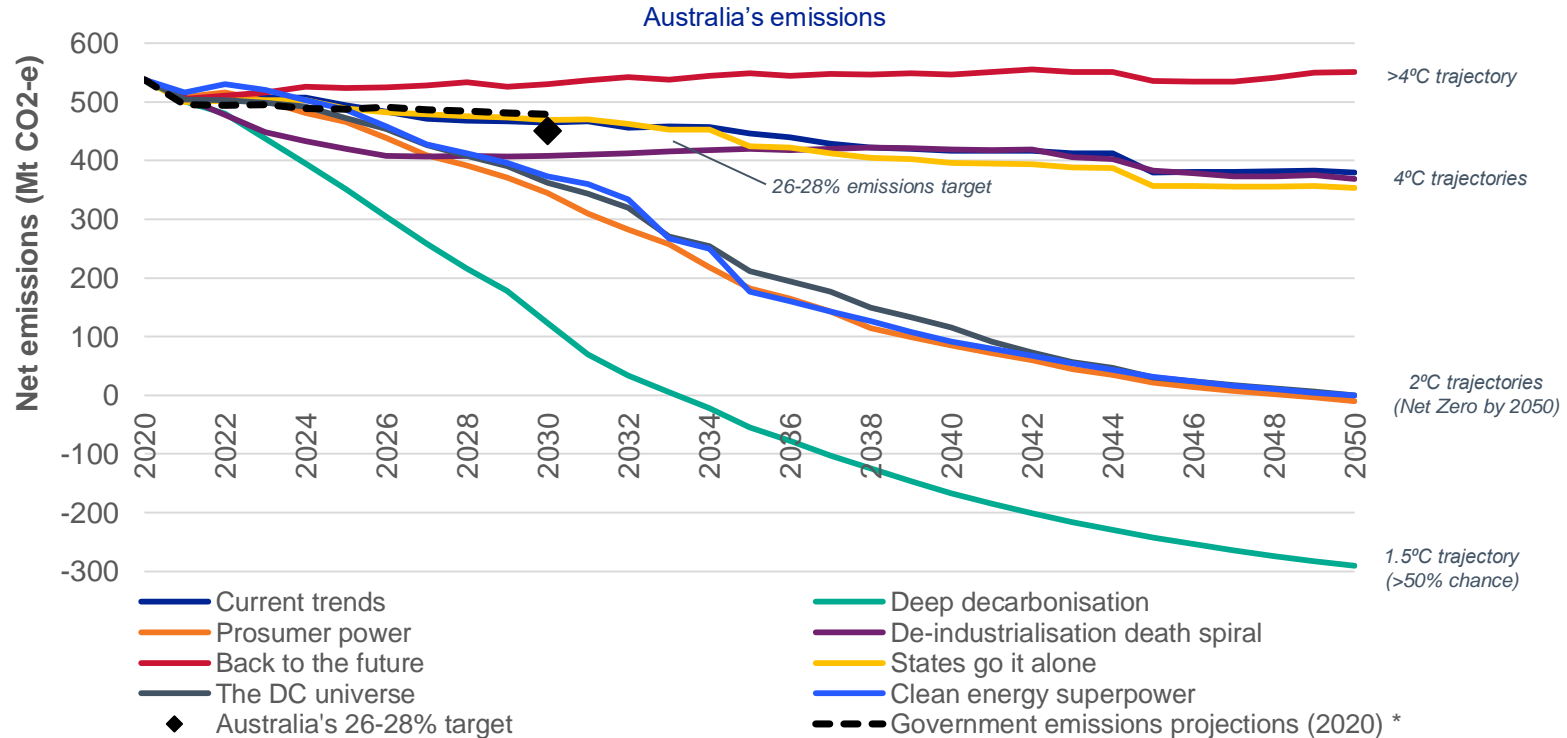
Behind versus in front of the meter generation

Even in the most optimistic scenarios for DER uptake (Prosumer power), rooftop PV only supplies 30% of the NEM's total electricity requirements. The remaining 70% will need to come from large scale generation



Decarbonisation trajectory

Without additional emissions reduction activities, Australia is not on track to meet its Paris commitments. But rapid decarbonisation is possible



Additional sources: Australian Government, Department of Environment and Energy (2020)
* Business as usual, without additional emissions reduction activities

Discussion

Mike Cleary, Advisor to the CEO

2023-28 Revenue Reset: Process Overview

Stephanie McDougall, Head of Regulation

2023-28 revenue reset team

Our reset team will combine network planning and regulatory experience with a dedicated focus on customer consultation

- **Stephanie McDougall**
Head of Regulation
- **Robert Alcaro**
Network Regulatory Manager
- **Jay Shaheen**
Project Manager
- **Jeff Forrest**
Finance
- **Lance Wee & Jeremy Roberts**
Network expenditure
- **Russell Morris**
Non-network expenditure
- **Catherine O'Neill**
Stakeholder Engagement

2023-28 revenue reset consultation process

Our engagement objectives are to:

- Put customers at the centre of everything we do
- Be a leader in stakeholder engagement
- Build credibility with customers and other stakeholders
- Give stakeholders real opportunities to influence and collaborate on assumptions/inputs and outcomes where possible, and
- Deliver a deeper and broader engagement program with the AER

2023-28 revenue reset consultation principles

AER engagement guidelines:

1. Nature of engagement

- genuine engagement
- skilled participants
- support provided
- independent
- multiple channels utilised

2. Breadth & depth of engagement

- stakeholder driven discussion topics
- used to test assumptions
- broad range of topics
- able to influence topics

3. Clearly evidenced impact

- feedback considered and reflected where appropriate

4. Proof point

- reasonableness of forecasts
- expenditures well justified

Our consultation principles:

- Timely and accessible materials provided
- Adequate opportunities for feedback
- Outcomes reported back
- Process evaluated

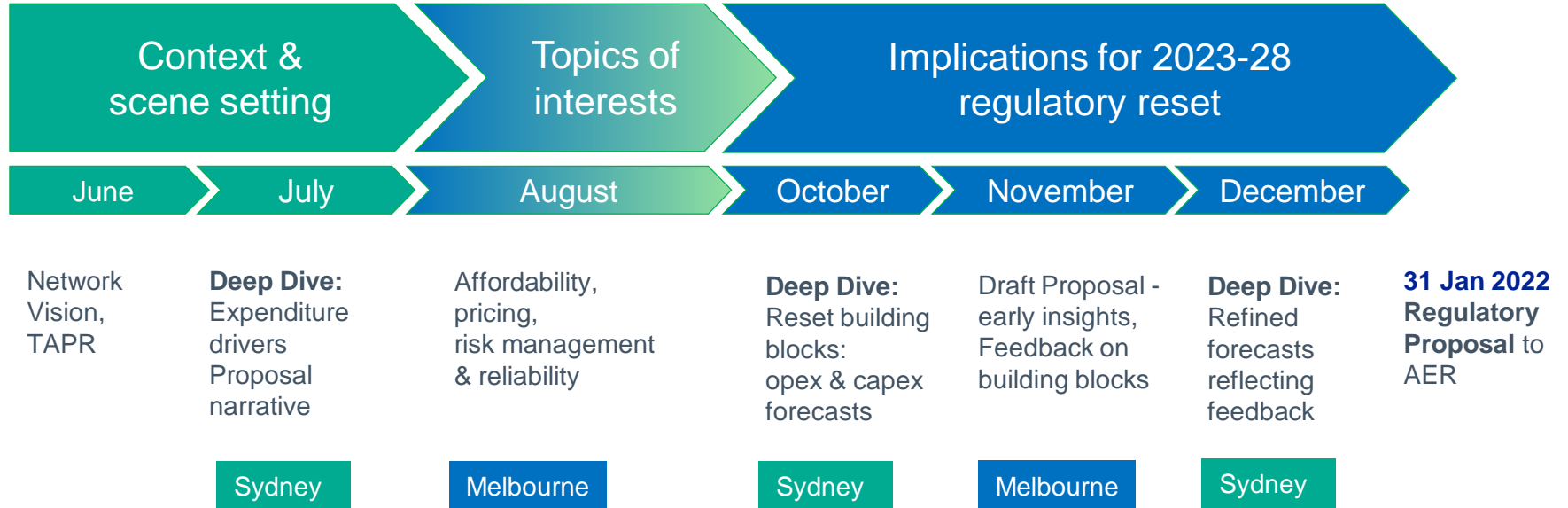
2023-28 Revenue Reset: Consultation format

1. TransGrid Advisory Council
2. Deep dive workshops
3. Small group meetings
4. Direct customer consultation
5. End customer research

2023-28 Revenue Reset: Key Dates



Revenue Reset: 2021 Consultation timeline



Revenue Reset: 2021 Consultation timeline

Date	Focus	Proposed topics for discussion
17 June	Setting the 'Reset scene'	<ul style="list-style-type: none"> • TransGrid's Network Vision • TAC feedback on reset approach and areas for consideration • Overview of reset process
22 July	Deep dive: Expenditure drivers	<ul style="list-style-type: none"> • Policy and regulatory drivers • Climate change • Network vision deep dive
19 Aug	TAC areas of interest	<ul style="list-style-type: none"> • Responses to TAC feedback • Affordability • Managing uncertainty
5 Oct	Deep dive: Reset building blocks	<ul style="list-style-type: none"> • Capex/Opex forecasts • Key expenditure items
3 Nov	Reset proposal overview	<ul style="list-style-type: none"> • Early insights into draft proposal and TAC feedback
2 Dec	Deep dive: Draft proposal	<ul style="list-style-type: none"> • Overview of draft proposal

Feedback on proposed consultation process

- **Is the proposed approach in line with your expectations?**
- **Are there any changes you would like to see made?**

Next steps ...

- **TAC Deep Dive: Expenditure Drivers, Thursday 22 July.**

General Business

Paul Italiano, Chief Executive Officer



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