Overview of Regulation

Rob Ball
Economic Regulation

Agenda

- Why are we regulated?
- Who regulates us?
- How are we regulated?

Regulation of Monopoly Services

The services that we provide are monopoly services – no other business supplies gas and electricity infrastructure in our geographic area

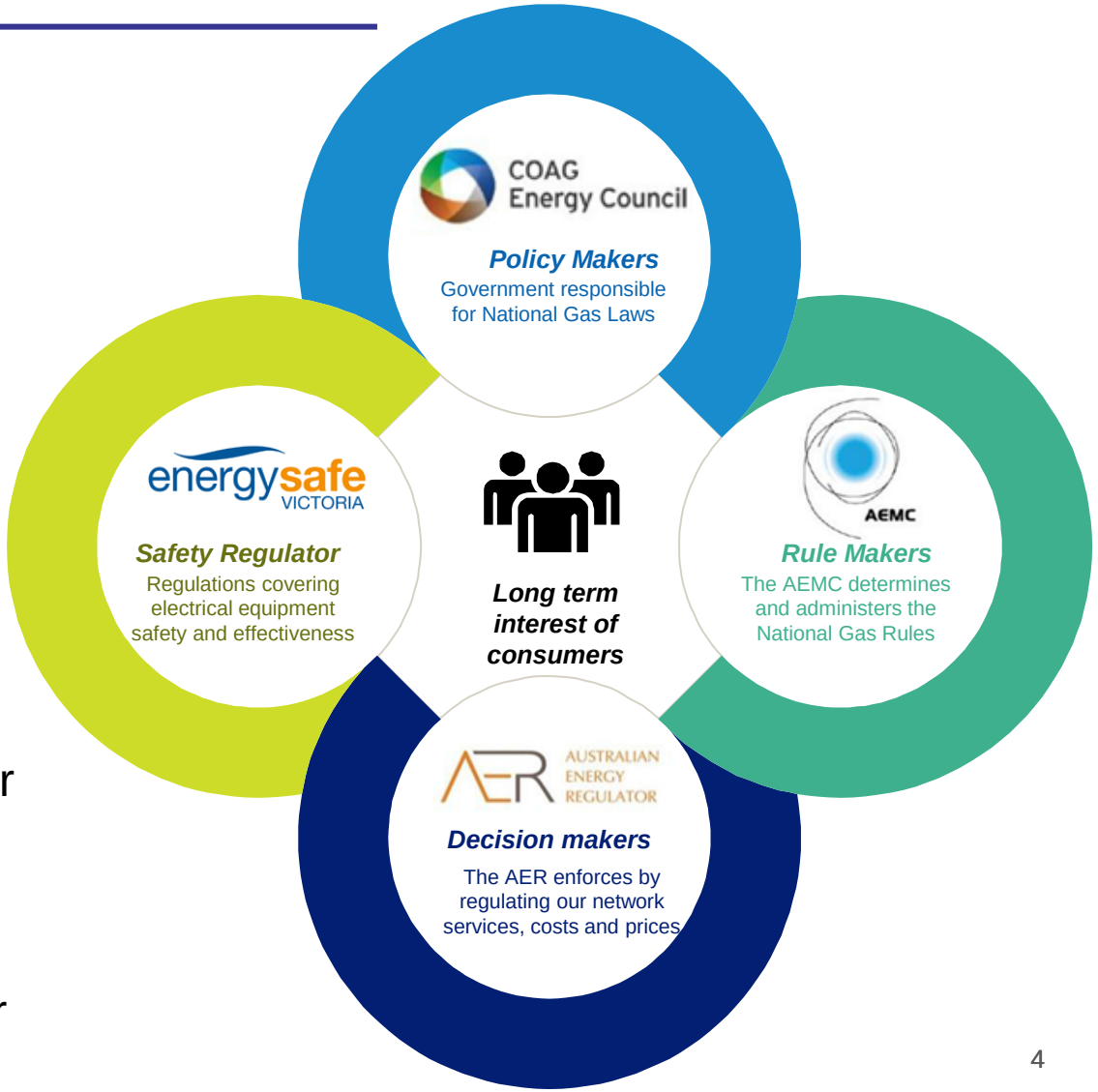
- The minimum efficient scale of production precludes more than one service provider i.e. water, rail
- Under economic theory, no market competition means no incentive to be efficient

Regulatory Framework

Different layers of oversight.

Comprises:

- **Energy Council** (State and Federal Energy ministers) set Policy and make the Laws
- **Energy Security Board** provides whole of system oversight of security and reliability
- **AEMC** is the rule maker and reviewer
- **AER** is the economic regulator and administers the laws and rules
- **ESV** is the technical / safety regulator; **ESC** responsible for licencing, EDC



National Electricity Objective

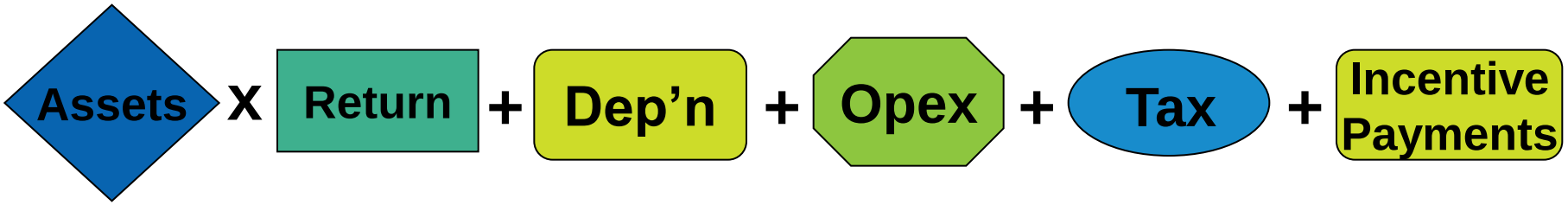
*to promote efficient investment in, and efficient operation and use of, electricity services for the **long term interests of consumers** of electricity with respect to—*

(a) price, quality, safety, reliability and security of supply of electricity; and

(b) the reliability, safety and security of the national electricity system.

Building Block Regulation

- Allowed revenue is calculated with what is known as a revenue ‘building block’ approach
- Each block represents an allowance for a different kind of expenditure or cost



Incentive Schemes

Electricity Distribution

- Capex and opex efficiency
- STPIS – SAIDI/ SAIFI/ MAIFI
- GSLs
- F factor
- Demand Management Incentive Allowance (DMIA)

Electricity Transmission

- Capex and opex efficiency
- STPIS
  - Service Component
  - Market Impact Component
  - NCIPAP

Gas

- Capex (new) and opex efficiency
- Unaccounted for Gas

How is the ‘Building Block’ set?

Network lodges five year plans for revenue, expenditure and service levels. Must incorporate customer views.

After Q&A process, AER issues initial views

Network responds with revised plans and evidence

AER issues binding price or revenue cap and service levels

Wide range of information required

- **Evidence that customer views have been considered** networks must consult with customers as part of the preparation of the revenue proposal. The AER takes into account the extent to which consumers preferences are incorporated.
- **Benchmarking** indicates whether networks are efficient. Uses RIN data.
- **Asset management information** (eg: strategies, asset condition reports, economic evaluations, failure rates, demand, risk (safety/supply) levels
- **Physicals** (eg: network capacity, size/length and location of assets, fault levels, nameplate ratings of individual assets, number of connections)
- **Cost** (eg: regulatory accounts, historic expenditure, unit rates, labour/materials costs, splits for internal/external labour, estimating data)
- **Project** (eg: planning reports, scoping documents, options analysis, business cases, Board Papers, cost estimation, delivery progress)
- **Governance and management** (eg: policies, processes, governance structures, Board decisions, cost allocation, related parties)

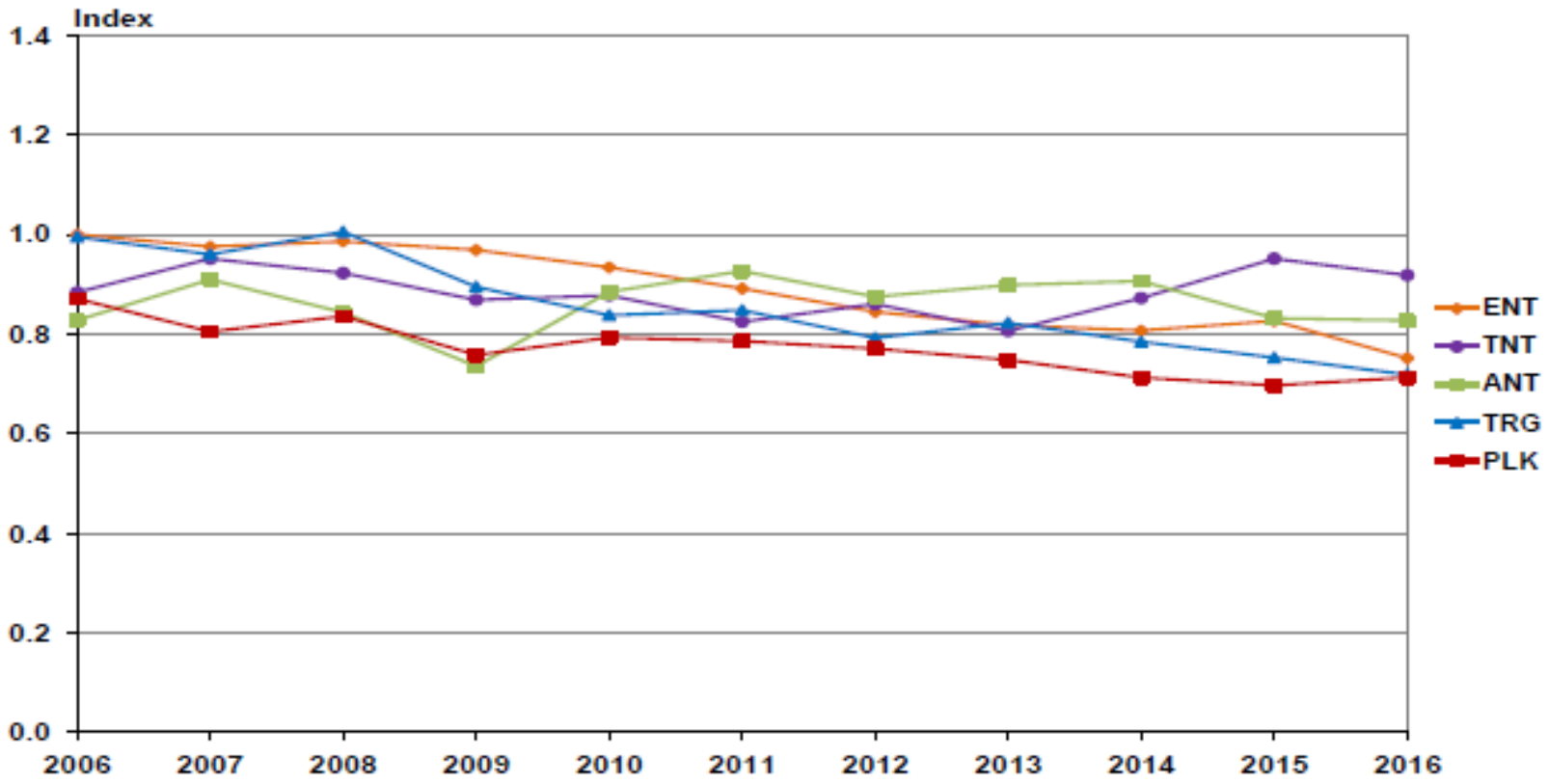
Use of Benchmarking – Top Down

Multi Total Factor Productivity = $\frac{\text{Total Output}}{\text{Total Input}}$

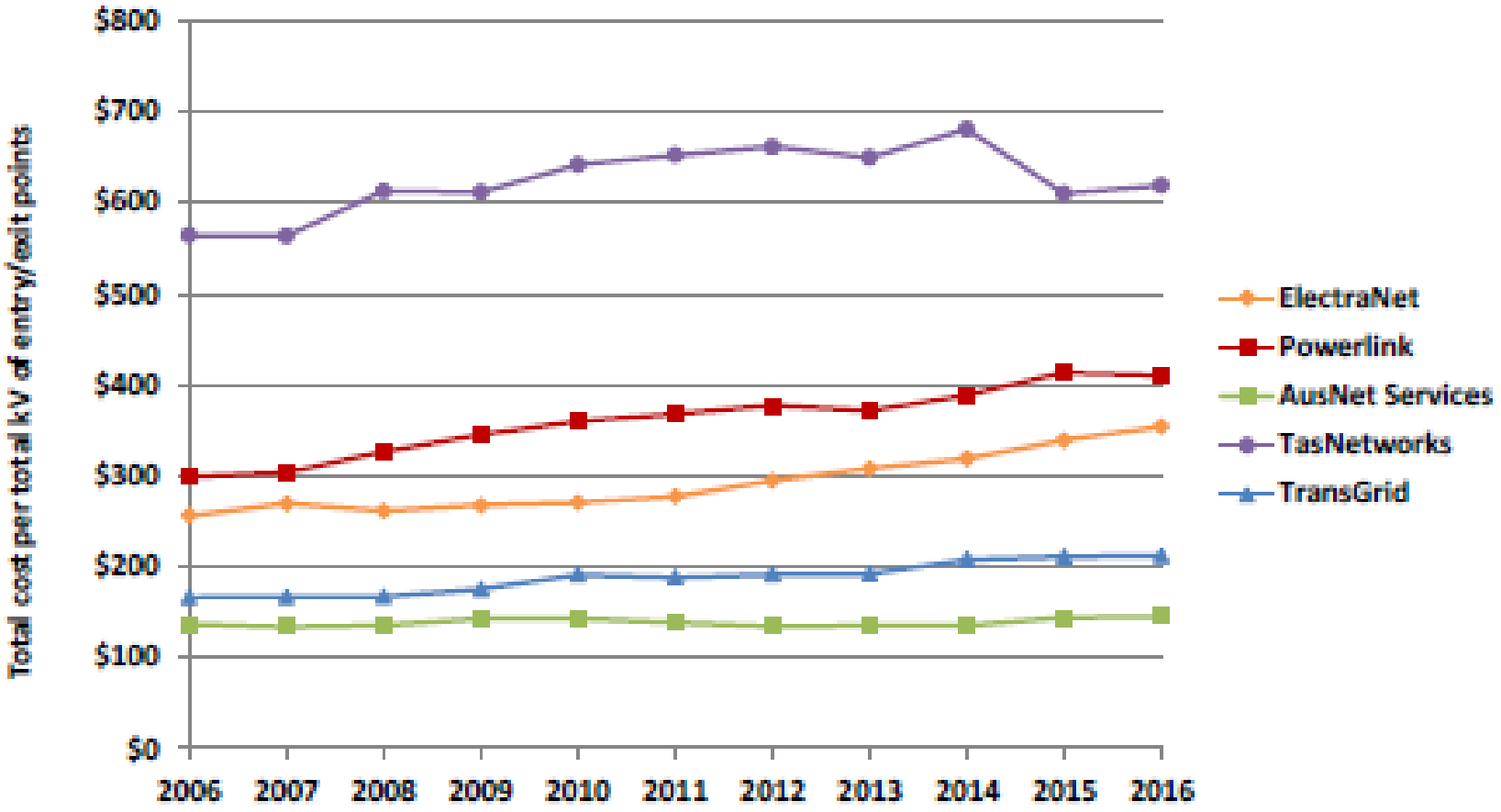
- **Inputs**
  - Assets
    - Overhead lines
    - Underground cables
    - Transformers and other capital
  - Operating Expenditure
- **Outputs**
  - Energy transported
  - Ratcheted maximum demand
  - Circuit length
  - End user numbers
  - Reliability

The more outputs you can deliver for a given set of inputs, the more productive you are

Use of Benchmarking – Top Down



Use of Benchmarking – Bottom Up



Use of Benchmarking – Bottom Up