

Workshop information

AEMO Energy Efficiency Workshop

Wednesday, 24 March 2021

*We acknowledge the Traditional Owners
of country throughout Australia and
recognise their continuing connection to
land, waters and culture.*

*We pay our respects to their Elders past,
present and emerging.*

Objectives of the Workshop



To seek feedback on energy efficiency policy scope and assumptions across AEMO's scenarios



To discuss methodologies for applying energy efficiency savings to the annual consumption and peak demand forecasts



To identify the potential for improved data collection and sharing, and areas for further research



To increase understanding of the role of energy efficiency in Australia's energy transition

Visual representation of draft scenarios



AEMO scenario settings

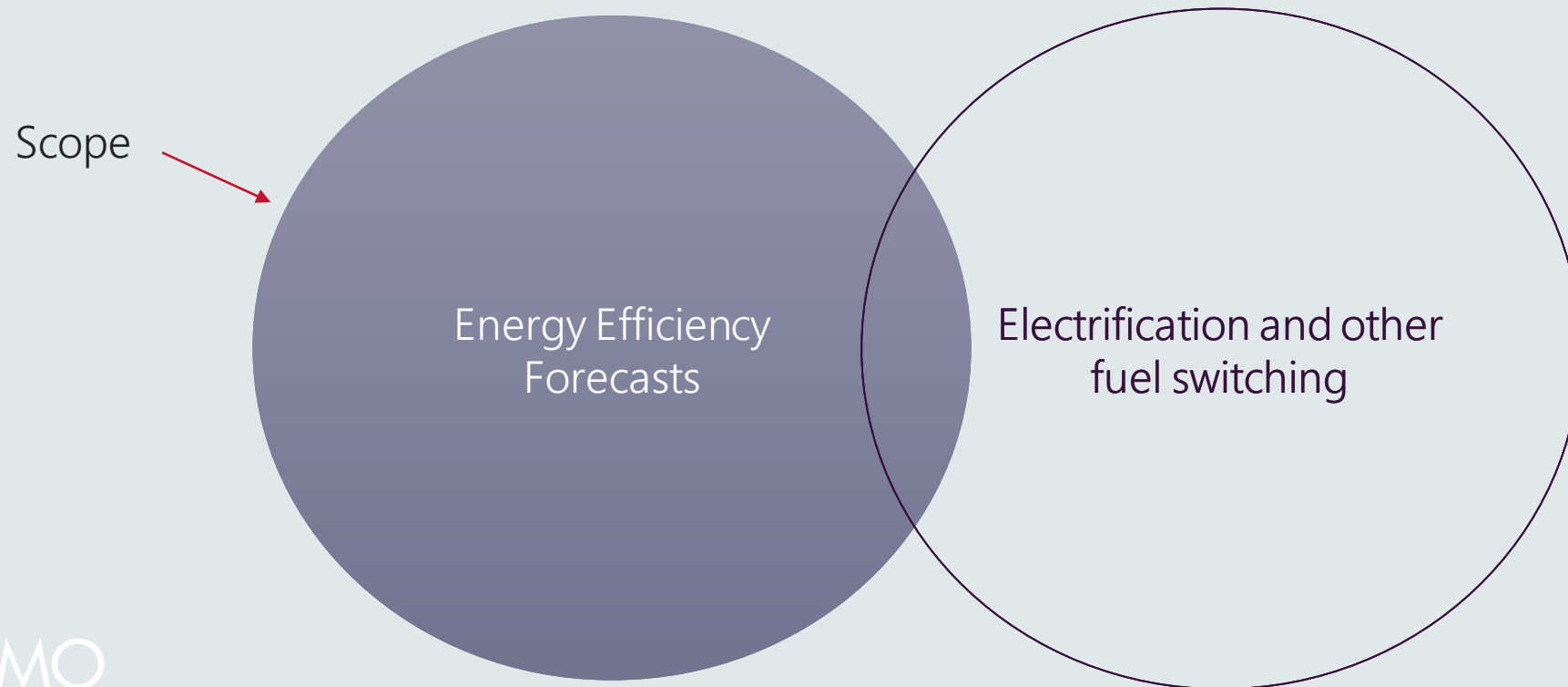
Scenario	Slow Growth	Current Trajectory	Net Zero	Sustainable Growth	Export Superpower
Economic growth and population outlook	Low	Moderate	Moderate	Moderate	High
Energy efficiency improvement	Low	Moderate	Moderate	High	High
DSP growth	Low	Moderate	Moderate	High	High
Distributed PV	Moderate, but elevated in the short term	Moderate	Moderate	High	High
Battery storage installed capacity	Low	Moderate	Moderate	High	High
Battery storage aggregation / VPP deployment	Low	Moderate	Moderate	High	High
Battery Electric Vehicle (BEV) uptake	Low	Moderate	Moderate	High	Moderate/High
BEV charging time switch to coordinated dynamic charging	Low	Moderate	Moderate	High	Moderate/High
Electrification of other sectors (expected outcome)	Low	Low/Moderate	Moderate	Moderate/High	Moderate/High
Hydrogen consumption	Minimal	Minimal	Potential for domestic consumption	Potential for domestic consumption	Large NEM-connected export and domestic consumption

Scenario	Slow Growth	Current Trajectory	Net Zero	Sustainable Growth	Export Superpower
Shared Socioeconomic Pathway (SSP)	SSP3	SSP2	SSP2	SSP1	SSP1
International Energy Agency (IEA) 2020 World Energy Outlook (WEO) scenario	Delayed Recovery Scenario (DRS)	Stated Policy Scenario (STEPS)	Stated Policy Scenario (STEPS)	Sustainable Development Scenario (SDS)	Net Zero Emissions by 2050 case (NZE2050)
Climate change impacts based on assumed Representative Concentration Pathway (RCP) (mean temperature rise by 2100) *	RCP7.0 (~4°C)	RCP4.5 (~2.6°C)	RCP4.5 (~2.6°C)	RCP2.6 (~1.8°C)	RCP1.9 (<1.5°C)
Decarbonisation target	No explicit decarbonisation target.	26-28% reduction by 2030. Further decarbonisation influenced by technology and economic improvements	26-28% reduction by 2030 Economy-wide net zero target by 2050.	Economy-wide net zero before 2050, exceeding 26-28% reduction by 2030 Pace of decarbonisation consistent with limiting temperature rise to 2 degrees, in line with global activities.	Economy-wide net zero by early 2040s, exceeding 26-28% reduction by 2030 Pace of decarbonisation consistent with limiting temperature rise to 2 degrees, in line with global activities.
Generator and storage build costs	CSIRO GenCost Central	CSIRO GenCost Central	CSIRO GenCost Central	CSIRO GenCost High VRE	CSIRO GenCost High VRE
Generator retirements	In line with expected closure years, or earlier if economic to do so.	In line with expected closure years, or earlier if economic.	In line with expected closure years, or earlier if economic or driven by decarbonisation objectives beyond 2030.	In line with expected closure year, or earlier if economic or driven by decarbonisation objectives	In line with expected closure year, or earlier if economic or driven by decarbonisation objectives
Relative project finance costs	To be determined based on further review				

* The modelling will not target a specific global temperature objective, but in applying more rapid decarbonisation activities, it is assumed that a lower RCP is more relevant

Scope of the workshop

- Primary focus is energy efficiency
- Fuel switching may be a secondary impact of an energy efficiency policy



How do you use AEMO's forecasts?

Policy

Policy development and
program design

Benchmark performance of
policy measures

Modelling

Basis for own energy
efficiency modelling

Input/ alternative input into
own energy and
decarbonisation modelling

Capacity and expansion
(generation and
transmission) modelling

Reporting

Compilation and reporting
of energy efficiency,
consumption and
greenhouse gas data

What is the Workshop timeline?

Opening plenary (10am to 11.10am)

Philip Harrington, Strategy Policy Research: Annual consumption forecasts
Daniel Guppy, AEMO: Peak demand forecasts

Breakout session (Part 1) (11.10am to 11.40am)

Session 1 (25mins)

Break (11.40am to 11.50am)

Breakout session (Part 2) (11.50am to 12.40pm)

Session 2 (25mins)

Session 3 (25mins)

Closing plenary (12.40pm to 1.00pm)

Greg Staib, AEMO: Survey and next steps
Dane Winch, AEMO: Final remarks

Participating in the discussion

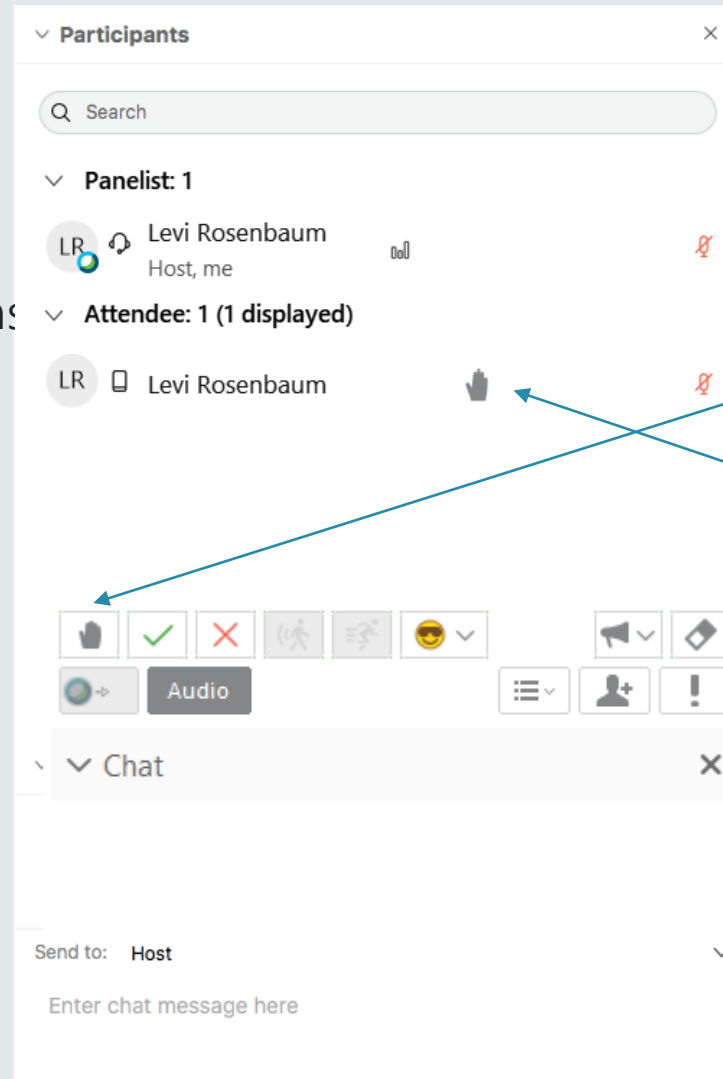
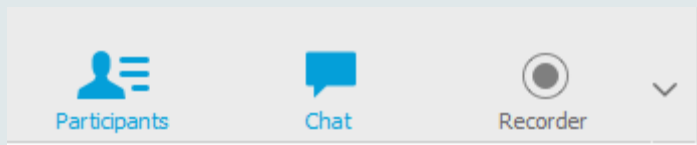
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Please sign in

Putting your hand up

For technical assistance, chat with "host"

1
Press 'Participants' and 'Chat' Buttons



2
To ask a question put your hand up



3
A hand icon will appear next to your name

4
The host will unmute you when it's your turn

5
Press the hand icon again to lower your hand

Break out sessions

You will remain in the same group for the three breakout sessions

Topic A: Reviewing policy scope and assumptions

Topic B: Improving energy efficiency modelling

Topic C: Energy efficiency in peak demand forecasts

What if I need technical assistance?

If you need technical assistance and are unable to use Webex chat to contact Levi, please email energy.forecasting@aemo.com.au