# Australia's climate for growth

### Queensland



Doing nothing is a costly choice: Queensland loses 14% of its GSP and 470.000 jobs (7% of employment) by 2070 due to unmitigated climate change impacts.

Choosing net zero is an economic necessity: By mitigating climate change in recovery, Queensland gains 5% growth in GSP and over 185,000 jobs by 2070.

#### Unchecked climate change.

The economic fundamentals that make Queensland strong today are equally what expose the state to climate change related disruption.

In a future where Australia and the rest of the world does not mitigate climate change, the worst effects of a warming world are felt in Queensland compared to the other States and Territories. Queensland really feels the heat.

**Services, trade, tourism and manufacturing industries** are disproportionality affected by a changing climate.

Unchecked climate changes gets the better of icons such as the Great Barrier Reef – and the diverse economic structure that would otherwise support Queensland's regions, suffers from a new economic climate. Economic loss is the norm with unchecked climate change.

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By choosing change, Queensland has the most to gain under a new growth recovery – jobs, new industries and economic potential come with the global shift to net zero emissions.

New growth recovery.

But there is no time to lose if Queensland wants to capture the gains of new growth. Delay in making the shift to net zero reduces the dividends for Queensland and makes it harder for business and communities to invest in new economic futures. Structural adjustment is always hard but doing nothing comes at the greatest cost to Queensland livelihoods.

Under a climate for growth, many of Queensland's traditional strengths get stronger and new industries – such as hydrogen – could emerge. Queensland becomes an economy which has what the rest of the world wants – and is not penalised by global customers who demand less emissions intensive goods and services.

Queensland suffers irrevocable losses from climate change. But Queensland's diversified economy can take advantage of a new growth recovery to enhance livelihoods and jobs in (advanced) manufacturing, transport, and services, while also saving tourism jobs.



### Australia's climate for growth

### Northern Territory



Doing nothing is a costly choice: The Northern Territory loses 12% of its GSP and 18.000 jobs (5% of employment) by 2070 due to unmitigated climate change impacts.

Choosing net zero is an economic necessity: By mitigating climate change, the Northern Territory stands to gain 5% growth in GSP and over 5,000 jobs by 2070.

#### Unchecked climate change.

The heat of the Top End makes it one of the most vulnerable regions in Australia to the impacts of climate change.

This results in the Northern Territory economy being hard hit – second only to Queensland.

Like Queensland, jobs are significantly impacted by climate change related damages, with employment dropping by 18,000 jobs (5%) by 2070.

By leaving climate change unchecked, Northern Territory is making itself vulnerable to the real possibility that heat stress of a warming climate takes its toll on its economy and the rest of the world no longer wants what it has to offer.

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The industries hardest hit in the Top End are services, mining and the tourism and trade sectors.

Where the cost of complete inaction is so high, delayed action is also very costly.

#### New growth recovery.

Under a new growth recovery, the Northern Territory unlocks diversified industry growth in order to meet their net zero emissions target and in reaction to the structural adjustment in the global economy. The potential to become a major energy exporter is one of the bright sparks for the future.

Mitigating the impacts of climate change encourages an additional 5% GSP growth and adds a further 5,000 jobs in the economy by 2070

The Northern Territory has a lot to lose from climate change in comparison to other states. Investing in a climate for growth offers jobs in key industries like manufacturing, services, tourism and transport.



### Australia's climate for growth

### Western Australia



Doing nothing is a costly choice: Western Australia loses 9% of its GSP and 110,000 jobs (3.5% of employment) by 2070 due to unmitigated climate change impacts.

Choosing net zero is an economic necessity: By mitigating climate change, Western Australia stands to gain 1% growth in GSP by 2070 – structural adjustment takes time.

#### Unchecked climate change.

Western Australia's endowment of natural resources has bolstered its historic economic performance. However, these economic fundamentals are what exposes the state to climate change related damages.

Unchecked climate change leads to significant loses across the mining, tourism and trade and services industries.

Just as Western Australia has ridden the commodities cycle, climate change has the potential to create a new cycle for the Western Australian economy. Heat stress will wreak havoc and critical exports are threatened as major suppliers seek less emissions intensive goods and services.

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#### New growth recovery.

It is harder for Western Australia to structurally adjust to a net zero future in line with the rest of the country and the global economy. Traditional competitive advantages are strained and new sources of economic growth struggle to establish in the scenario.

The economy has further to go to realise the change required – and the world no longer wants what it has to offer by 2070.

Creating a climate for growth helps Western Australia but it is neither cheap nor easy, with structural adjustment needed and around 10,000 jobs disrupted by 2070. But investment to transition and become an energy powerhouse for the world is real.

The industries most positively impacted by climate change mitigation actions are manufacturing, services and the renewable energy sector.

Western Australia continues to structurally adjust from a resourcebased economy to create new sources of growth, such as in energy and new rare earth minerals



### Australia's climate for growth

### South Australia



Doing nothing is a costly choice: South Australia loses 5% of its GSP and 38,000 jobs (2.5% of employment) by 2070 due to unmitigated climate change impacts.

Choosing net zero is an economic **necessity:** By mitigating climate change, South Australia stands to gain 5.3% growth in by 2070.

#### **Unchecked climate change.**

While South Australia has made great strides in addressing climate change, its economy loses 5% of its economic potential (GSP) by 2070, as the state feels the significant impacts of unmitigated climate change.

The services, manufacturing and trade and tourism sectors are among the hardest hit by climate change damages.

South Australia has a lot to lose from unchecked climate change but stands to gain from further mitigation action.

The challenge for South Australia is to harness climate for growth and fuel the progress of its emerging industries such as defence and space through innovation.

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#### New growth recovery.

South Australia's proactive investment in renewable energy expansion today provides the state with the capacity to meet its renewable target earlier than the rest of Australia, unlocking gains in the transition period. South Australia becomes a net exporter of renewable energy. This is a win.

Under a new growth recovery, the South Australian economy grows at a faster rate than all other states and territories, gaining 5.3% in GSP growth by 2070.

But this sustainable growth trajectory only adds around 150 jobs to the economy in 2070. Why is the growth rate high and the jobs added lower? The impacts of 1.5°C of warming still hits South Australia's largest employing industries more than the growth in jobs from economic transition to net zero.

While transition by itself could create around 2,500 jobs in South Australia, the losses from any degree of warming erodes these gains. This means South Australia's transition to new growth requires more targeted, place-based and industry-based planning.

South Australia sees job growth in renewables, construction and services – but high employing industries like tourism and agriculture still feel the impacts of 1.5°C of warming.



# Australia's climate for growth

### **New South Wales**



Doing nothing is a costly choice: New South Wales loses 4% of its GSP and 175,000 jobs (2% of employment) by 2070 due to unmitigated climate change impacts.

Choosing net zero is an economic necessity: By mitigating climate change, New South Wales stands to gain 2% growth in GSP and over 50,000 jobs by 2070.

#### Unchecked climate change.

Services have underpinned much of the strong economic performance of New South Wales to date.

This strength, along with the other key sectors of the state economy, is vulnerable to the impacts of climate change if left unchecked.

The most vulnerable being the services, trade and tourism and manufacturing sectors.

Heat stress and variable weather patterns, with greater intensity, all serve to disrupt the State.

#### New growth recovery.

Of all the States and Territories, New South Wales has the furthest to go to achieve a net zero emissions economy, resulting in a slightly higher economic cost to get there.

This makes the structural economic transition hard in parts of the economy. But with 2% growth and an additional 50,000 jobs up for grabs in 2070, choosing a new growth recovery delivers long-term economic dividends to the state.

A climate for growth will support jobs growth across the economy, with significant opportunity for jobs across renewables, services and manufacturing sectors. The opportunity for NSW to lead on green finance, consistent with its objectives of being a financial hub in the region, is enormous.

New South Wales has a complex path to net zero. But any gain compared to unchecked climate change is needed. Growth in manufacturing, tourism, transport and services under net zero offsets any short-term cost.

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### Australia's climate for growth

### Victoria



Doing nothing is a costly choice: Victoria loses 1% of its GSP and 55,000 jobs (0.5% of employment) by 2070 due to unmitigated climate change impacts.

Choosing net zero is an economic **necessity:** By mitigating climate change, Victoria stands to gain 2% growth in GSP and over 30,000 jobs by 2070.

#### **Unchecked climate change.**

Victoria's location results in a generally cooler climate than that of that of Northern Australian regions, reducing the State's exposure to the impacts of climate change – for a time.

Although the impacts are expected to be less than the rest of Australia, Victoria still stands to lose from the damages of unmitigated climate change.

The services, trade and tourism and the transport sectors are the most vulnerable sectors to the impacts of climate change.

The risk for Victoria is that the rest of the world may not want what it has to offer. If Victoria can't keep up with global demand for low emissions intensive exports, this will drag on growth.

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#### New growth recovery.

Although Victoria has less to gain from a net zero transition than other states, there is still an economic, as well as global incentive, to meet a net zero emissions target. 2% growth in GSP is expected by 2070 and over 30,000 jobs would be added to the economy, under a new growth recovery.

A climate for growth could see Victoria doing significantly more to drive exports across traditional sectors and tap into new markets.

Victoria has less to gain under a new growth recovery, as it has less to lose from climate change due to the cooler climate. But strong job growth in renewables, transport, manufacturing and services shape Victoria's new growth path.



# Australia's climate for growth

### Tasmania



Doing nothing is a costly choice: Tasmania gains 0.5% in GSP growth and 0.1% of employment by 2070. Although, these gains are not spread evenly across industries.

Choosing net zero is an economic necessity: By mitigating climate change, Tasmania stands to gain 3% growth in GSP, by 2070.

#### Unchecked climate change.

Like Victoria, Tasmania enjoys a cooler climate, which increases its resilience to the impacts of climate change.

This resilience allows the economy to marginally grow at 0.5% and employment to grow by 0.1% by 2070.

The overall marginal gain to the Tasmanian economy is not distributed evenly across industries, with the energy and service sectors suffering losses out to 2070 due to climate change.

#### New growth recovery.

Although Tasmania has less to gain from a net zero transition, there is still a 3% increase in new growth potential by transitioning with the rest of the country and the rest of the world.

On the surface, a new growth recovery delivers 10,000 fewer jobs than unchecked climate change – but that is not quite correct. The state simply has less to gain in the transition phase compared to a damages baseline. This is actually good news. But Tasmania is not immune from the actions of the rest of the world, particularly as demand preferences change – so this could very quickly become losses.

As the world warms, Tasmania sticks out as a relative 'winner' due to its colder climate, but this makes it a relative 'loser' in new growth. But it is still growing – just relatively less. Tasmania has less to lose from climate change and this is a good thing.

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