



Australian Government
The Treasury

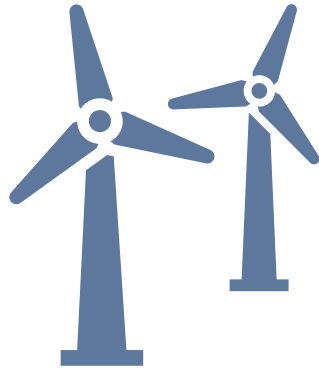


Setting the scene:

Key Net Zero Challenges (and Opportunities) for the Australian Economy

Alex Heath – First Assistant Secretary
Climate and Energy Division
Macroeconomic Group

The Net Zero challenge



2030 Emissions

43% on 2005 levels

Net Zero

By 2050

Context

Trade



Physical risks



Constraints/Enablers

Innovation



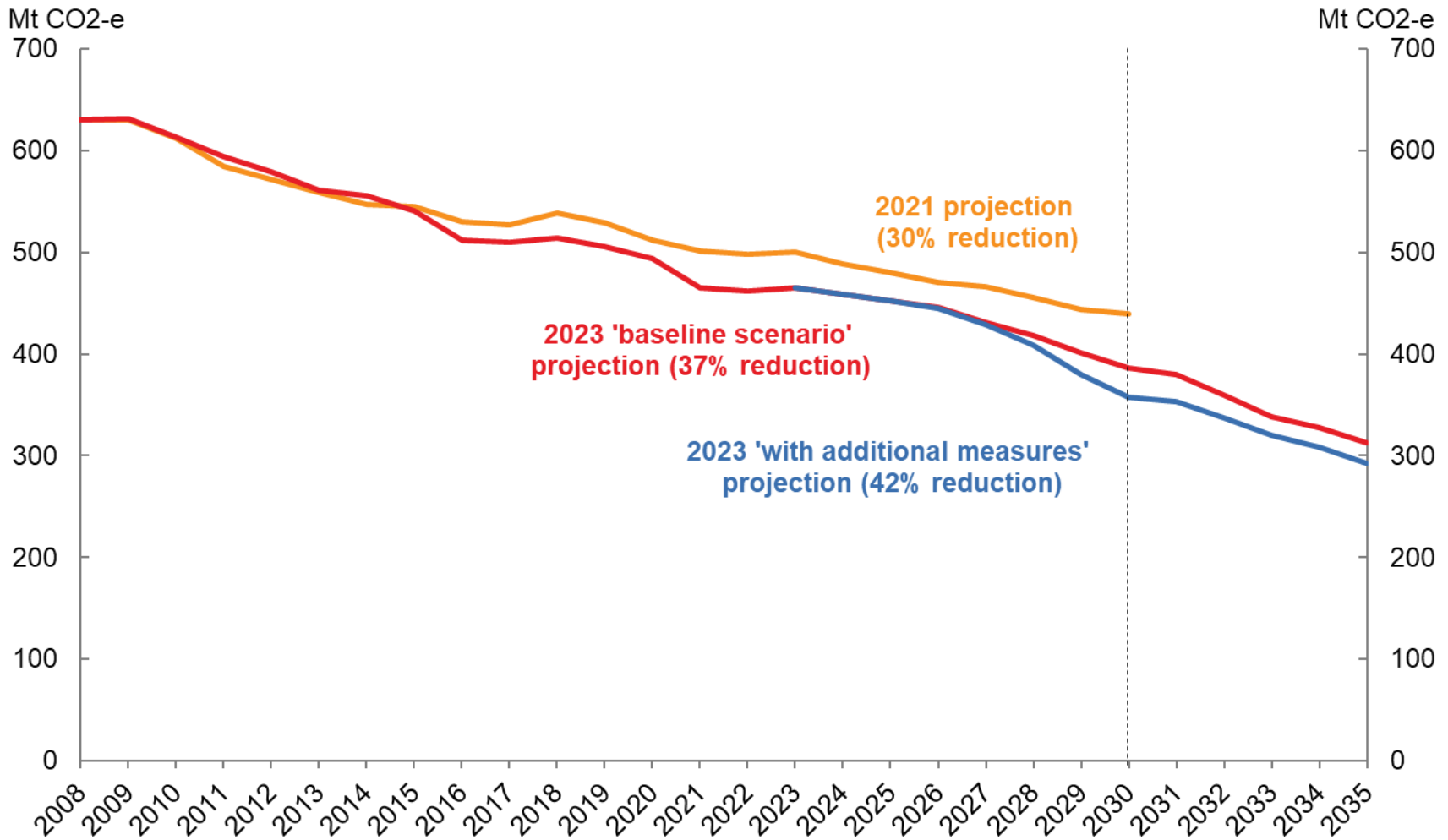
Skills



Finance

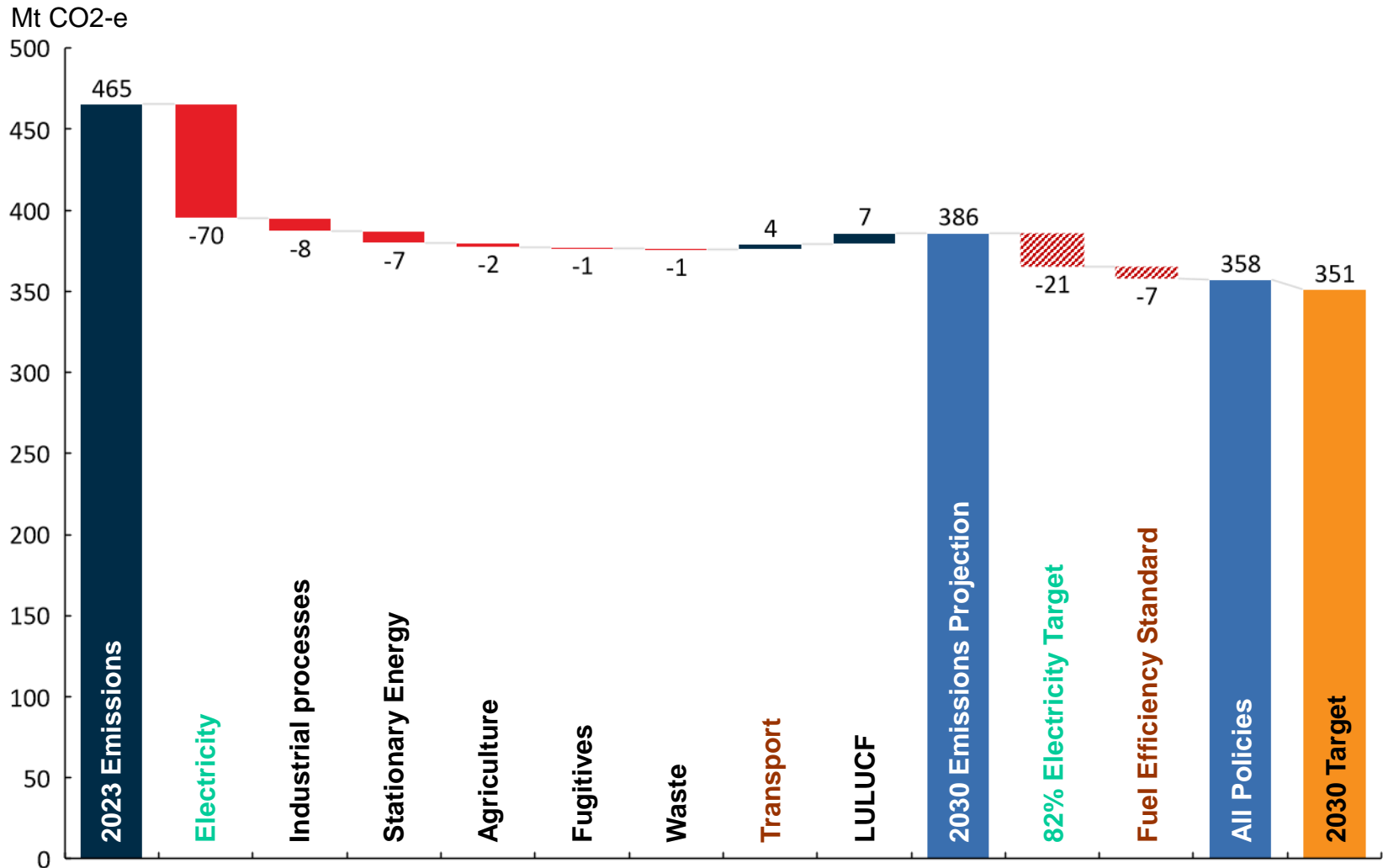


We've made significant progress...



Source: DCCEEW Emissions projections 2021 and 2023

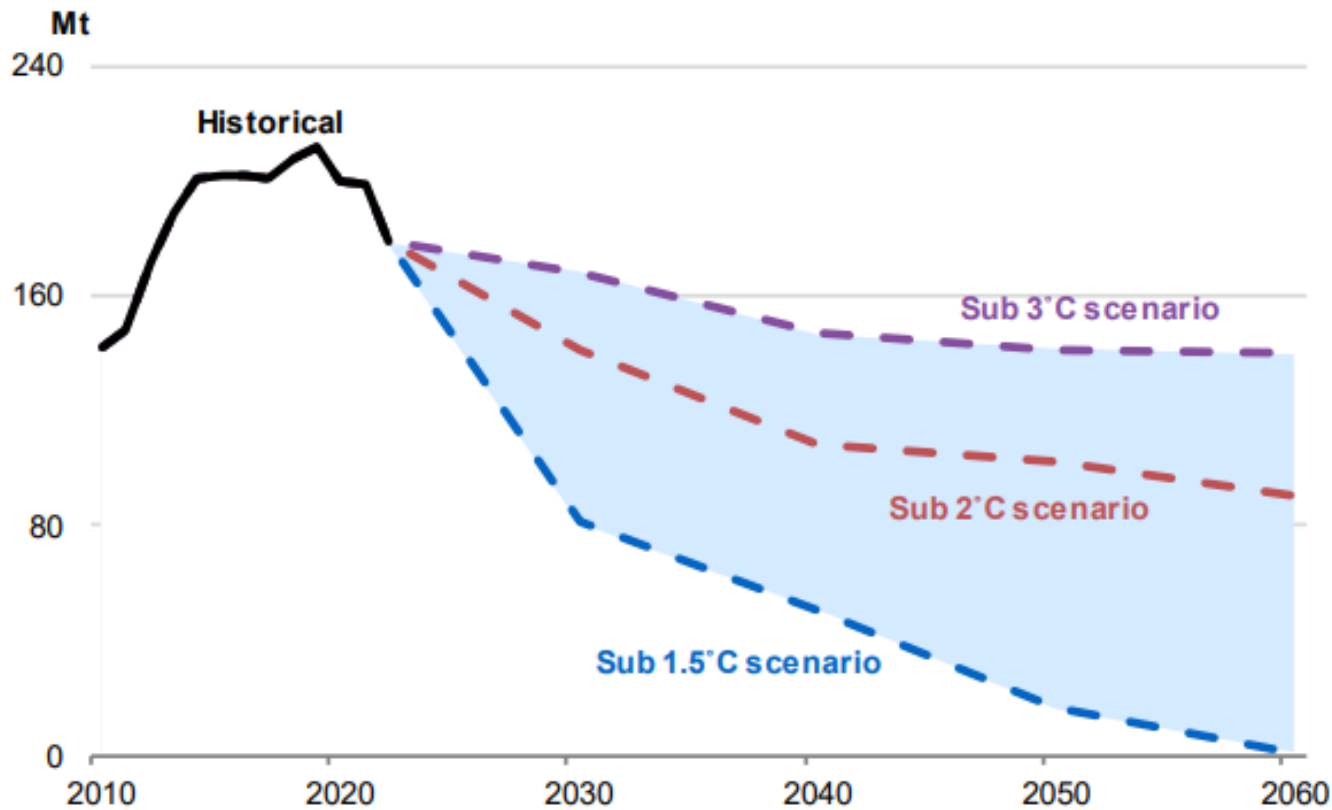
...but substantial challenges remain



Source: DCCEEW Emissions projections 2023

Traditional Australian exports will fall...

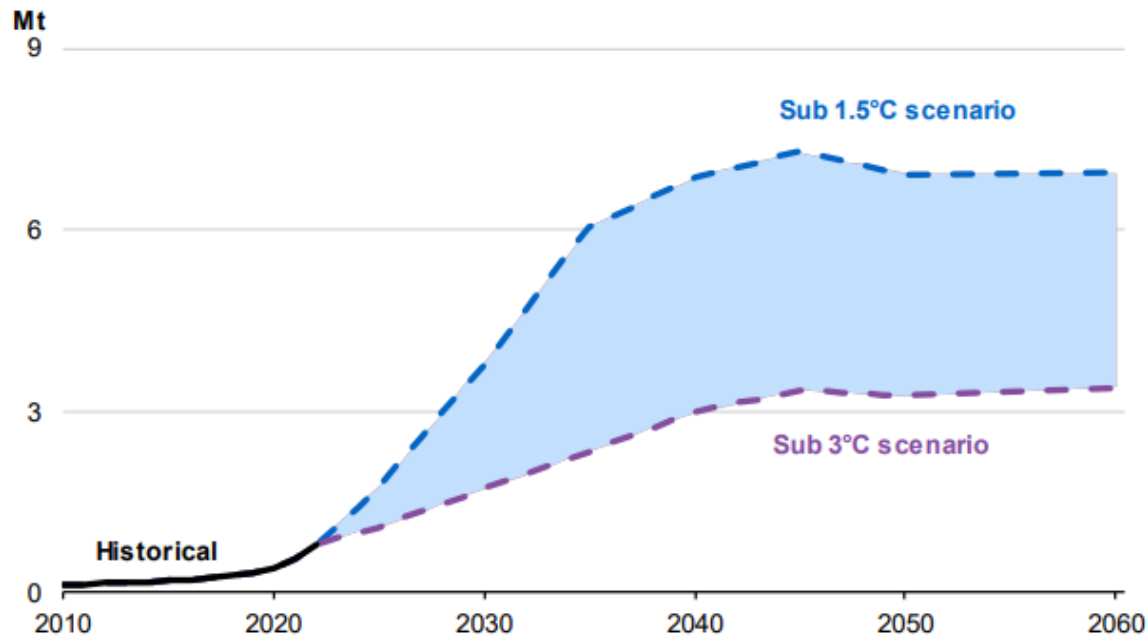
Potential demand of Australian seaborne thermal coal exports to 2060



Source: Intergenerational Report 2023

...but the global transformation offers new opportunities

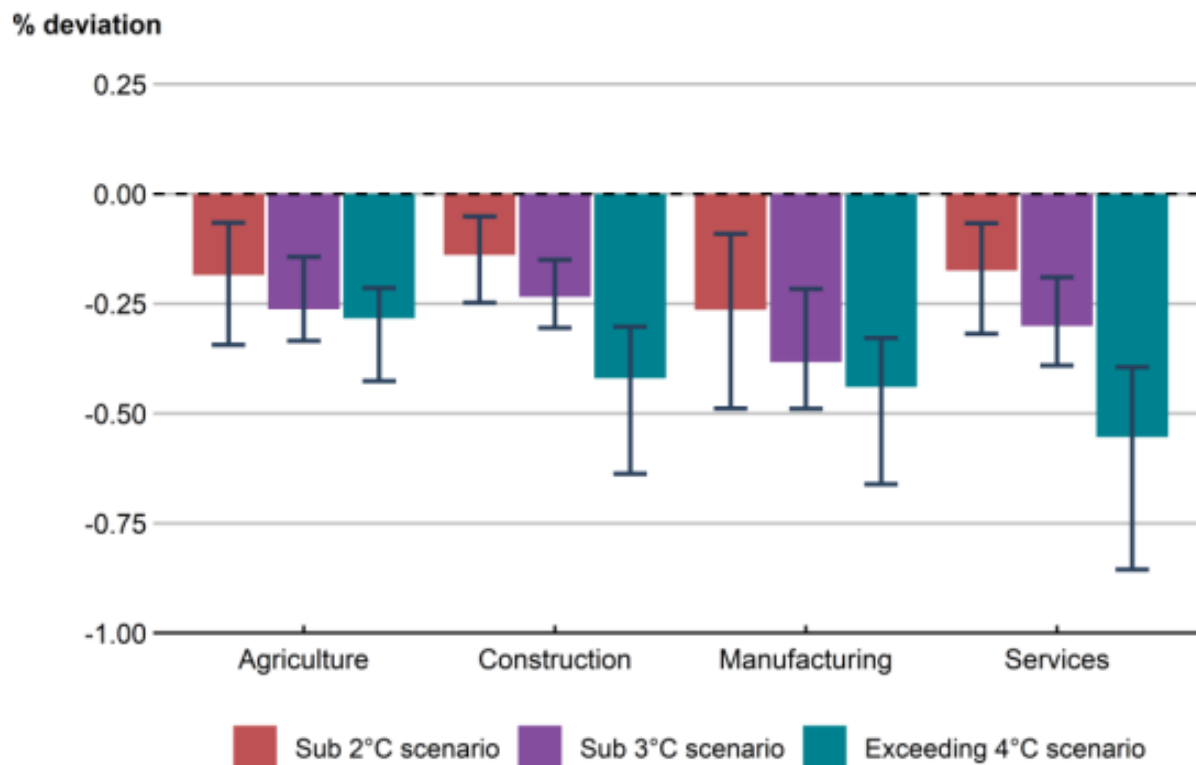
Potential demand of Australian lithium exports to 2060
(Mt lithium concentrate equivalent)



Source: Intergenerational Report 2023

Physical damages from climate change will flow through to the economy

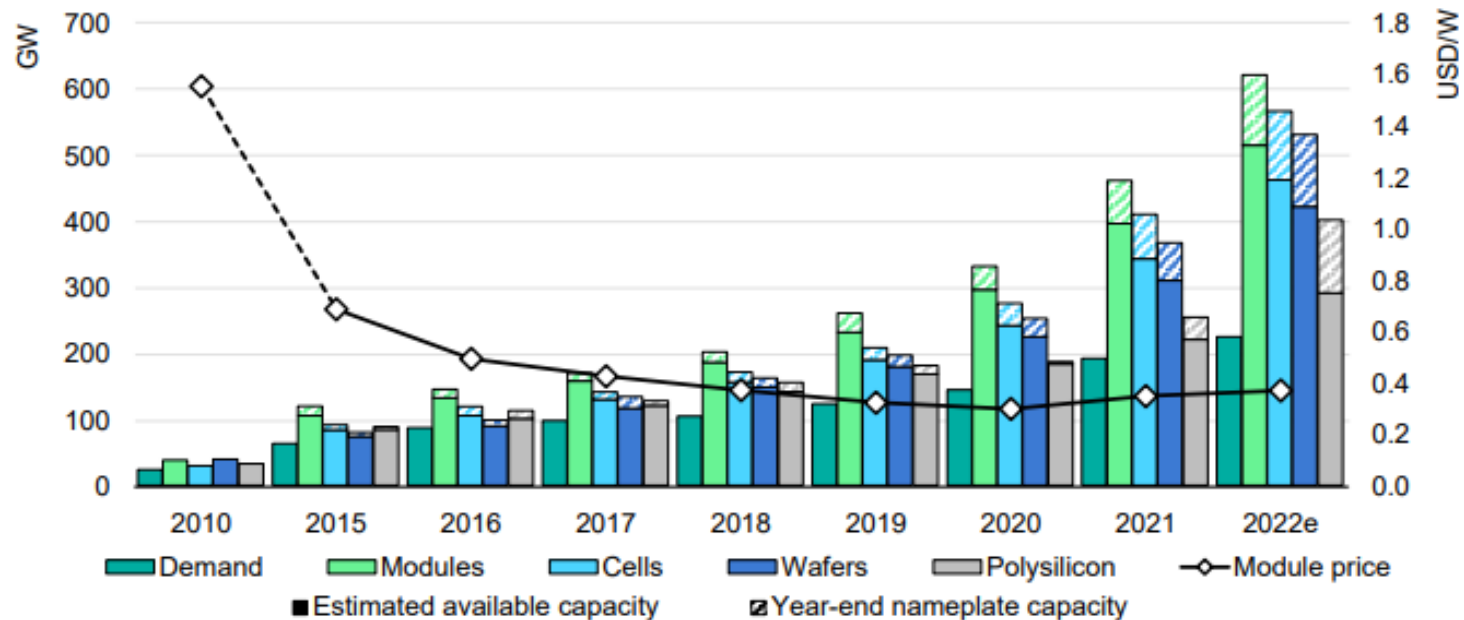
Potential output changes across select sectors from direct labour productivity impacts of higher temperatures, 2023 to 2063



Source: Intergenerational Report 2023

We must take technology from overseas, and develop our own

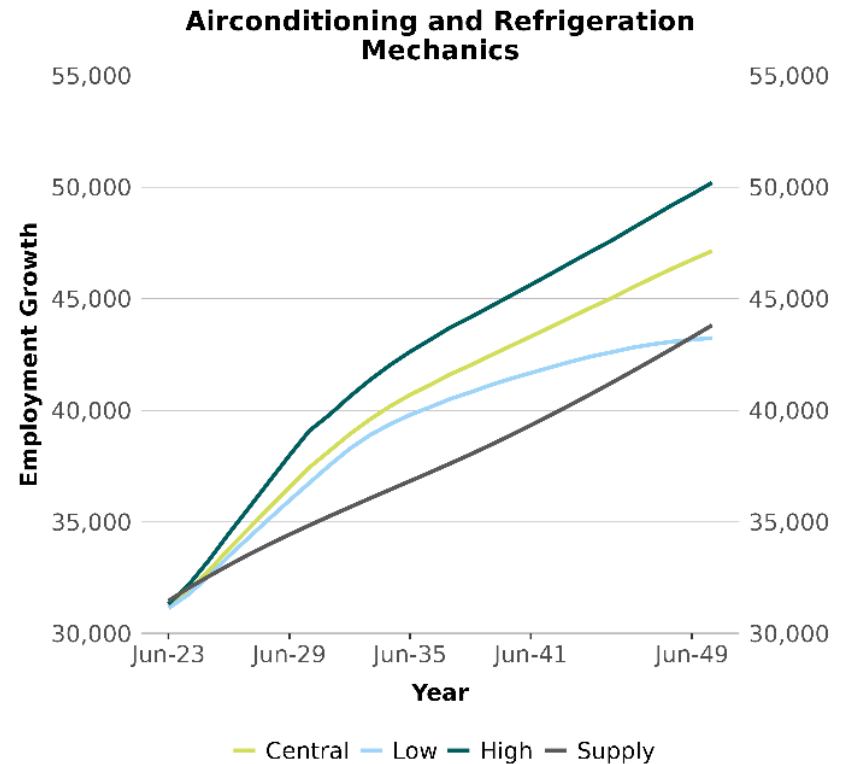
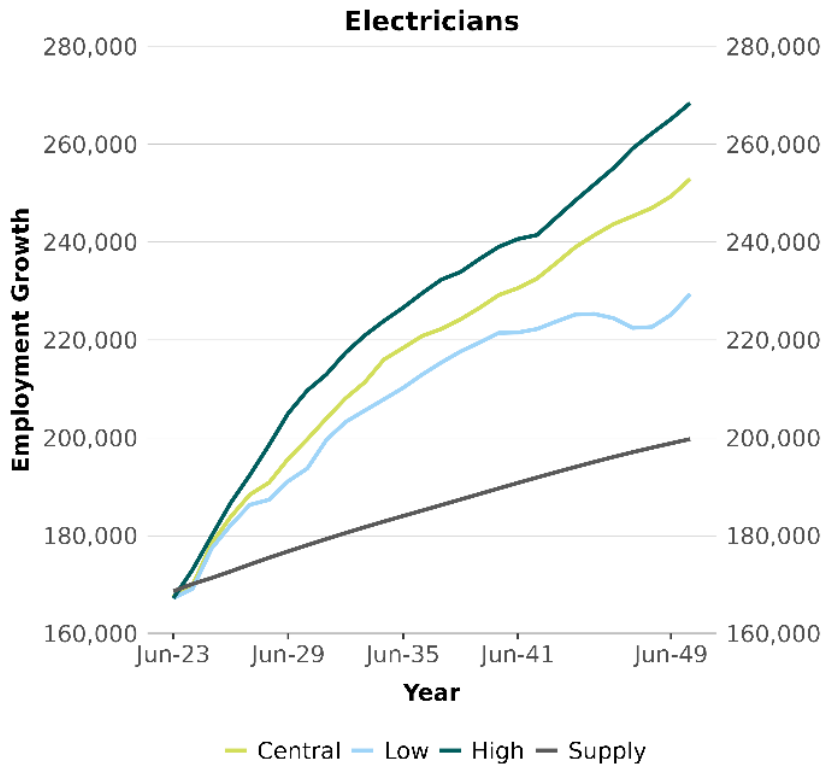
Global PV manufacturing capacity, demand and average module selling price, 2010-2022



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Source: International Energy Agency – Special report on Solar PV Global Supply Chains

The workforce faces massive, but not unprecedented, transformation



Source: Jobs and Skills Australia – The Clean Energy Generation

The scale of investment around the globe and in Australia will be large

~9%-10% GDP per year

- A **range of estimates** around the investment required to get to net zero.
- Some investments are **required anyway**, but now need to be clean (e.g. EV instead of ICE).

Bring everyone to the table

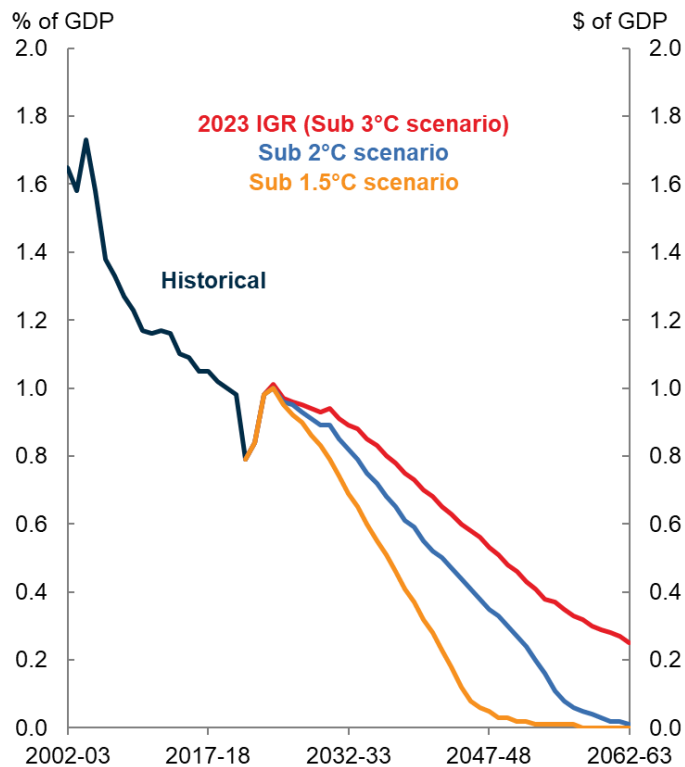
- Governments, commonwealth, states and territories
- Investors
- Businesses and households

Reducing policy uncertainty

- The Net Zero Plan
- Sustainable Finance Strategy
- NZEA

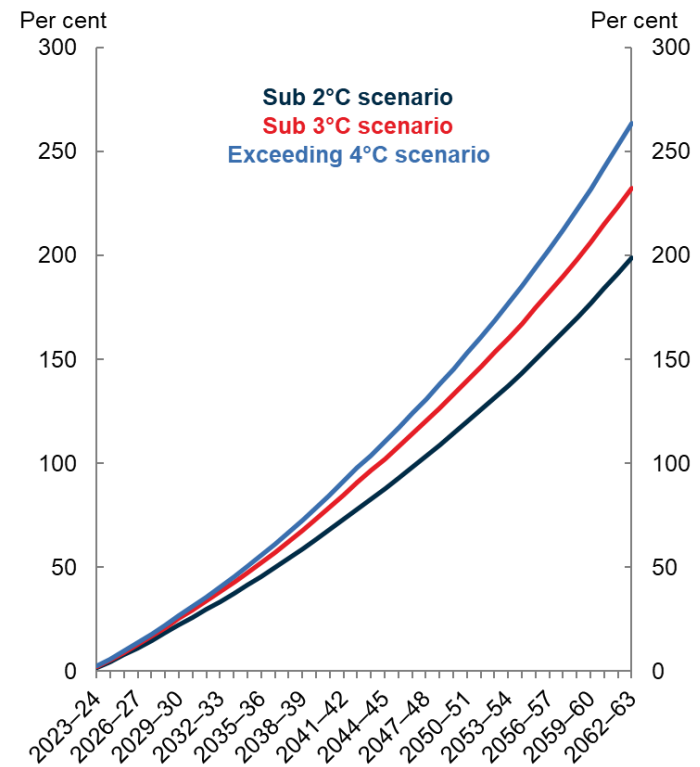
Climate change adaptation and mitigation will affect the Budget

Potential fuel excise receipt decreases



Source: Intergenerational Report 2023

Potential Government expenditure increases on the Disaster Recovery Funding Arrangements



Source: Intergenerational Report 2023

The net zero transition: the everything bagel of economic challenges



'In short our world needs climate action on all fronts – everything, everywhere, all at once.'

United Nations secretary general António Guterres