

NSW Clean Coal Summit

John Connor, CEO

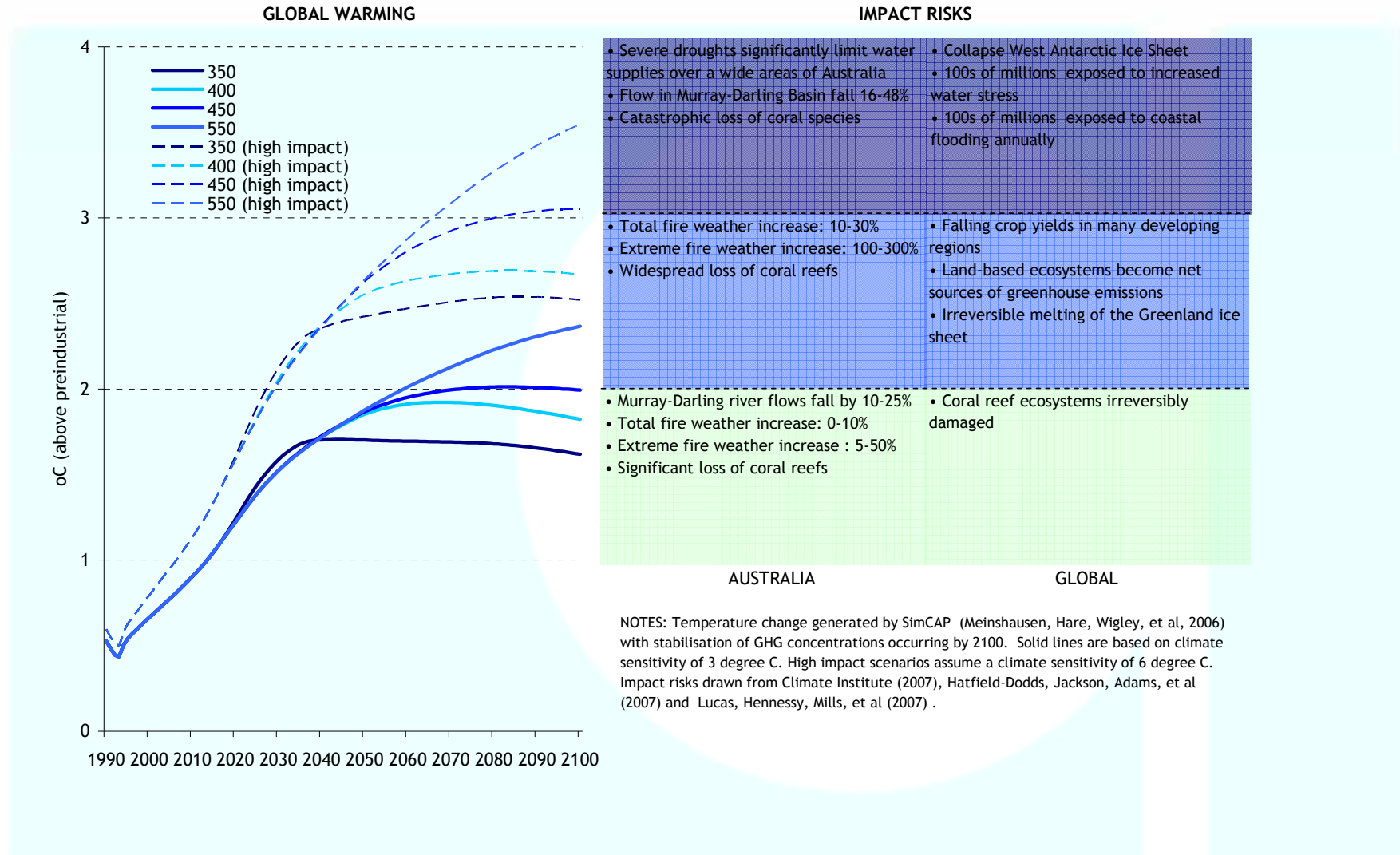
- Established in 2005 with grant from Poola (Tom Kantor) Foundation
- Australia leading the world in clean technology use and innovation, with clean and low carbon solutions a part of everyday life throughout the community, government and business.
- Non-partisan and independent research organisation

Introduction

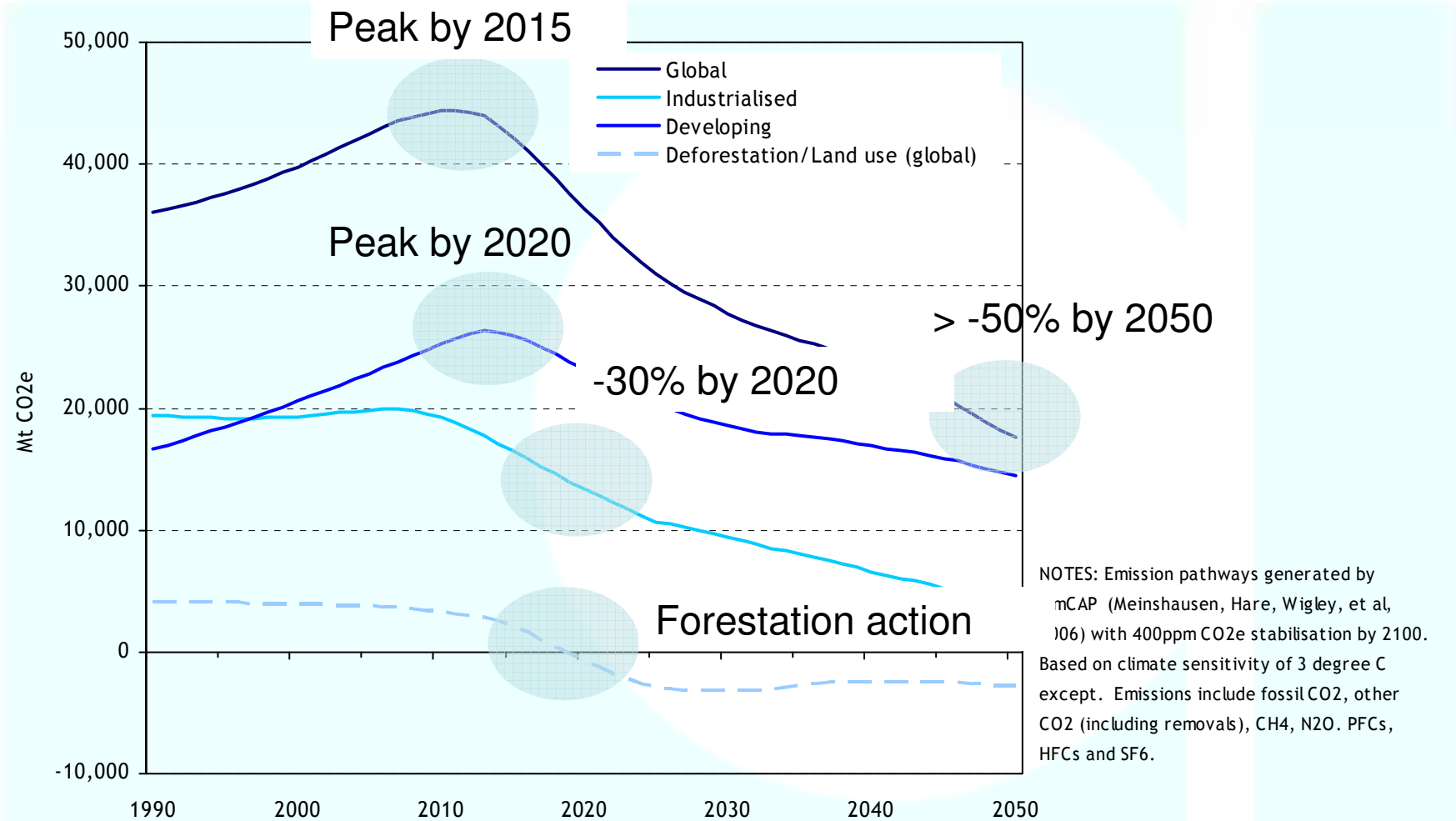
- Science
- Targets
- Role of coal and ccs
- Policy goals
- Public Attitudes
- Conclusions

The Science

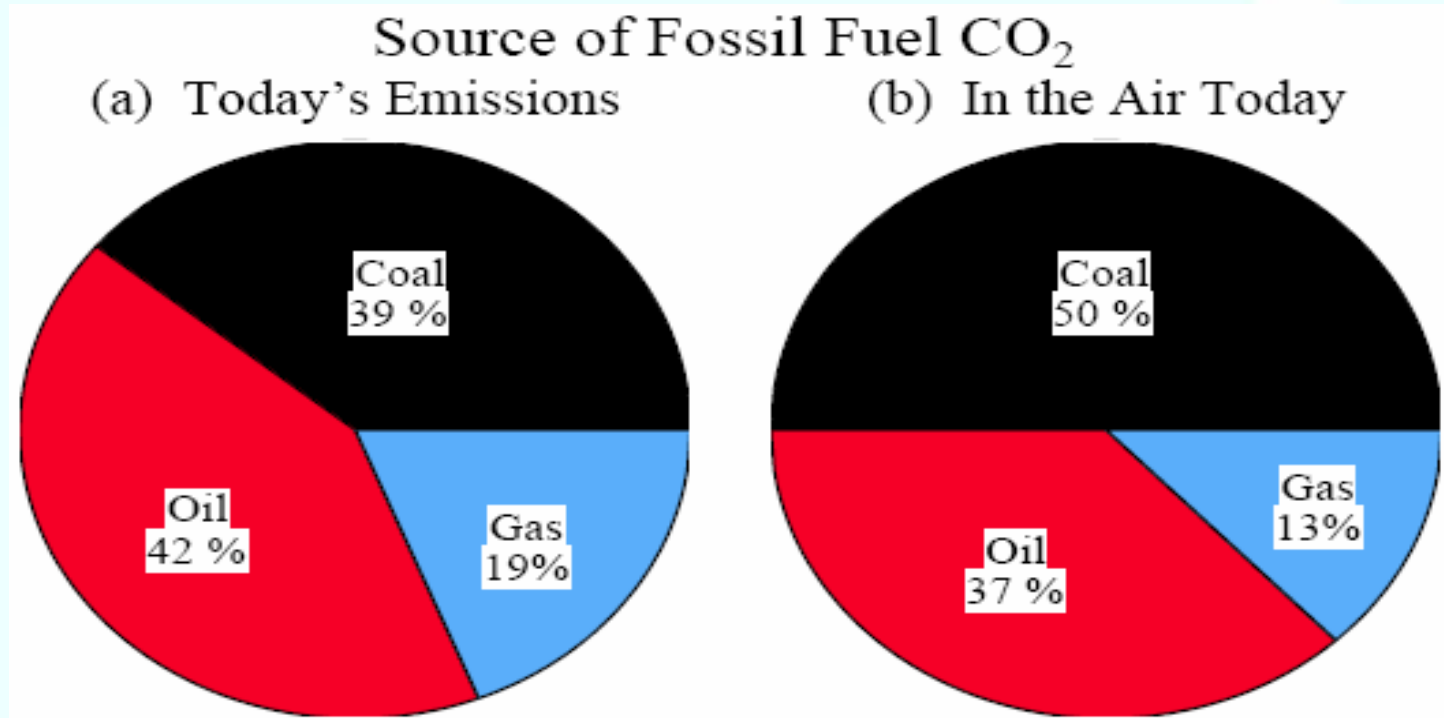
a)



Benchmarks for Copenhagen

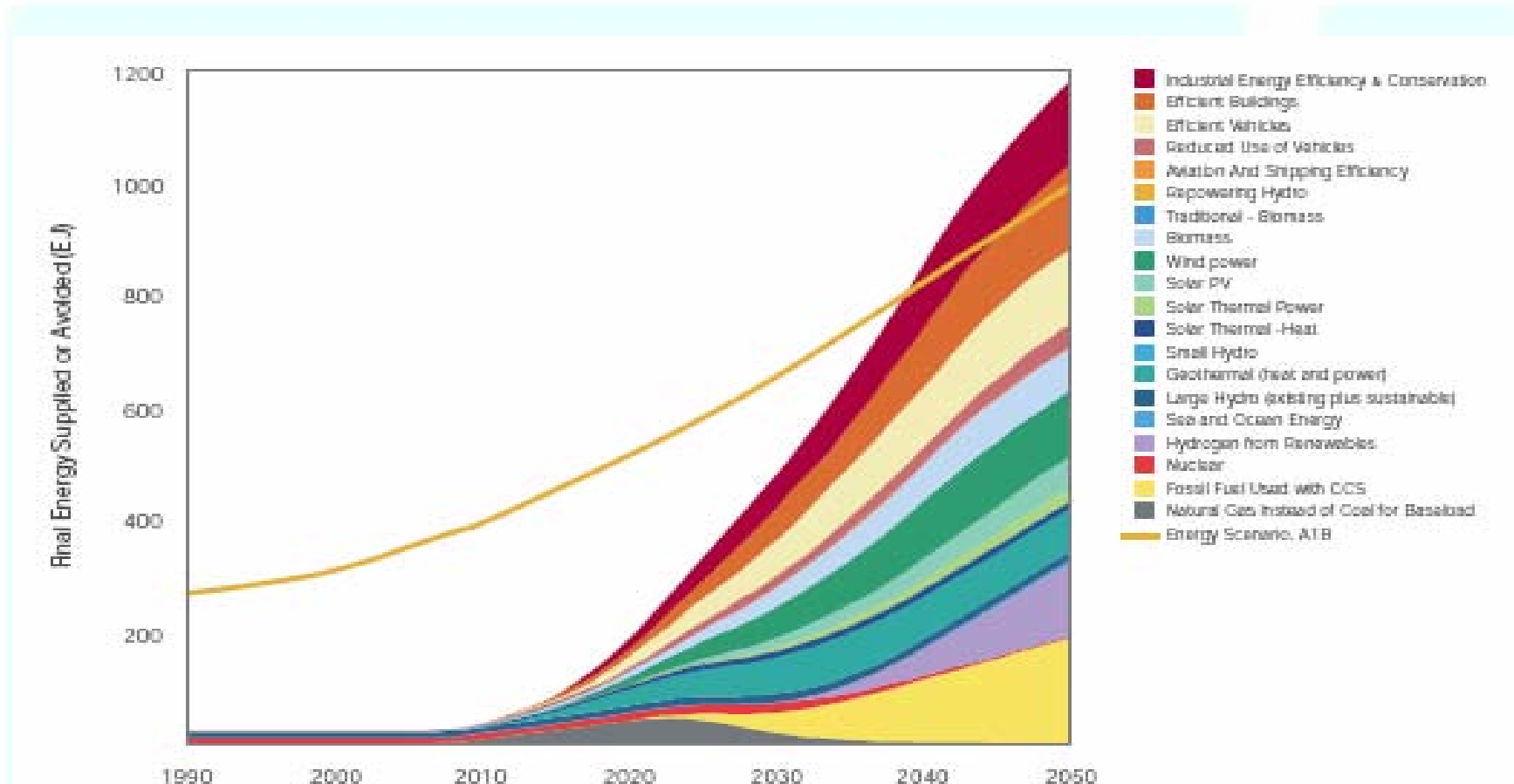


Role of coal



Percent contributions of different fossil fuels to 2006 CO₂ emissions (left side) and contributions to the excess CO₂ in the air today relative to pre-industrial CO₂ amount (CDIAC data for 1751-2004, BP for 2005-6; cf. Atmos. Chem. Phys. 7, 2287-2312, 2007).

Global energy wedges



Source: WWF Climate Solutions



Policies for Australia

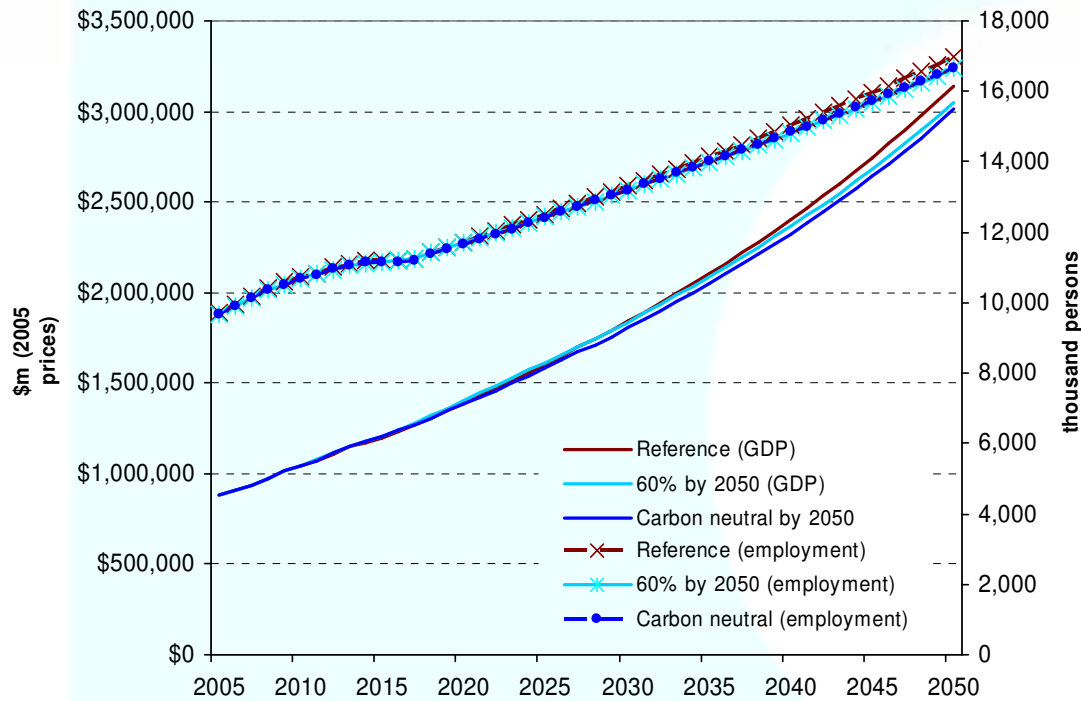
- Australian Greenhouse Gas Emissions
 - Real reductions by 2012
 - At least 25% below 1990 by 2020
- Clean Energy
 - All new load generation from clean energy
 - Diverse portfolio by 2020 (spread risk + long term savings)
 - Range of policies (ETS, portfolio standards, energy efficiency)
- International leadership
 - Global negotiations (targets + transfer/adaptation \$)
 - Export conditionality?

CCS Alliance

- Modelling, industry & O/S comments raise concern about delays
- ACA, CFMEU, WWF, Climate Institute
- Acknowledge renewables and energy efficiency also part of solution
- Focus on commercialisation - 10 000 GWhr in commercial operation by 2020
- PM Taskforce to address policy barriers and identify best commercialisation incentives
- Differing views on R&D investment

GHG targets and employment

AUSTRALIAN GDP AND EMPLOYMENT UNDER CARBON CONSTRAINTS: 2005 - 2050



Carbon neutral by 2050

GDP:

- ~\$1 trillion now to around \$3 trillion by 2050
- GDP grows at 2.8%/year (-0.1%/year GDP growth)

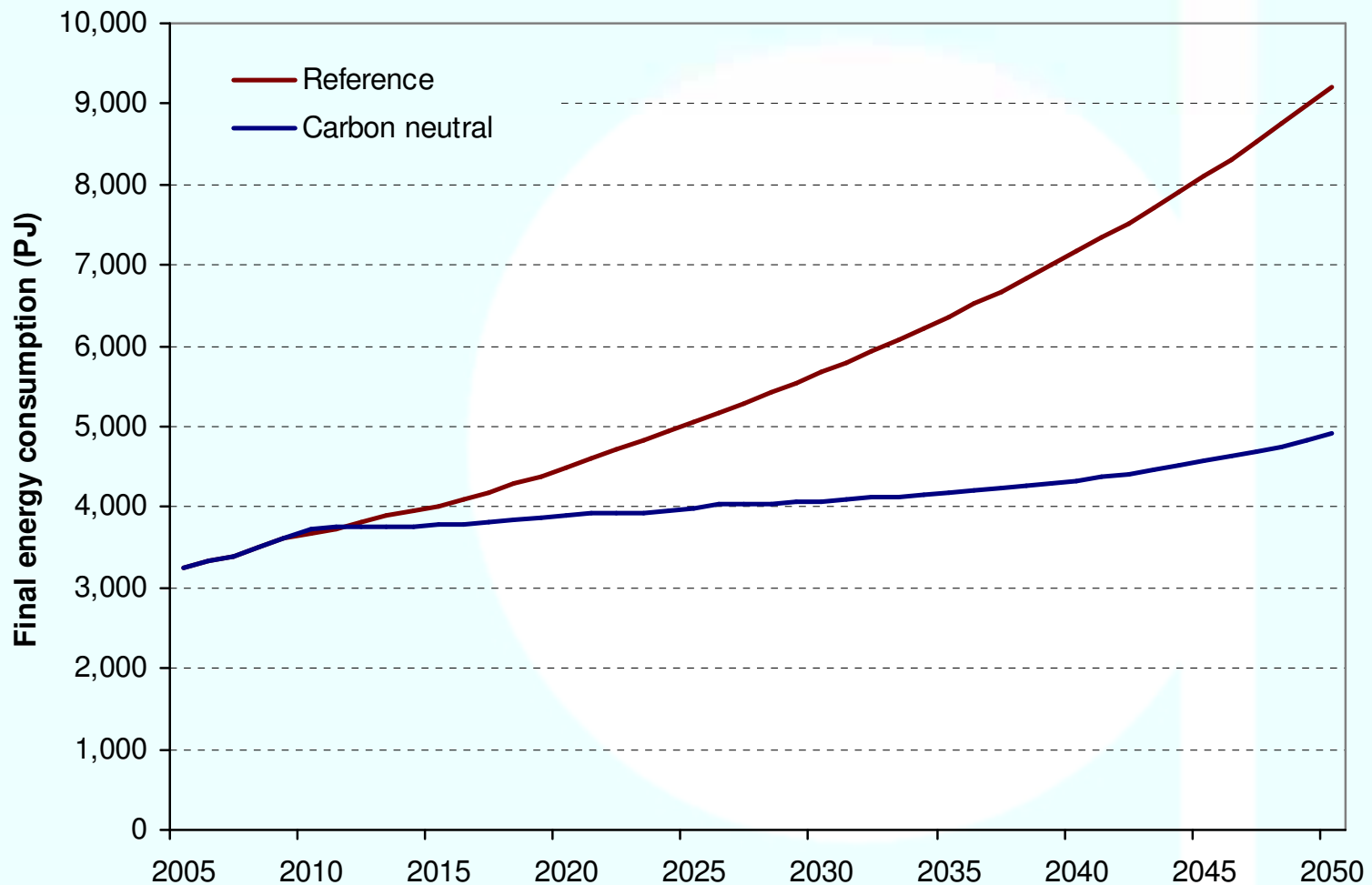
Employment:

- increases 16.7 million jobs by 2050 (-0.04%/year growth)

NOTES: MMRF-Green, unpublished data, see, Hatfield-Dodds, Jackson, Adams, et al (2007).

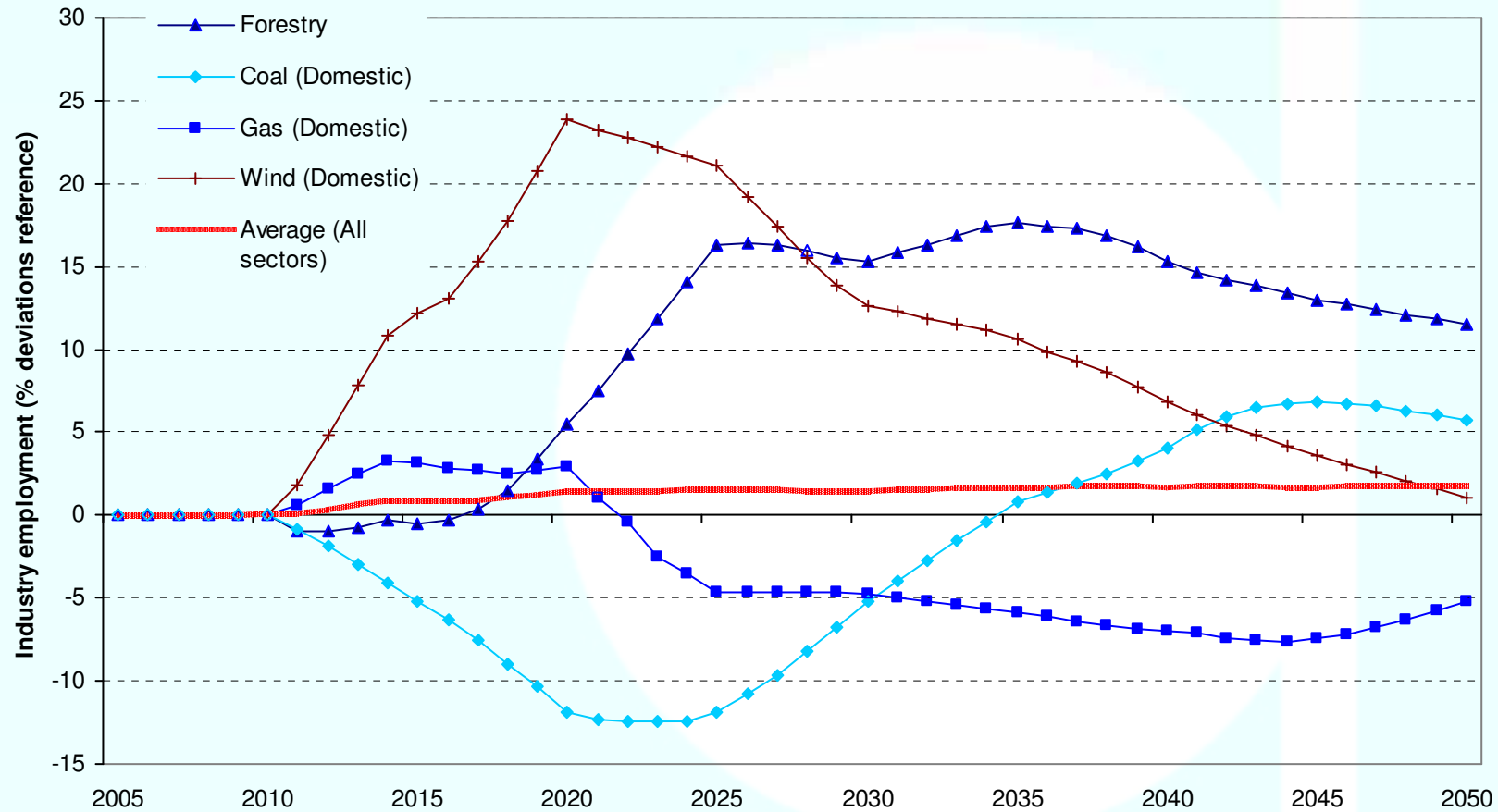
Low carbon economy

AUSTRALIAN FINAL ENERGY CONSUMPTION UNDER BAU AND CARBON NEUTRAL SCENARIOS: 2005-2050



Structural changes

PERCENT CHANGE IN EMPLOYMENT (WEAK CONSTRAINT VS CARBON NEUTRAL): 2005-2050



NOTES: MMRF-Green, unpublished data, see, Hatfield-Dodds, Jackson, Adams, et al (2007).

2008 Australian Attitudes



- **73%** expect the Government to show strong international leadership by introducing stronger policies to reduce greenhouse pollution in Australia

74% support laws to ensure all new electricity from clean energy sources

89% support subsidies for solar panels

61% support cutting subsidies that encourage fossil fuel use

53% Support investing in CCS

45% support reducing the size of our coal industry

Most Australians do not want action delayed because of arguments about jobs.

29% agreed that the government should “delay action on climate change if jobs are at risk”. (The remaining 71 per cent either opposed this position or had no real opinion.)

Conclusions

- Full toolkit of policies
- Focus on skills and commercialisation
- Communication: “Clean Coal” branding
own goal?
- Urgency!

Sept 2007 Arctic sea ice extent (Source: NASA)

----- Approx. average ice extent

