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Discussion paper

No free ride

Australia's economy and the consequences of a warming world post-COVID

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Deloitte Access Economics

Climate risk is multifaceted

The **key risks** to Australia coming out of COVID are the **physical risks** associated with a changing climate and the **economic transition risks** associated with the human response to this changing climate.

Australia's vast and variable landscape means that it is particularly exposed to the physical impacts of climate change. There are sizeable costs to be incurred if Australia fails to mitigate climate change.

Doing nothing is not costless.

At the same time, Australia needs to navigate the risks of economic transition as an emissions intensive, resource-based economy that is highly integrated into global markets.

Regardless of what transition path Australia chooses (including choosing not to transition), there will be economic shocks as the world moves to a low emission economy, with these global choices transmitted to Australia through trade, politics and changing consumer demand.

Where the economic stakes are so high, so is the cost of inaction. There is no free ride.

A triple threat

The risks presented by COVID-19 and climate change are not mutually exclusive. Industries and workers that are at risk as the world fights COVID-19, are the same ones that are exposed to the risks from a warming world.

COVID-19 IMPACTS
- IMMEDIATE
- STRUCTURAL
- VULNERABLE

ECONOMIC DISRUPTION
- GEOPOLITICS AND TRADE
- LACK OF MODERNISATION
- TECHNOLOGY

CLIMATE CHANGE
- PHYSICAL RISKS
- COMMERCIAL AND TRANSITION RISKS
- REGULATION AND POLICY

Economic risks and impacts from COVID-19

We all feel the uncertainty that surrounds our current economic trajectory – many people have lost their jobs; businesses have been forced to close their doors and industries have been curtailed by the disruption of global supply chains due to COVID. The disruptions and risks of COVID are very real.

Deloitte Access Economics estimates that the top six industries hardest hit by COVID – in looking at weekly ABS payroll data as at Jul 2020 – represent 32% of all employed people in Australia and 25% of GDP.

And what is vulnerable today, is even more vulnerable tomorrow. While the world is feeling the COVID crisis, the more gradual consequences of climate change are occurring at the same time.

TOP INDUSTRY IMPACTS FROM COVID-19

32% of jobs

25% of GDP

- Accommodation and food services
- Arts and recreation services
- Agriculture
- Rental, hiring and real estate services
- Administrative and other services*
- Construction

*Administrative and other services includes administrative and support services, information media and telecommunications and other services.

Source: DAE-CLIMATE; Australia's National Greenhouse Accounts, National Inventory by Economic Sector, May 2020; ABS Weekly Payroll Jobs and Wages in Australia, July 2020; ABS Labour Force, Australia, Detailed, Quarterly, May 2020; ABS Australian System of National Accounts, 2018-19

Physical risks from climate change damages

Going forward, some of the most significant risks to Australia's economic growth trajectory are the physical risks associated with a changing climate and unplanned economic transition risks from the response to this changing climate.

Australia's vast and variable landscape means that it is particularly exposed to the physical impacts of climate change.

Deloitte Access Economics estimates that the top six industries which are the most exposed to the physical damages from climate change today, represent 43% of all employed workers and 38% of GDP.

TOP INDUSTRY IMPACTS FROM CLIMATE CHANGE DAMAGE

43% of jobs

38% of GDP

Manufacturing

Trade

Agriculture

Mining

Services (includes tourism)

Construction

*Administrative and other services includes administrative and support services, information media and telecommunications and other services.

Source: DAE-CLIMATE; Australia's National Greenhouse Accounts, National Inventory by Economic Sector, May 2020; ABS Weekly Payroll Jobs and Wages in Australia, July 2020; ABS Labour Force, Australia, Detailed, Quarterly, May 2020; ABS Australian System of National Accounts, 2018-19

Economic disruption risk as the world changes

At the same time, Australia as an emissions intensive, resource-based economy that is highly integrated into global markets is not immune from the economic risks associated with climate change – and the way the rest of the world decides to mitigate the worst consequences of it.

Regardless of what transition path Australia chooses (including choosing not to transition), there will be economic shocks as the world transitions to a lower, and ultimately net-zero, emissions economy. These global choices will be transmitted to Australia through trade, politics and changing consumer demand.

Deloitte Access Economics estimates that the top six industries that are the most emissions intensive in their output represent 23% of all employed Australian's and 34% of GDP.

These emissions intensive industries are vulnerable to disruption as the rest of the world shifts its preferences – the world may not want what Australia has to offer.

TOP INDUSTRY IMPACTS FROM ECONOMIC DISRUPTION

23%
of jobs

34%
of GDP

Manufacturing
Energy
Agriculture
Mining
Transport
Construction

*Administrative and other services includes administrative and support services, information media and telecommunications and other services.

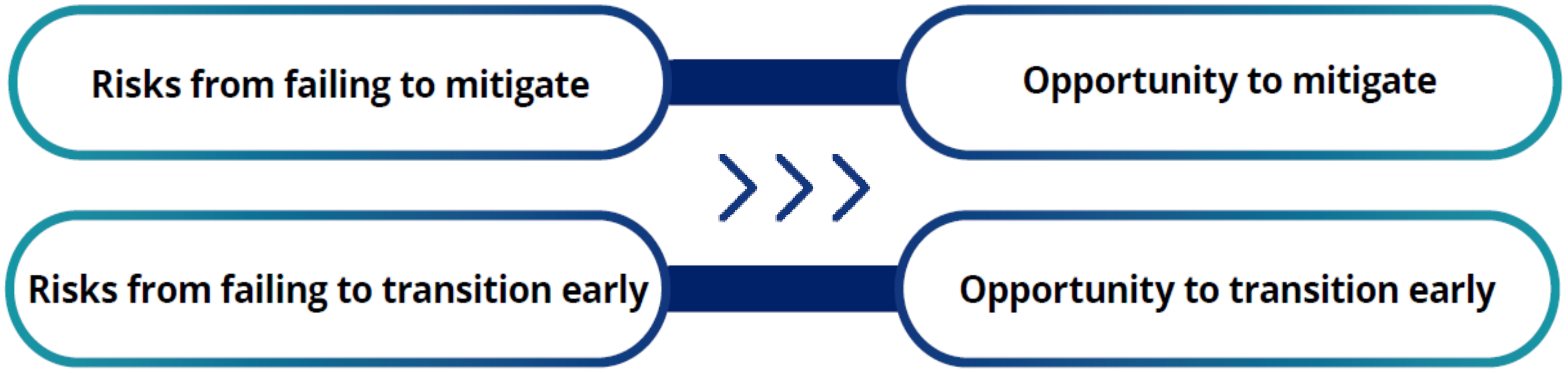
Source: DAE-CLIMATE; Australia's National Greenhouse Accounts, National Inventory by Economic Sector, May 2020; ABS Weekly Payroll Jobs and Wages in Australia, July 2020; ABS Labour Force, Australia, Detailed, Quarterly, May 2020; ABS Australian System of National Accounts, 2018-19

Deloitte Access Economics' analysis shows that those industries hard hit by the pandemic, are also the most vulnerable to the effects of a warming world. The economic fundamentals that make Australia strong today, are equally what can expose the economy to disruption and change. Agriculture, construction, manufacturing, tourism related industries and mining all feature consistently in each risk category.

This creates a need to mitigate in recovery, to seize the opportunity

- **Mitigate climate change and its consequences domestically**
- **the risk and policy consequences of the global move to net-zero already underway**
- **Delay in acting means a greater cost in the rush to mitigate.**

No matter the recovery or transition pathway chosen, an emissions intensive structure will not support a strong economic growth trajectory in Australia; the risk of stranded assets, industries, communities and workers is intensified. And the lessons of COVID have demonstrated that such risks are too great a cost to wear.



To achieve a sustainable economic growth path, there is a need to mitigate climate change and the risks that come with it...

Risks from failing to mitigate

Risk of the **physical impacts** of unmitigated climate change and economic disruption to long-term growth paths.

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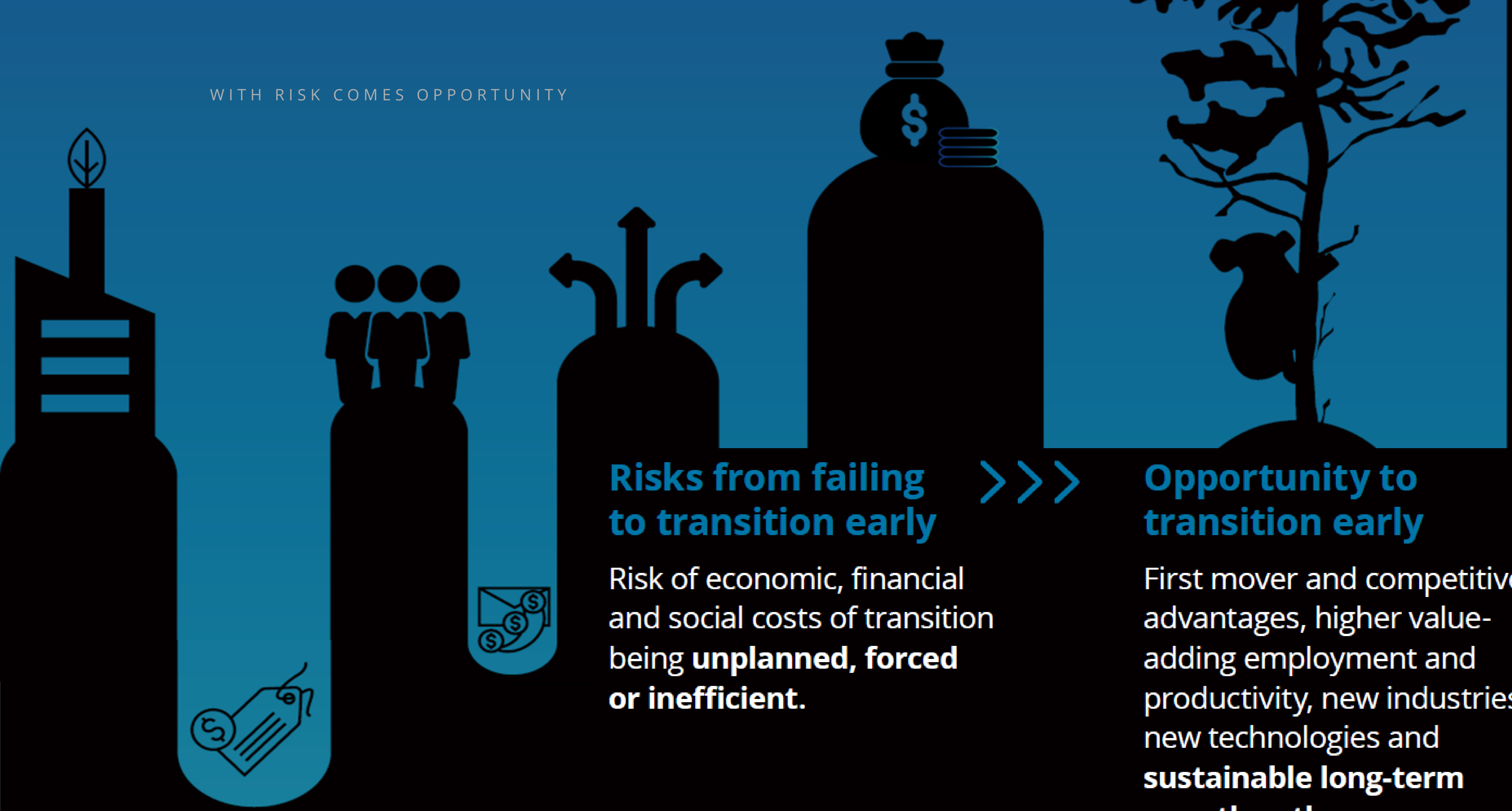
Opportunity to mitigate

Efficiently meet global commitments and build **resilient communities, industries and assets.**

WITH RISK COMES OPPORTUNITY



Risks from failing to transition early

Risk of economic, financial and social costs of transition being **unplanned, forced or inefficient.**

Opportunity to transition early

First mover and competitive advantages, higher value-adding employment and productivity, new industries, new technologies and **sustainable long-term growth paths.**

Climate change is not an economic scenario, it is the baseline

The growth in the global economic system is currently contingent on emissions intensive activity. Economic theories and models that provide the ability to understand emissions intensive activity and growth, are also maintaining society's 'business as usual' approach to preventing climate change.

That is, the **climate change economic paradox**: the economic fundamentals that make economies strong on paper with emissions intensive production, are equally what expose economies to disruption from both the climate and economic transition. And because the economic fundamentals are strong, it prevents the necessary policy and economic change from taking place.

And economic modelling is part of this wicked problem.

Current models assume as the baseline that unconstrained emissions do not have a consequence on economic growth. It's no wonder any plans to mitigate are snared in the 'costs too much' debate.

It's time to get this right – **the real economic baseline must be one where trend growth is subject to the economic consequences of unmitigated climate change**. It is against this baseline which the policy debate must be conducted.

It is against this baseline where the opportunities for jobs and growth can be truly understood and embraced.

It is against this baseline where the costs of delay are revealed.

It's a matter of good economics.

Climate crunch time

As Australia cushions the economy to the effects of the pandemic and recovers, there is a need to think of resilient investments for recovery: good investments.

Ones that make the economy robust to future challenges and avoids the economy running headlong into another economic wall in just a few years' time.

Recovery from the pandemic is crunch time to put emissions in structural decline and mitigate the worst effects and risks from a changing climate.

The Global Financial Crisis saw greenhouse gas emissions jump significantly as the world economy recovered, further stalling resilient economic progress.

The Australian and global economy cannot afford this a second time round – cannot afford it economically, socially or environmentally.

All economies are recovering from COVID off an economic baseline that was already disrupted and exposed to risk – climate change and economic disruption is not a scenario, it is the baseline.

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