



# Targets and Progress Review Final Report

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# The Climate Change Authority

- The Authority is an independent body that provides evidence-based advice to the government about climate change policies
- It is chaired by Bernie Fraser and comprises 8 members
  - with expertise in climate science, economics, business and public policy
- Authority reviews are guided by legislated principles
  - including economic efficiency, environmental effectiveness and equity
- The Authority must consult with the public on its reviews

# The Targets & Progress Review

- The Targets and Progress Review is about what Australia's emissions reduction goals should be, and our progress towards these goals
- The Review can inform Australia's international position – Australia has committed to:
  - review its 2020 target in early 2014 and indicate post-2020 goals by early 2015
- The Review can inform the government as it revises Australia's climate policies, identifying:
  - where Australia has made progress in reducing emissions,
  - significant opportunities for more reductions—e.g. light vehicle standards and continued deployment of renewables
  - cost-effective ways to achieve stronger targets—e.g. international emissions reductions

# Principles and consultation

- In making its recommendations, the Authority considered:
  - the latest climate science
  - global action - what other countries are doing
  - equity – between countries and between generations
  - economic implications
- The Authority consulted extensively throughout the Review
  - around 12,500 written submissions
  - expert workshops and stakeholder roundtables
  - presentations to interested groups and state and territory governments

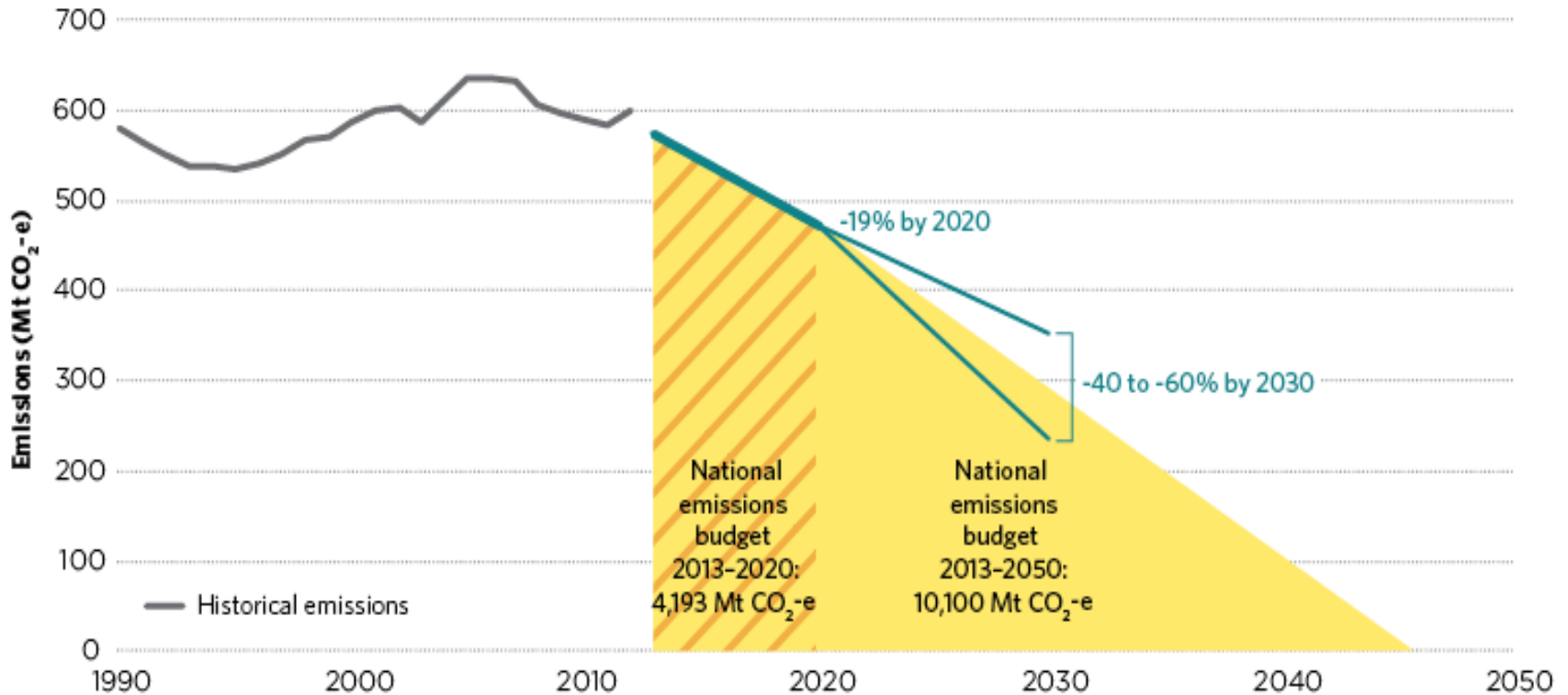
# Strong global action is in Australia's interest

- Human activities are causing the climate to warm
- Climate change poses major risks for Australia's
  - **People**—more exposure to tropical diseases; heat-related deaths
  - **Economy**—reduced agricultural productivity; bushfire/flood costs
  - **Environment** – degradation of coral reefs; species extinction
- Global action to avoid the worst impacts of climate change will benefit Australia
  - Australia should play its part

# Recommended emissions reduction goals

- The Authority recommends a coordinated set of goals that chart a clear course for action in the short-term and provide guidance for the longer term:
  - a minimum 2020 target of 15 per cent, plus 4 per cent credit from past action ('carryover')
  - a 2030 trajectory range of 40 to 60 per cent below 2000 levels
  - a long-term (2013-2050) budget of 10.1 Gt CO<sub>2</sub>-e

# Recommended emissions reduction goals

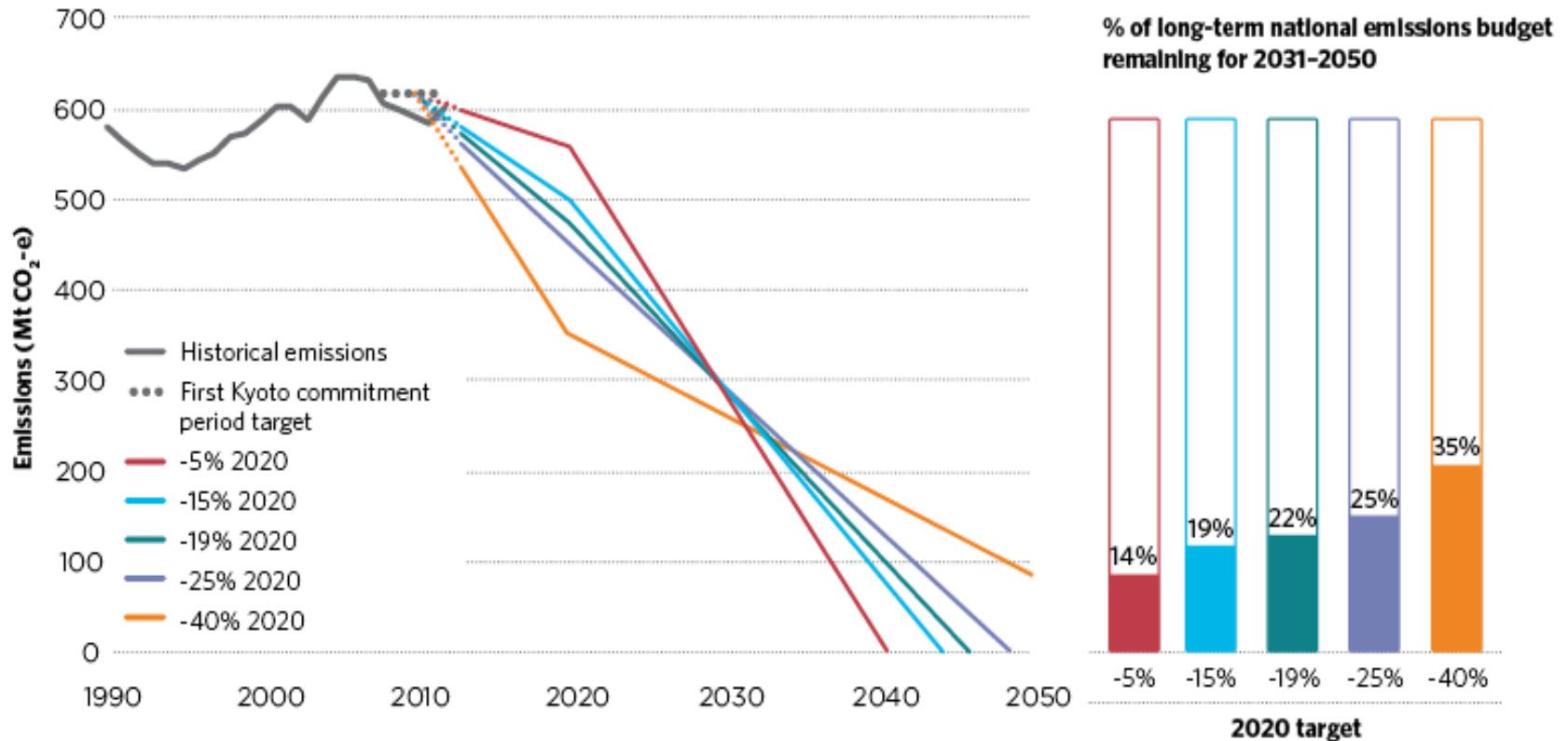


# 2020 target: 15 + 4 per cent carryover

- A 15 + 4 target is consistent with the science and fair to future generations
  - a 5 per cent target risks a costly and disruptive adjustment in the future
- A 15 + 4 target is in line with the efforts of similar countries, including the United States
  - a 5 per cent target does not keep up with the scale and pace of international action
- A 15 + 4 target can be achieved while the economy and national incomes continue to grow
  - moving from 5 per cent to 19 per cent slows the annual growth in average per person income by 0.02 per cent (but depends on the policy)



# Why 15 + 4? A balanced effort over time





# Why 15 + 4? China & the US are stepping up

- Many countries, including the largest emitters, are acting.
- Both China and the United States are stepping up their efforts on climate change, with measures including:

## **Investment in renewable energy:**

- more than \$US100 billion invested in US/China in 2012

## **Vehicle emissions standards:**

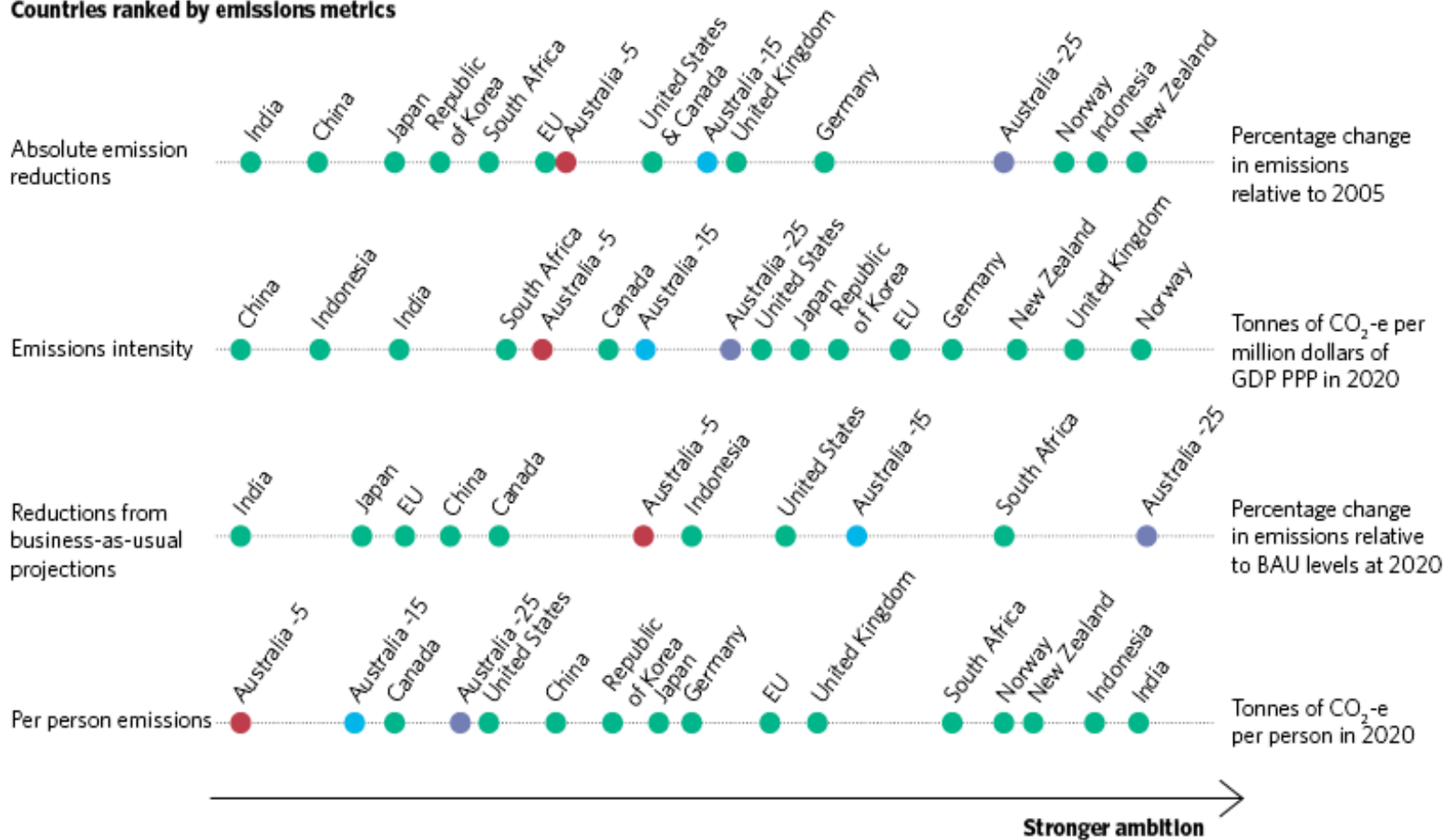
- both countries announced tougher standards in 2013

## **Sub-national emissions trading schemes**

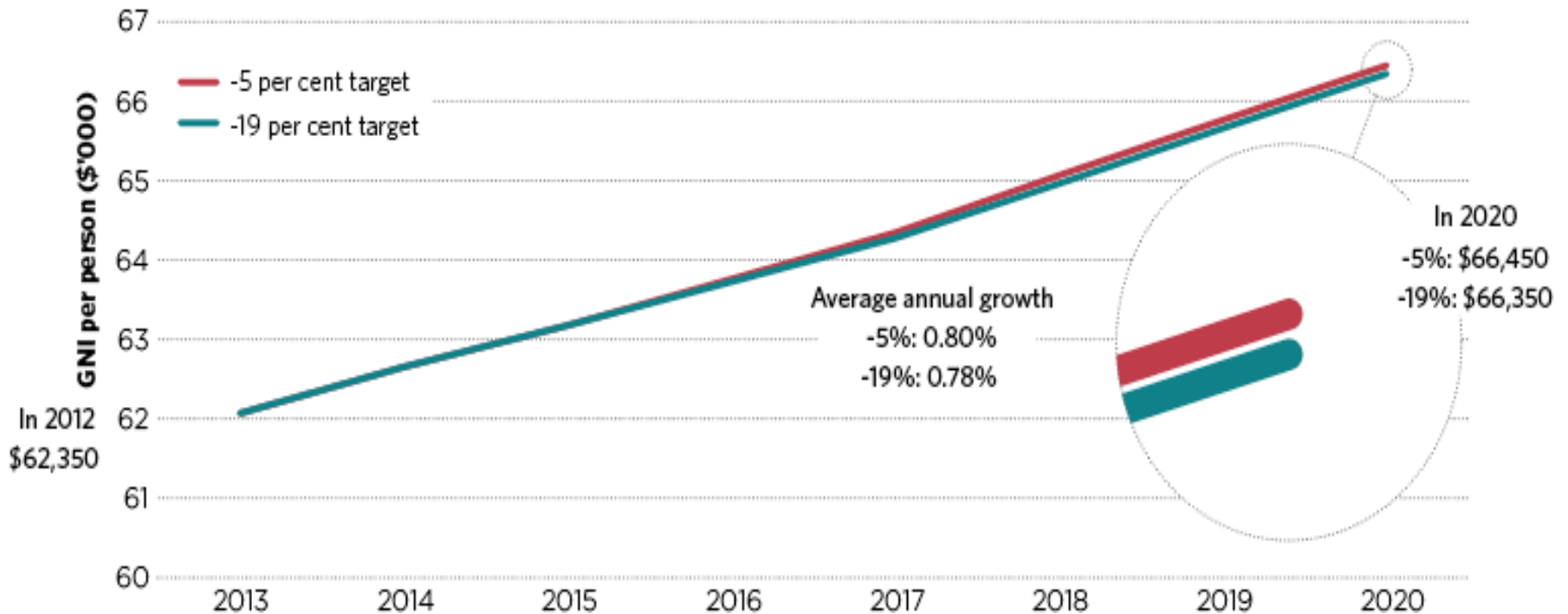
- At the start of 2014, China had five in operation, the US had ten
- Countries, including both the US and China, are beginning to plan their action after 2020

# Why 15 + 4? In line with other countries

## Countries ranked by emissions metrics



# Why 15 + 4? The costs are manageable



# Beyond 2020: 2030 goals

- Longer term emissions reduction goals can increase policy predictability
  - a wide range of stakeholders supported setting post-2020 goals
- The trajectory range of 40 to 60 per cent provides flexibility for Australia to adjust its action in response to changing circumstances, including:
  - developments in climate science
  - the level of international action, and
  - economic factors
- Authority recommends periodic review of the trajectory range and long-term emissions budget

# Beyond 2020: emissions budgets

- Emissions budgets set an overall limit on emissions and highlights the trade-offs of effort over time
- The Authority uses a global emissions budget that provides a 'likely' chance of limiting warming to below 2 degrees
- The Authority considers that Australia's fair share of the global emissions budget is 10.1 Gt CO<sub>2</sub>-e for the period 2013 to 2050
  - about 17 years of emissions at current levels
- The Authority's recommended 2020 target is the minimum reduction consistent with staying within a 10.1 Gt budget
  - a weaker 2020 target would leave too much effort for later

# Australia can achieve 15 + 4

- Australia has already made progress
- Since 1990, the size of the Australian economy has doubled, but its emissions intensity has halved
  - changes in land use and forestry and, recently, electricity generation and use have been significant contributors



# There are opportunities to reduce emissions across the economy

- Australia has many opportunities to reduce emissions, including:
  - using energy more efficiently in industry, homes and businesses, and using more efficient transport
  - transitioning to lower emissions electricity generation
  - adopting low emissions technologies and production processes
  - continuing to reduce land clearing, increase forest cover, and improve land and forest management

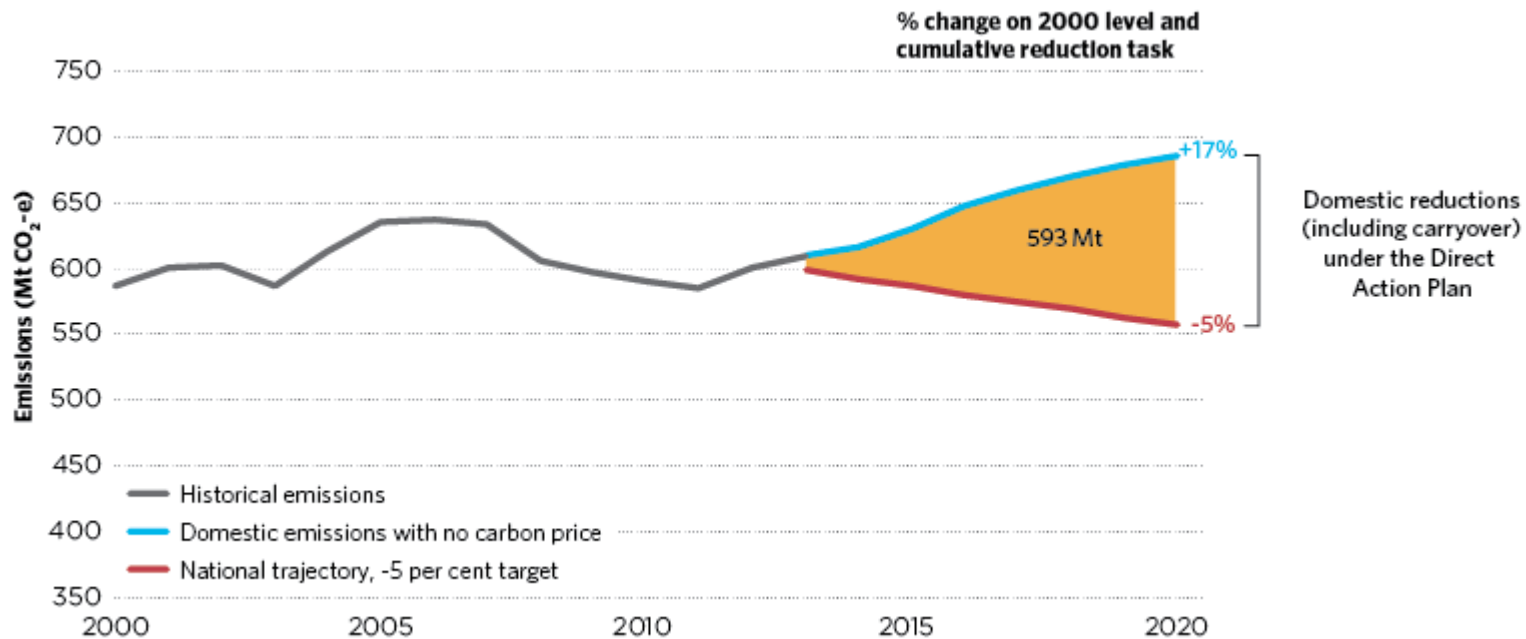
# Effective policies are needed now

- Australia needs policies to drive long-term changes given the lead times
  - by 2020, emissions could be up to 17 per cent above 2000 levels (no additional action)
  - or as low as 6 per cent below 2000 levels (high price incentive)
- Taking action could help Australia remain competitive in a future low emissions world

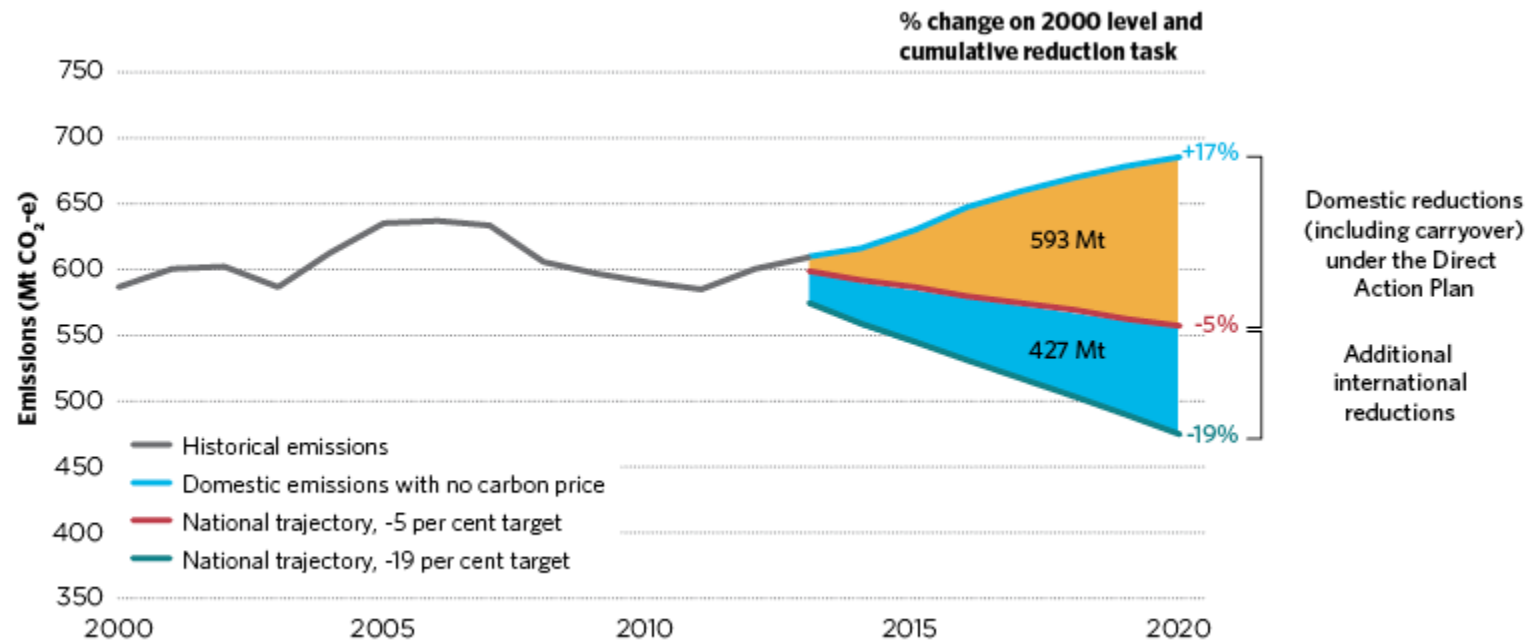
# International emissions reductions can help

- Genuine international emissions reductions can help meet the recommended target in a cost-effective way
- The time is opportune
  - there are high-quality international emissions reductions available at historically low prices
- The government could establish a fund to purchase international emissions reductions to bridge the gap between domestic reductions and the recommended target
  - the fund would need to be between \$210 and \$850 million based on CDM unit prices of \$0.50 and \$2 a tonne (current prices are below \$1)

# International emissions reductions



# International emissions reductions



# Summary

- The science is clear: the world urgently needs to cut greenhouse gas emissions. Australia will benefit from global action and needs to play its part
- We need to strengthen our efforts now, otherwise we will leave future generations with an improbably large task
- The responsible course of action is to raise our 2020 target to at least 15 per cent
- And, with credit for action Australia has already taken, we can boost this target to 19 per cent
- The target is achievable if strong policies are implemented now, and the costs are small and can be managed.