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Associate Director Climate Economics Climate change: Australia's journey to net zero and its economic implications.





A Soft Landing by Todd Robinson Location: Winmark Wines Sculpture Park

What will we cover today?

Present two scenarios to help you navigate the climate change transition and meet ASRS disclosures

2 Describe the transition impact of a delayed transition scenario

3 Describe the impact of physical peril from a warmer than expected future due to an incomplete transition



Why will we need to care about climate change?

The Australian Sustainability Reporting Standards (ASRS) are now being enforced for large and/or heavy emitting entities.

Covered entities need to evaluate the business impact of at least two possible future states:

A scenario where global temperature increase exceeds 2°C

This represents a higher warming scenario, reflecting a future with less stringent climate policies and greater greenhouse gas emissions. A scenario where global temperature increase is maintained below 1.5°C

This scenario aligns with the most ambitious global temperature goal set out in the Climate Change Act 2022.

A sample of Group 1 companies covered by ASRS

AGL ENERGY LIMITED GLENCORE HOLDINGS PTY LIMITED ELECTRICITY GENERATION AND RETAIL STANWELL CORPORATION LIMITED CORPORATION ENERGYAUSTRALIA HOLDINGS LIMITED ANGLO AMERICAN AUSTRALIA LIMITED **ORIGIN ENERGY LIMITED QANTAS AIRWAYS LIMITED** CHEVRON AUSTRALIA HOLDINGS PTY **BHP GROUP LIMITED** PIONEER SAIL HOLDINGS PTY LIMITED **BM ALLIANCE COAL OPERATIONS PTY LIMITED** WOODSIDE ENERGY GROUP LTD LIBERTY PRIMARY METALS AUSTRALIA PTY LTD C S ENERGY LIMITED **RTA HOLDCO AUSTRALIA 5 PTY LTD RIO TINTO LIMITED CEMENT AUSTRALIA HOLDINGS PTY LTD** SEV.EN GLOBAL INVESTMENTS PTY LTD SHELL ENERGY HOLDINGS AUSTRALIA LIMITED SOUTH32 LIMITED YANCOAL AUSTRALIA LTD SANTOS LIMITED CONOCOPHILLIPS AUSTRALIA OPERATIONS PTY LTD NRG VICTORIA I PTY LTD VIRGIN AUSTRALIA HOLDINGS LIMITED BLUESCOPE STEEL LIMITED FORTESCUE METALS GROUP LTD **GENUITY PTY LTD** ADBRI LIMITED ALCOA AUSTRALIAN HOLDINGS PTY LTD EXXONMOBIL AUSTRALIA PTY LTD **INPEX HOLDINGS AUSTRALIA PTY LTD** WOOLWORTHS GROUP

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CK WILLIAM AUSTRALIA HOLDINGS PTY LTD

YARA AUSTRALIA PTY LTD **KESTREL COAL GROUP PTY LTD**

ORICA LIMITED

APA INFRASTRUCTURE LIMITED **BANPU AUSTRALIA CO. PTY LTD**

INCITEC PIVOT LIMITED SEVEN GROUP HOLDINGS LIMITED CITIC PACIFIC MINING MANAGEMENT PECHINEY CONSOLIDATED AUSTRALIA WHITEHAVEN COAL LIMITED CORONADO AUSTRALIA HOLDINGS

OGC UPSTREAM INVESTMENTS PTY LTD

POWER GENERATION CORPORATION

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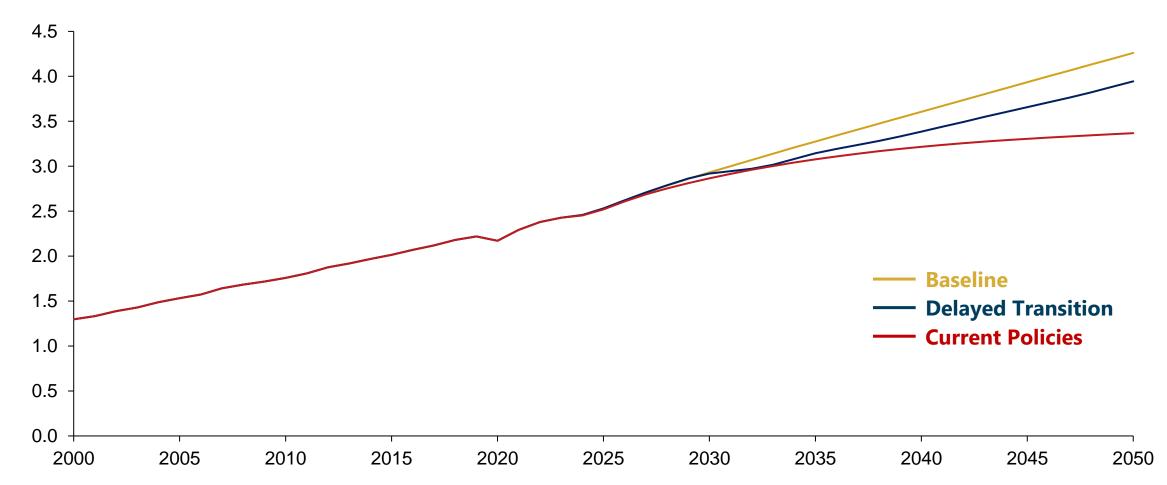
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Our baseline and two plausible scenarios

Australia's annual economic output (real GDP \$ trillion)



Some industries are much more affected than others

10%

Delayed Transition

Deviation to baseli	ne in 2050	
Construction		
Public Admin		1%
Health		0%
Education	-1%	
ICT	-2%	
Professional Services	-4%	
Admin Services	-5%	
Financial Services	-5%	
Other Services	-5%	
Retail Trade	-6%	
Wholesale Trade	-6%	
Rental & hiring	-6%	
Arts & Rec	-7%	
All industries	-7%	
Hospitality	-8%	
Utilities	-11%	
Transport	-13%	
Agriculture	-16%	
Manufacturing	-16%	
Mining -30%		

Current Policies .

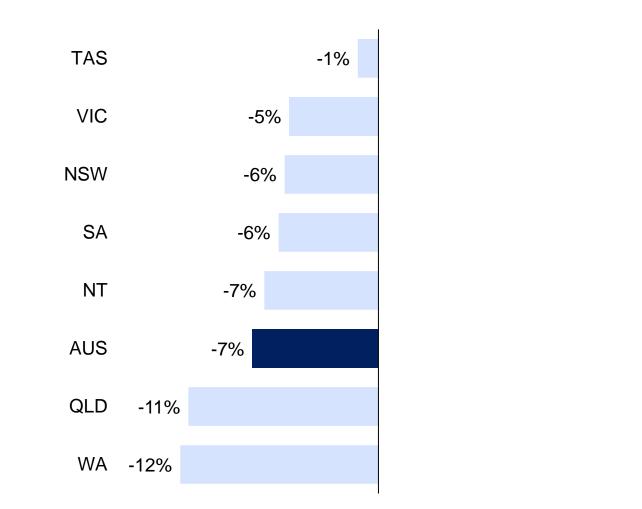
Deviation to	o baseline in 2050
Construction	-8%
Public Admin	-13%
Health	-15%
Education	-16%
Mining	-19%
Utilities	-19%
All industries	-21%
Other Services	-23%
Professional Services	-23%
Wholesale Trade	-24%
Arts & Rec	-24%
Admin Services	-24%
Retail Trade	-24%
Rental & hiring	-24%
Financial Services	-25%
Hospitality	-25%
ICT	-27%
Manufacturing	-27%
Transport	-31%
Agriculture -	36%
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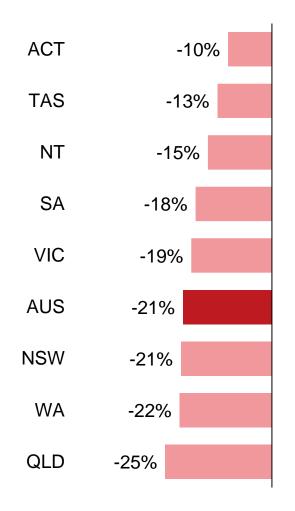
States will be affected differently

Delayed Transition Deviation to baseline in 2050

Current Policies

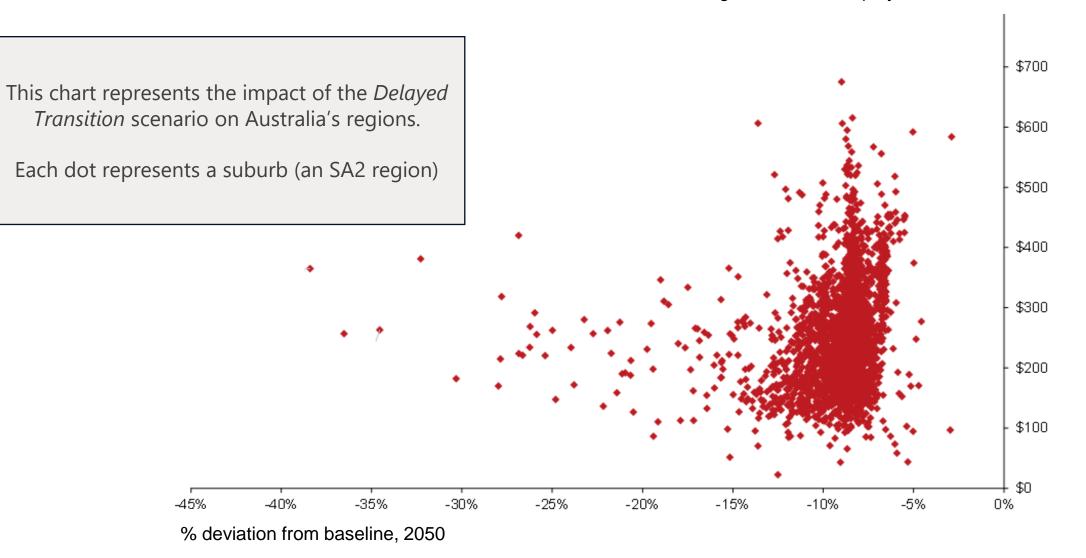
Deviation to baseline in 2050





Impacts will be more acute for particular regions

2050 average household employment income ,000's



How could climate change affect my new bourbon business?

Ability to pay for premium goods and increasing input costs will challenge profits

KK's Bourbon Co. Revenue	\$40,000	Sales may drop as ability to pay for high-end liquor will drop
Rent Power Wages	\$1,000 \$2,000 \$10,000	
Purchase of raw materials	\$10,000	Purchase costs to vary as climate change shifts agricultural land
EBITDA	\$17,000	
Depreciation Interest	\$3,000 \$1,000	Interest costs to rise as interest rates rise to curb price increases
Taxes Net profit	\$3,900 \$9,100	Taxes may increase to enable the government to pay for the transition

How will this affect my construction business?

Physical peril will affect the type of work I do. The transition journey will affect the cost and type of materials I work with

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KK Builds for You!		
Revenue	\$200,000	Demand will vary widely from one region to another and vary between new builds and maintenance
Rent	\$10,000	
Power	\$1,000	
Wages	\$120,000	Local building requirements change to reflect decarb path.
Purchase of raw materials	\$60,000	Global supply chains affected by differing decarbonisation
EBITDA	\$9,000	journeys and Carbon Border Adjustment Mechanisms
Depreciation	\$2,000	
Interest	\$5,000	
Taxes	\$600	
Net profit	\$1,400	

That's a lot of information – what are the key take-aways!

Look beyond conventional damage functions

Dive below GDP to consider industry changes Consider regional impact below the State and national level

Think about who will need to pay along the supply chain



Thank You

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