



COTA Tasmania

# NATIONAL ENERGY MARKET SEMINAR

3 July 2018

# AGENDA

- National Energy Market Overview
- How energy prices are set
- National Energy Market Framework
- Current Issues in the NEM
- Developments in Tasmania

# National Energy Market (NEM)

- 'National' includes all jurisdictions except WA and NT
- Electricity and Gas

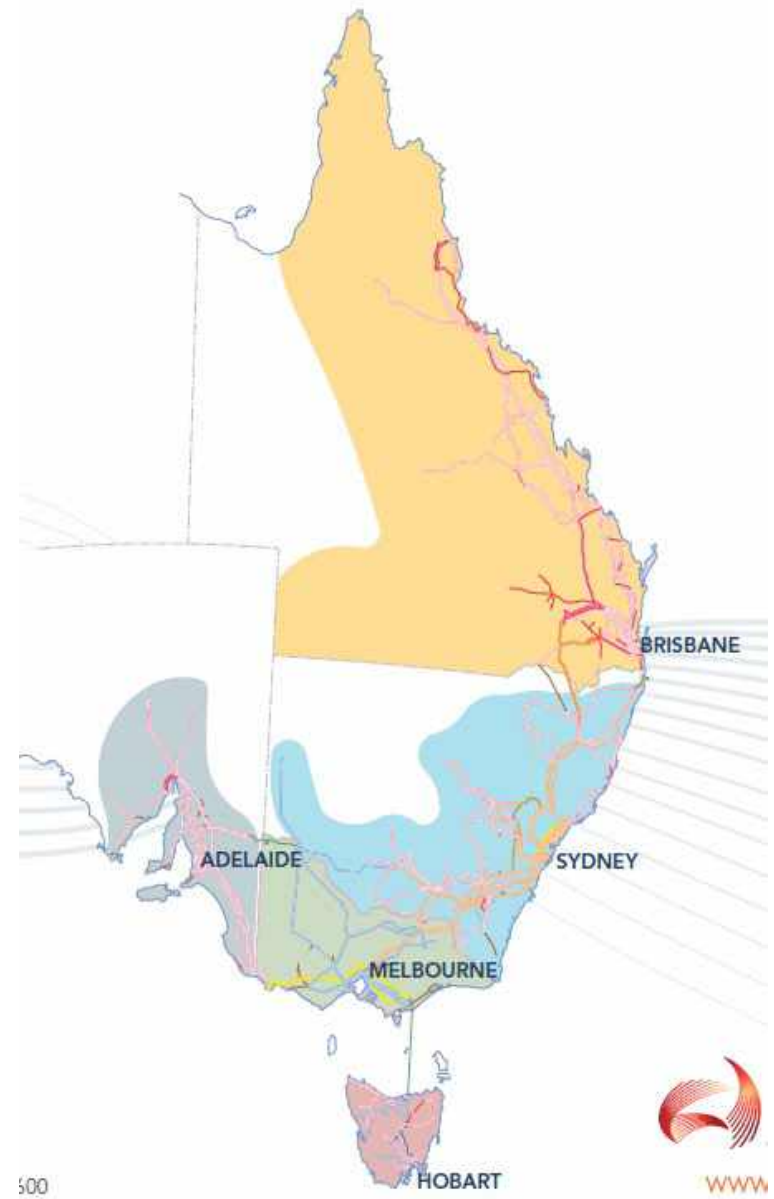
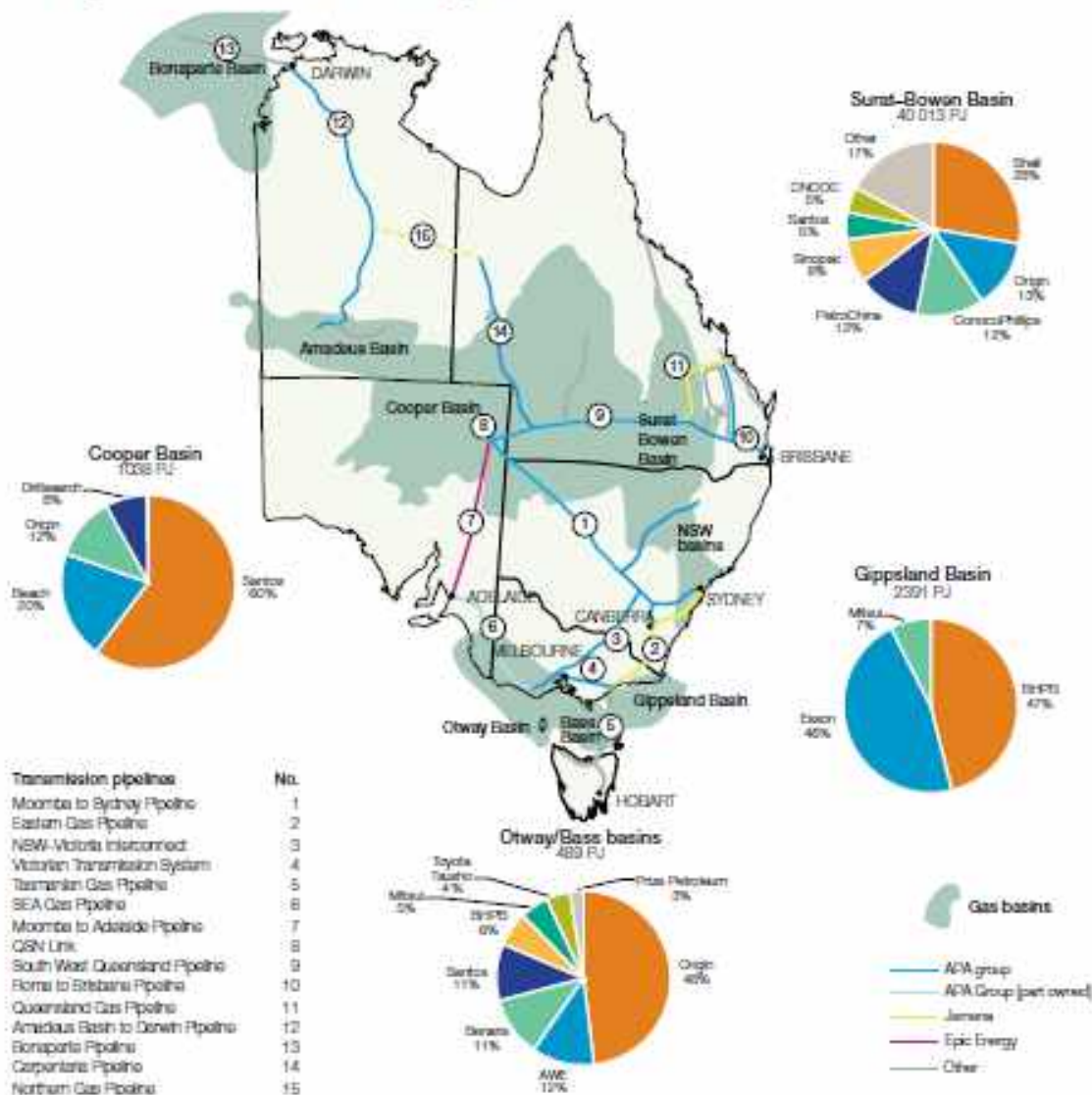


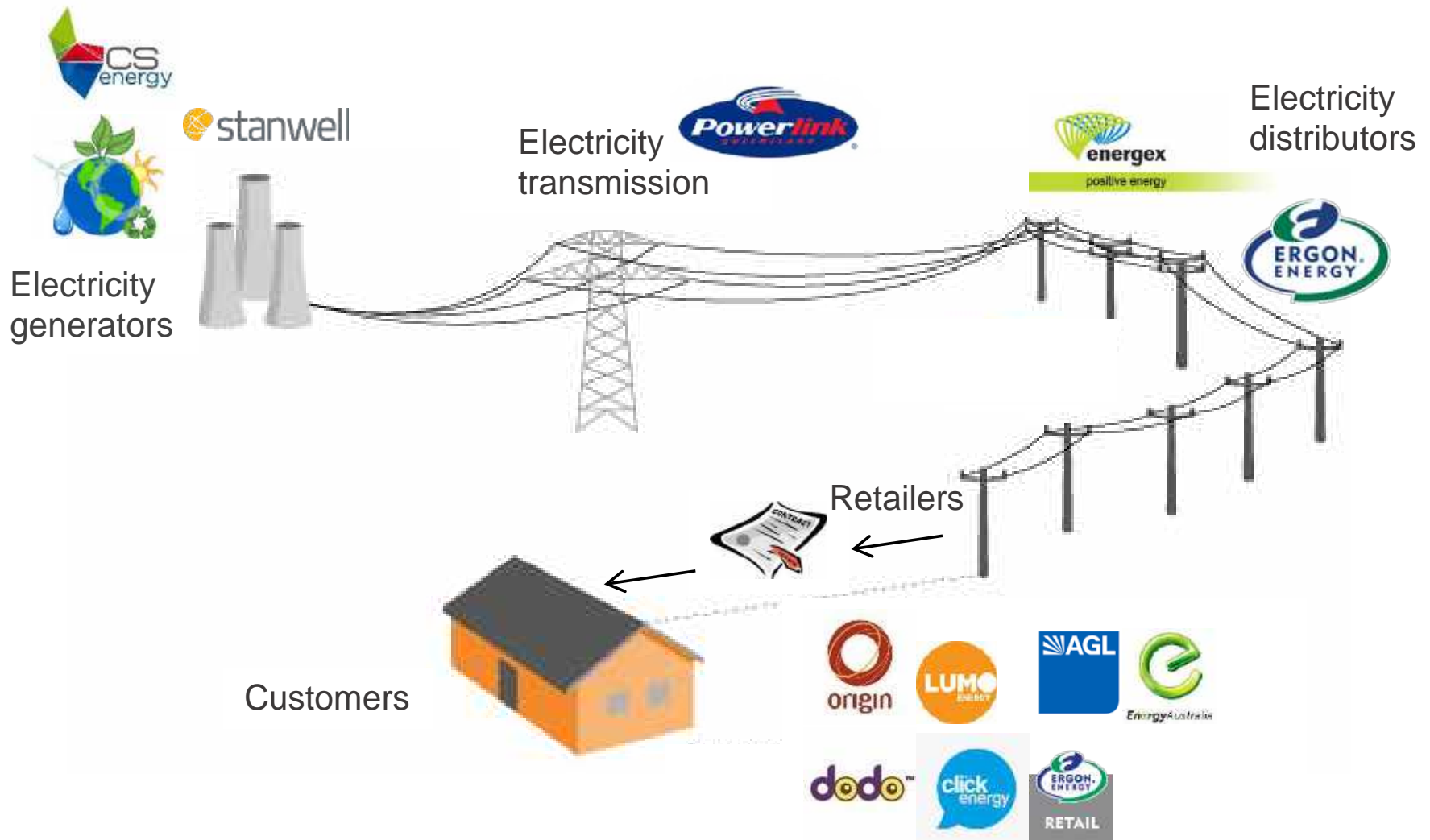
Figure 2.1  
Eastern gas market—basins and transmission pipelines



Note: Pie charts illustrate market shares in 2P (proved plus probable) gas reserves for each basin. Not all major transmission pipelines are shown. Table 2.5 and Figure 2.7 provide further detail.

Source: AER.

# Electricity supply chain - Queensland



# National Electricity Market

## Annual generation by fuel type

(2016/17):

**100%**

196.5 TWh

**77%**

150.9 TWh



COAL

**9%**

17.6 TWh



GAS

**8%**

15.5 TWh



WATER

**5%**

10.6 TWh



WIND

**0.3%**

0.6 TWh



SOLAR

**0.7%**

1.3 TWh

OTHER

Data does not include generation from  
rooftop solar PV systems.

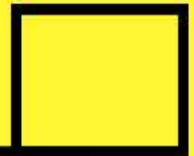
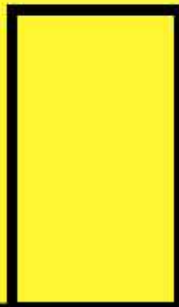
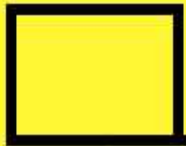
# How are electricity prices set?



# What makes up a typical electricity bill

Generation (20%)	Metering (2%)	Networks (50%)	Renewable Fees (6%)	Retail (22%)
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Approximate electricity  
bill breakdown





# Price Setting

Price Component	Responsibility
Wholesale generation	Competitive energy market
Network	Regulated by the AER
Solar payments	Jurisdictional schemes
Green schemes	Federal government
Retailer costs	Competitive market

# Regulated or De-regulated Market?

Regulated Market	De-regulated Market
<b>Standing offer</b> Prices: <b>set by regulator</b>	<b>Standing offer (30% of customers)</b> Prices: <b>set by retailer</b> <ul style="list-style-type: none"><li>• Generally higher than market offers</li><li>• Change 6 monthly</li></ul>
Terms & conditions: <b>standard and regulated</b>	Terms & conditions: <b>standard and regulated</b> <ul style="list-style-type: none"><li>• Open ended contract term</li></ul>
	<b>Market offer (70% of customers)</b> Prices: <b>set by retailer</b> <ul style="list-style-type: none"><li>• Subject to change anytime</li></ul> Terms & conditions: <b>set by retailer - varied</b> <ul style="list-style-type: none"><li>• May have fixed term contract</li></ul>

The government regulates electricity in regional Queensland, Tasmania and the ACT

# National Energy Market Framework

- Legislation
- NEM Institutions & other bodies
- Jurisdictional perspectives



# NEM – Legislative framework

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## COAG Energy Market Agreement

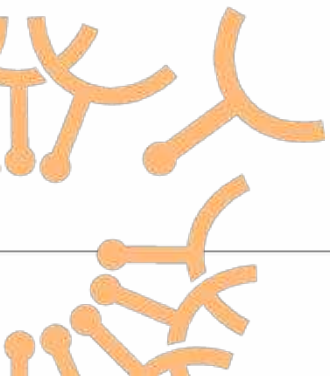
Executed by COAG members

The objectives of the Agreement are:

- the promotion of the long term interests of consumers with regard to the price, quality and reliability of electricity and gas services; and
- the establishment of a framework for further reform

Commenced 2004

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# NEM – Legislative framework

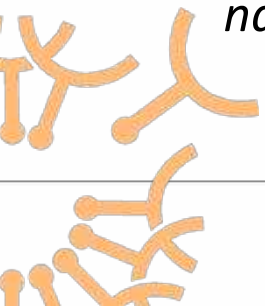
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- National Electricity Objective

*to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to – price, quality, safety, reliability, and security of supply of electricity; and the reliability, safety and security of the national electricity system.*

- National Gas Objective

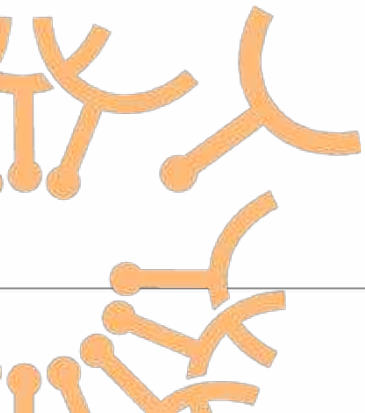
*to promote efficient investment in, and efficient operation and use of, natural gas services for the long-term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.*



# NEM – Legislative framework

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- National Electricity Law
  - plus regulations and rules
- National Gas Law
  - Plus regulations and rules
- National Energy Customer Framework (NECF)



### Jurisdictional application of the NECF

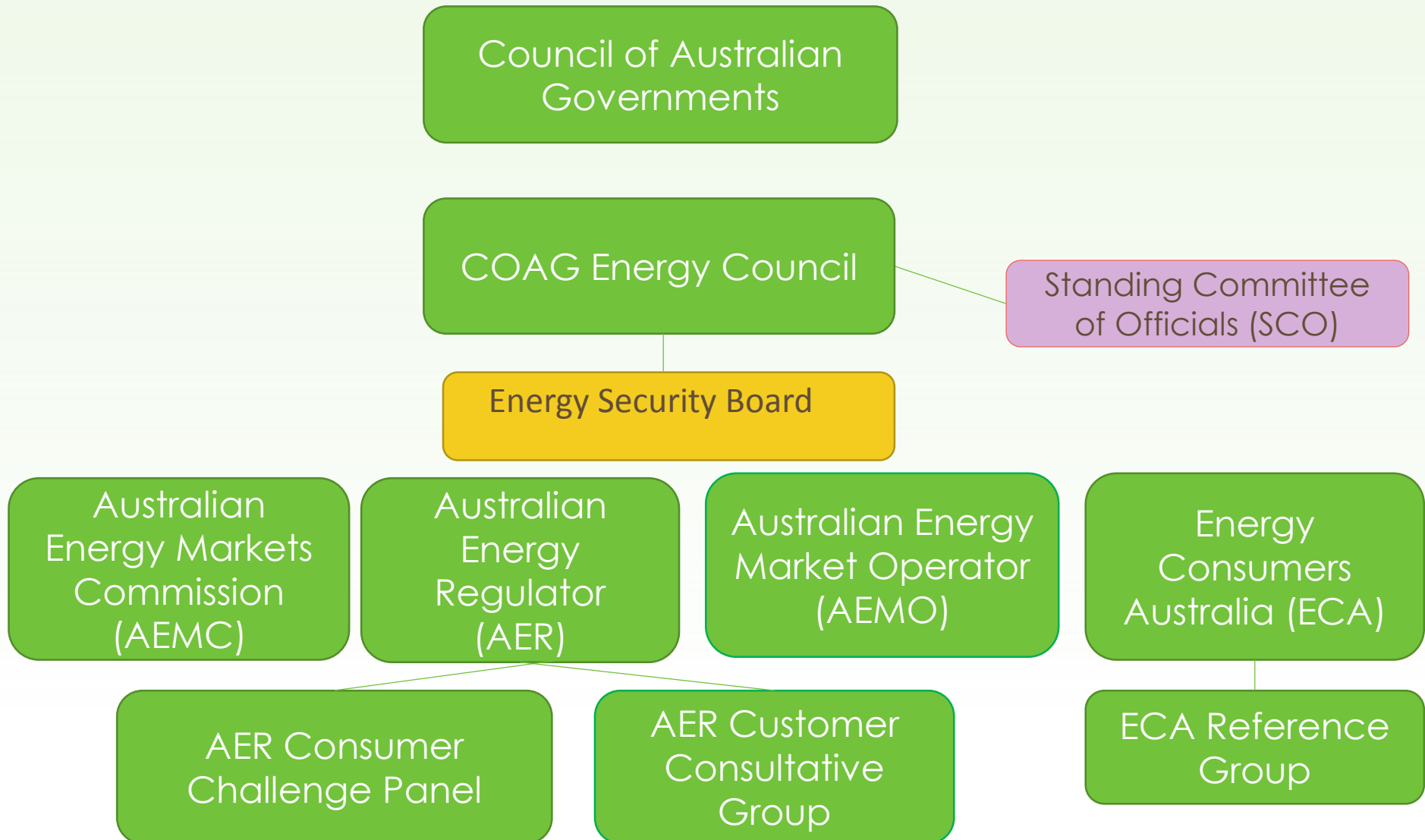
State	National Energy Customer Framework (NECF)
Lead legislation	
SA	<i>National Energy Retail Law (South Australia) Act 2011</i>
Application in remaining states and territories	
VIC	N/A
NSW	<i>National Energy Retail Law (Adoption) Act 2012</i>
ACT	<i>National Energy Retail Law (ACT) Act 2012</i>
QLD	<i>National Energy Retail Law (Queensland) Act 2014</i>
TAS	<i>National Energy Retail Law (Tasmania) Act 2012</i>
NT	N/A
WA	N/A

# NEM Institutions

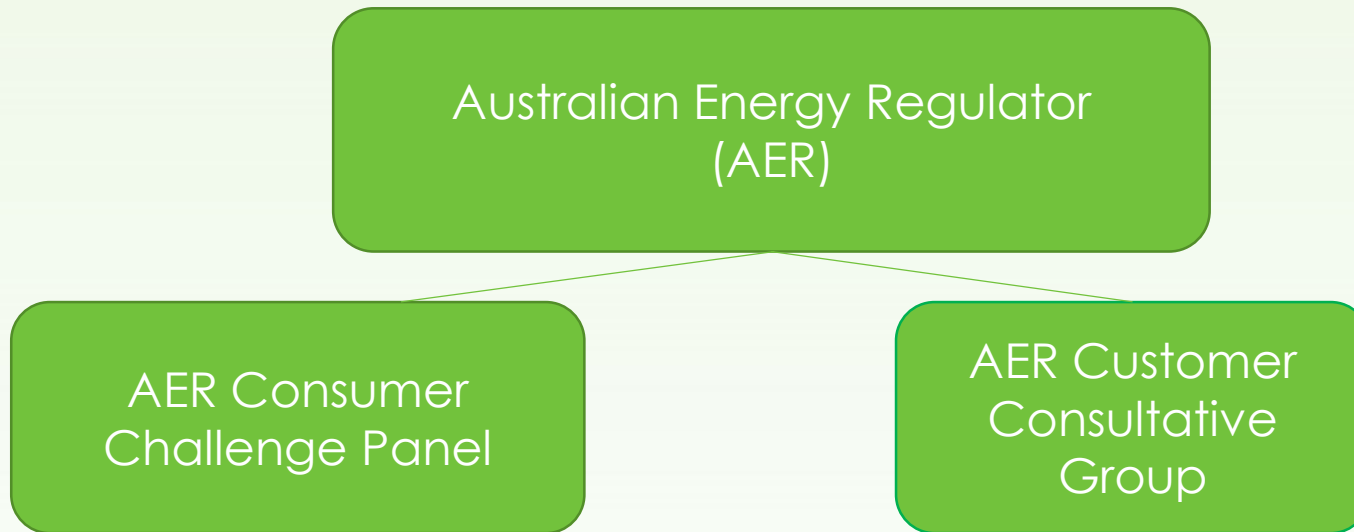




# National Energy Market (NEM) Institutions



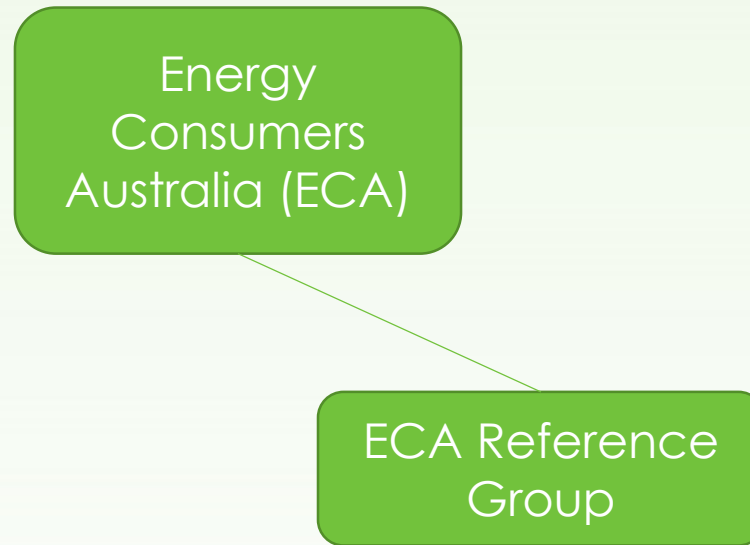
# National Energy Market (NEM) Institutions



## AER

- Monitors and regulates the wholesale market
- Regulates networks & sets revenues
- Monitors compliance and regulates retail market (approved and exempt retailers).

# National Energy Market (NEM) Institutions



## ECA

- Promotes the interests of residential and small business consumers
- Grant funding role for advocacy and research

# Tasmanian Jurisdictional arrangements

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Tasmania has:

- 1 dominant government-owned generator (hydro Tasmania)
  - 1 combined electricity transmission & distribution network
  - 1 gas transmission pipeline
  - 1 gas distribution network
  - 1 electricity retailer (for residential consumers)
  - 2 gas retailers (for residential consumers)
  - Tasmanian Economic Regulator
  - Department of State Growth
  - Energy Ombudsman Tasmania
  - Consumer, Building & Occupational Services – Technical Regulator
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# Current Issues in the NEM

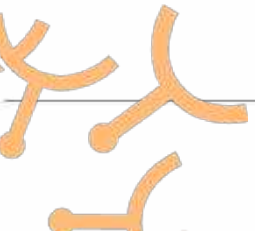
- Finkel Report - National Energy Guarantee
- ACCC review of electricity supply and prices
- New products and services
- Cost-reflective tariffs
- Contestable metering
- Embedded networks



# Tasmanian Developments

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- Regulatory determination for TasNetworks
- Basslink 2 & pumped hydro storage



QUESTIONS?

