

## Putting the customer back in front

How to make electricity cheaper

Tony Wood



## Shock to the system

Dealing with falling electricity demand

Tony Wood and Lucy Carter



## Getting gas right

Australia's energy challenge

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# GRATTAN

Institute

## Climate and Energy policy in 2016

Crawford School  
February 2016

## It may all be in the eye of the beholder

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**What we are hoping for**



# It may all be in the eye of the beholder

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**What we are hoping for**

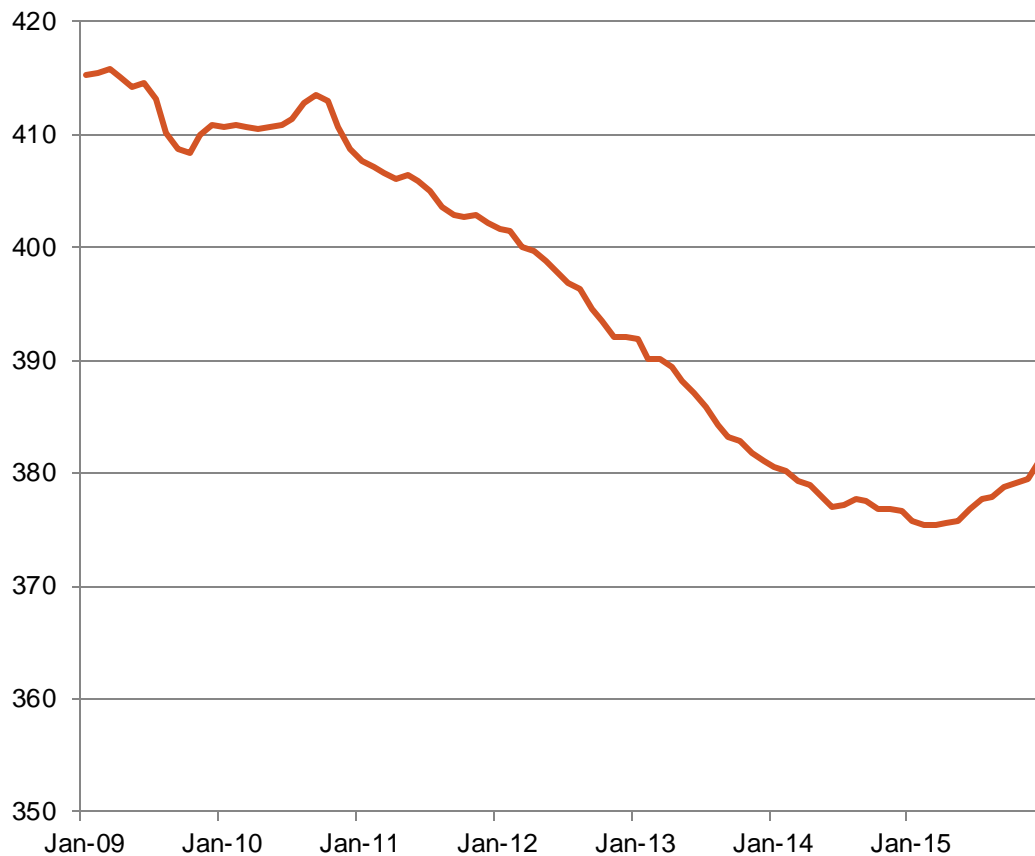


**What it sometimes feels like**



## Background: Falling demand, but now less so

Aggregate demand on rolling 12mth basis



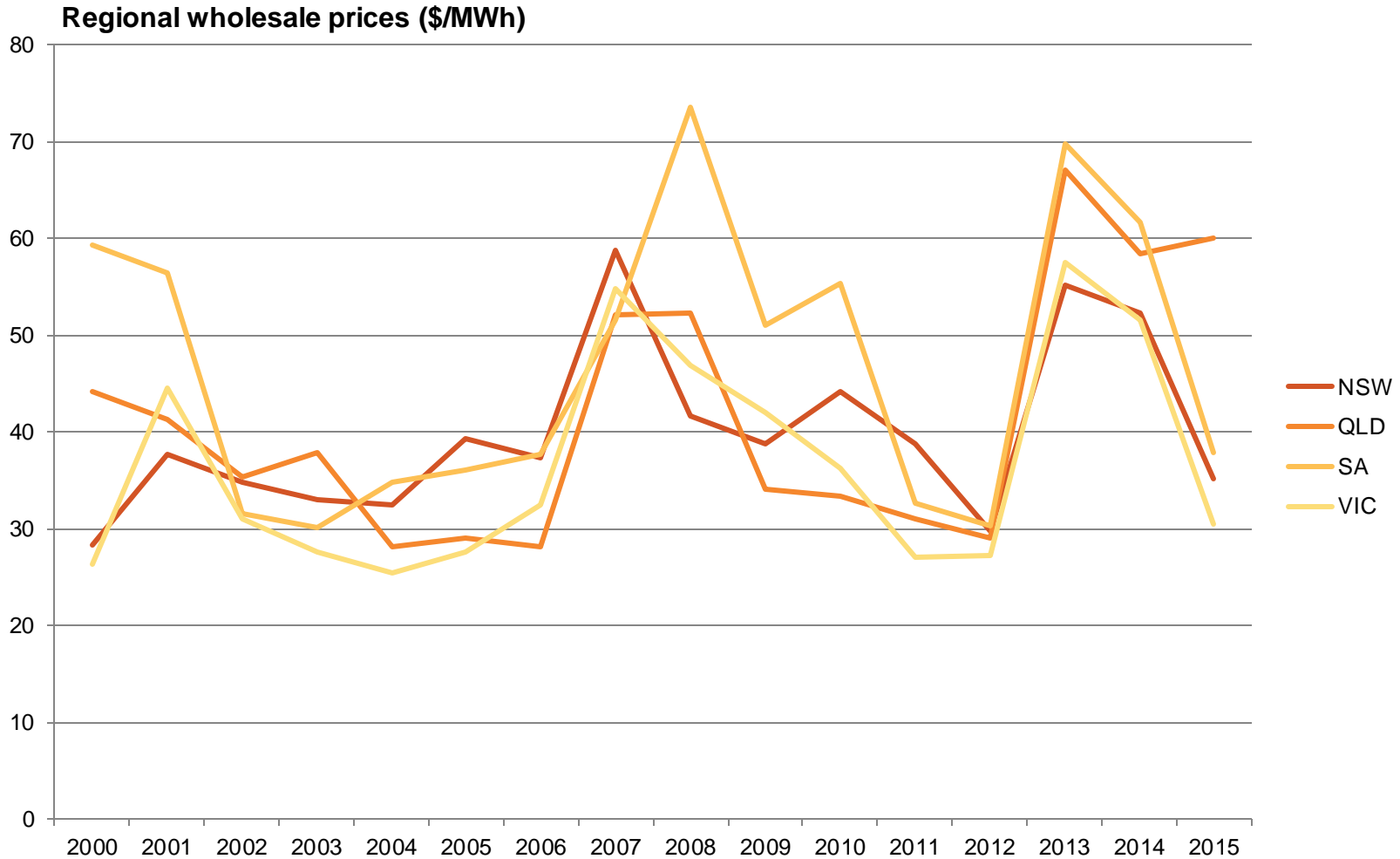
### Then:

- High prices
- Technology changes
- Manufacturing competitiveness
- Adoption of rooftop solar PV

### Now:

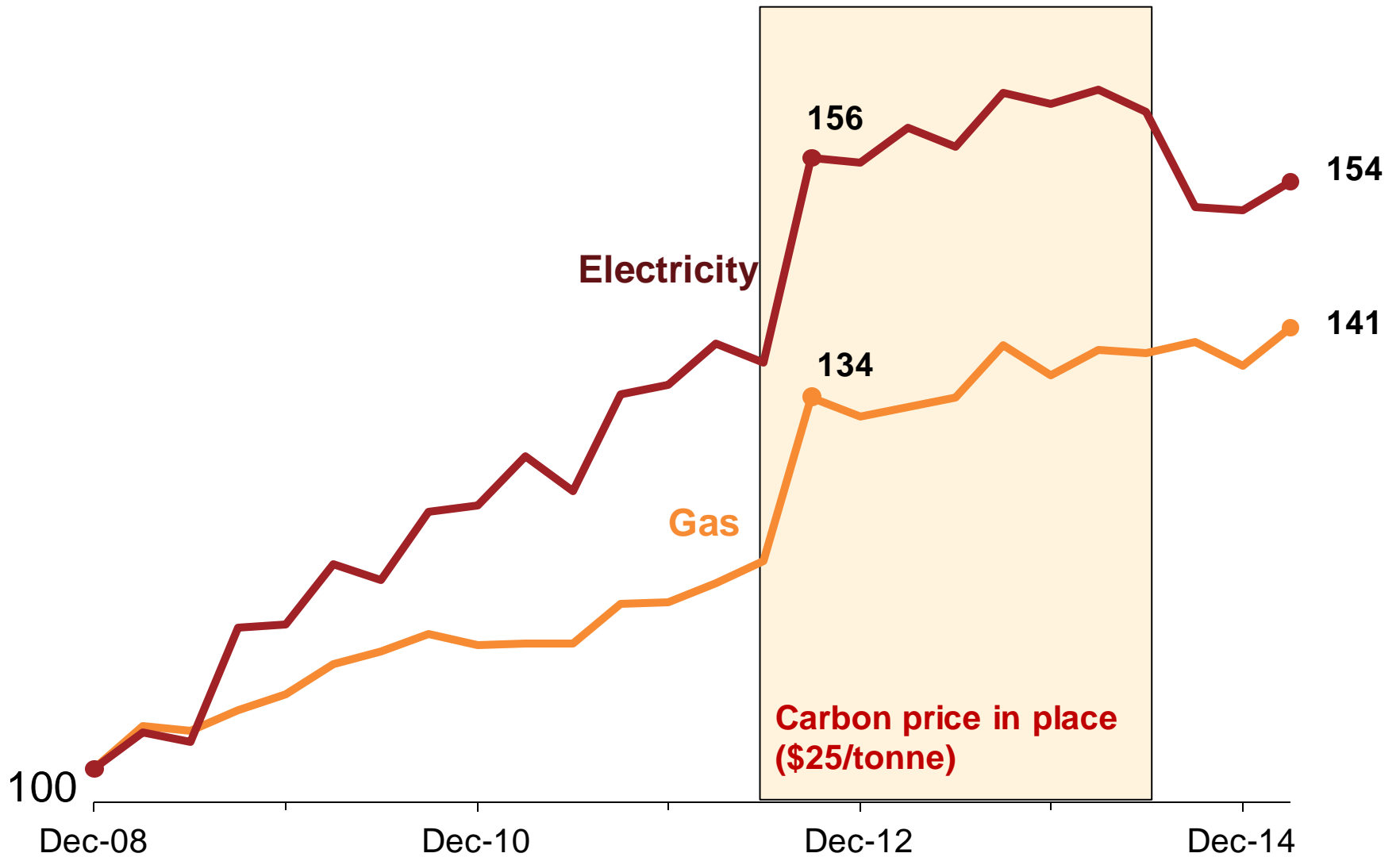
- LNG/CSG exports
- Population
- Saturation
- Exchange rates

## Volatile, low wholesale prices



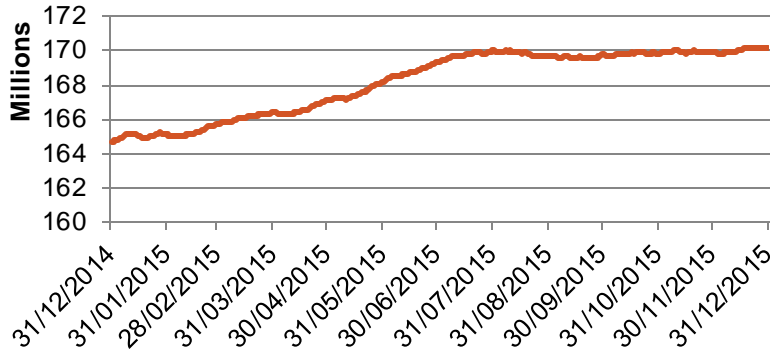
**Driven by oversupply and merit-order effect  
9GW oversupply in a 65GW market**

## Yet, rising retail prices, driven by networks



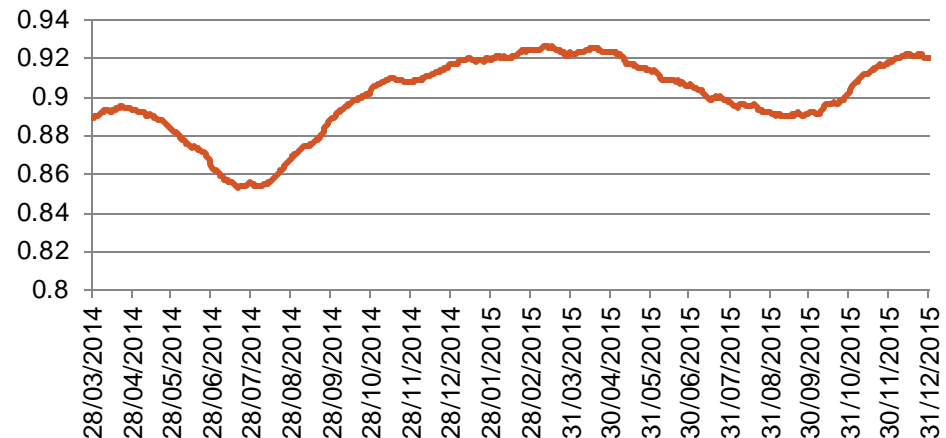
# Policies and markets intertwined

**NEM Annual emissions tonnes**



- **Short-lived policy delivered short-term outcomes**
- **The market is again dominant (mostly)**
- **The Renewable Energy Target is being challenged**

**Emissions intensity  
Rolling 3 mth average**



- **General trend to summer peak**
- **Hydro driven by economics and hydrology**
- **Brown coal very competitive**
- **Black coal prices low, but**
- **Rising domestic gas price**

## The outlook is anything but smooth

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Credible climate policy looks some way off:  
Carbon market risk



The wholesale market had something else in mind entirely:  
Tension between policy and market design



# The 2016 climate policy choice

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## The criteria

- Credibility
- Political viability\*
- Flexibility
- Adaptability
- Public acceptability\*
- Low cost

## Related issues

- Acceptance of international units.
- Assistance for emissions-intensive, trade-exposed (EITE) industries.
- Scheme coverage.
- Complementary policies.
- Use of scheme revenue.

## The choices

- Cap and trade emissions trading
- Carbon tax
- Intensity baseline and credit
- Emissions purchasing
- Regulation
- Tradable green certificates

## The politics

- A toxic, rollercoaster history
- Coalition has opted for a non-trading, combination of policies
- Labor is consulting on emissions trading and 50% renewables
- Paris Agreement remains delicately poised
- State governments are looking to act

## The 2016 energy market context

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- Completion of committed market reforms when fatigue sets in
  - Made more difficult by the Federal model of governance
- The resilience of a market model built for a different time and place
  - Gross-pool, energy-only wholesale market
- Challenges to a regulatory framework being left behind by technology and consumer choice (first Powerwall batteries installed this month)
  - Cost-reflective network pricing
  - Smart meters
- The golden age of gas is looking a bit tarnished
  - Global/regional oversupply
  - Domestic prices increasing
  - Unconventional (CSG and shale) gas is politically problematic

**Yet, Australia is not alone on most of these issues**

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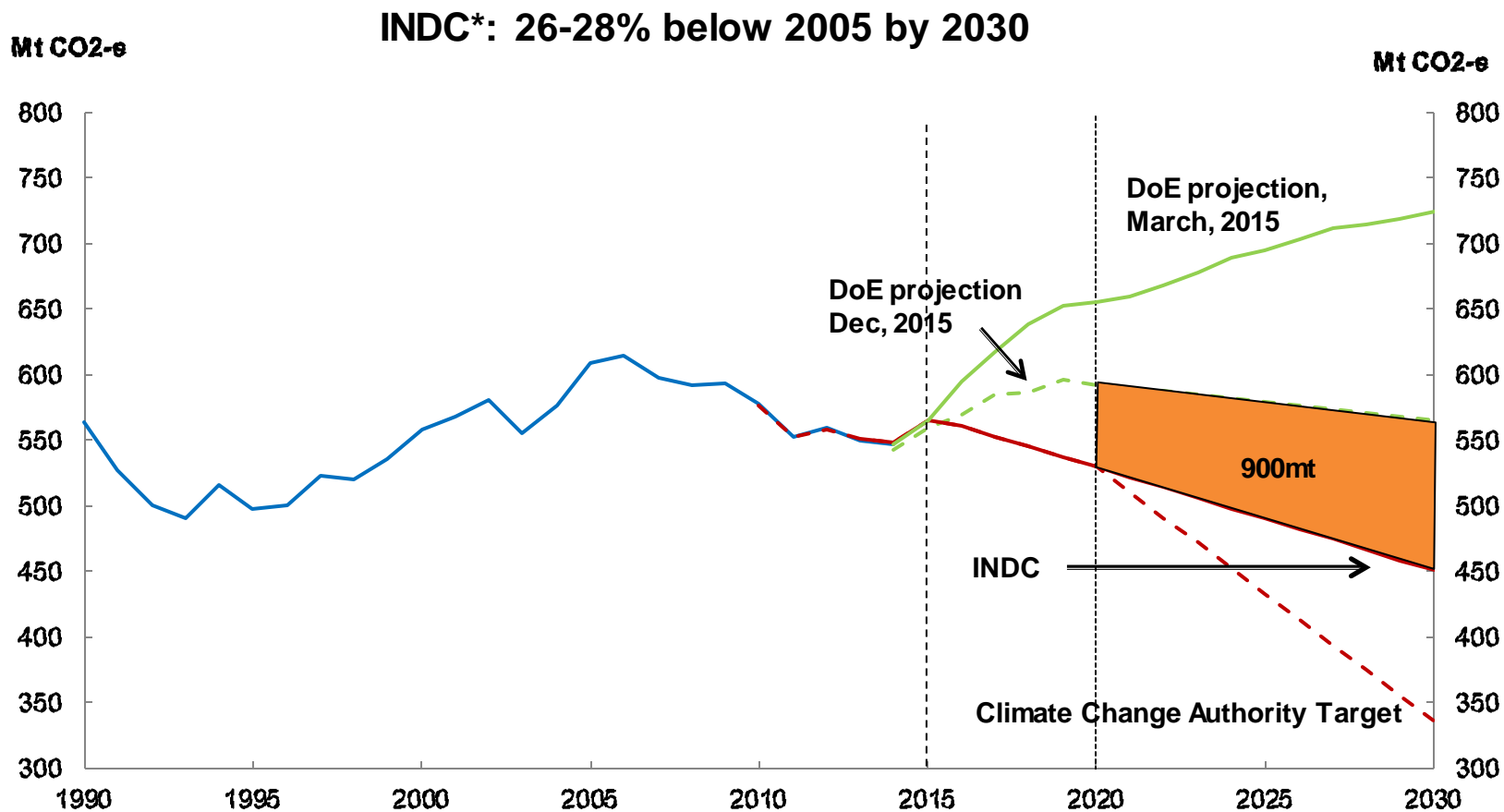
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## Climate and Energy policy in 2016

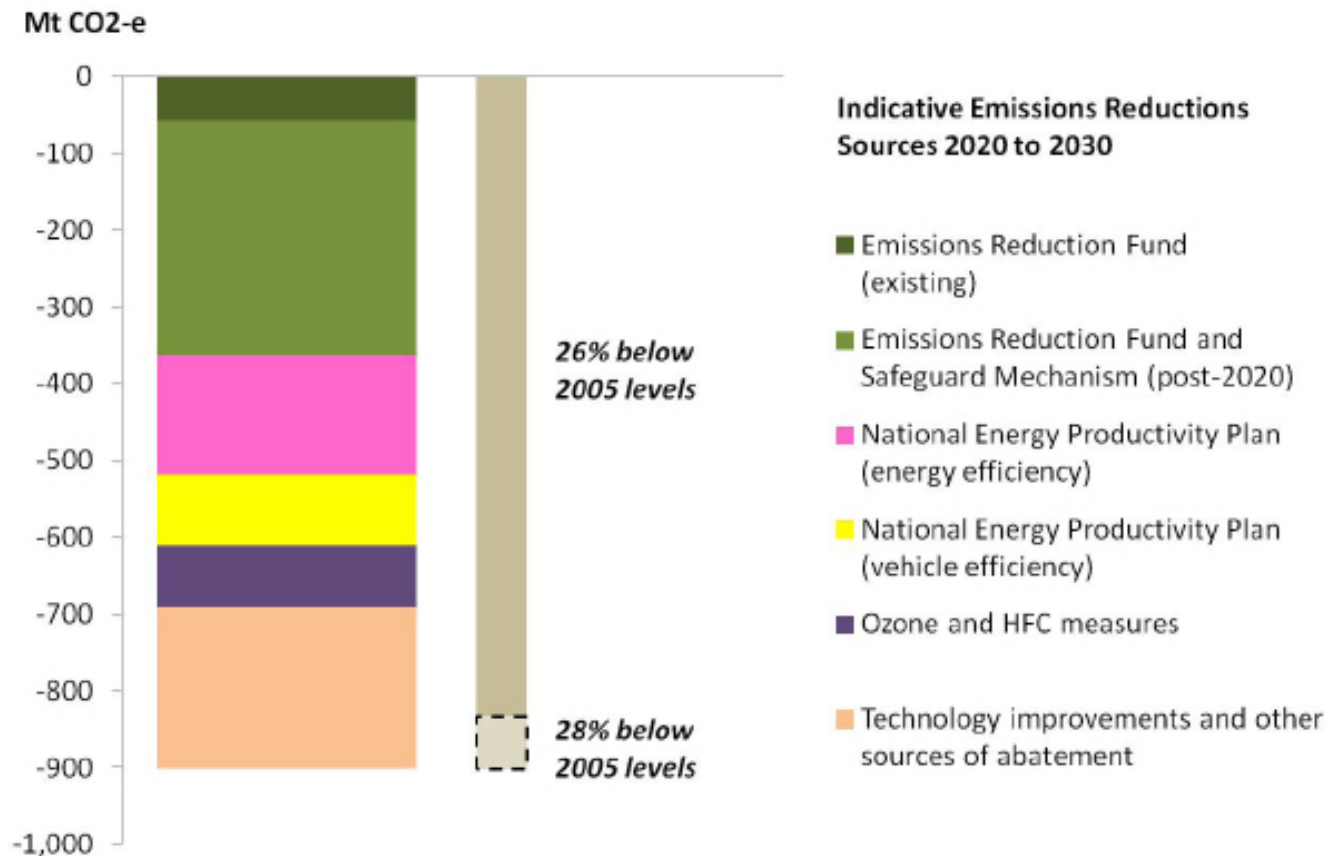
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# Emissions target modest but a challenge



Source: Grattan extension on DoE 2015/16  
Emissions projections  
INDC: Intended Nationally Determined Commitment

# Current policy based on a 900mt reduction wedge



Source: Department of Environment "Australia's 2030 climate change target"

**The numbers will be increasingly debated**