

Paris Plus

From cost to competitive advantage



Why 'Paris Plus'?

- As the urgent need to tackle climate change becomes clearer, a new 'Paris Plus' global climate architecture is emerging.
- "Net zero by 2050" has become the global standard against which emissions reduction targets are assessed.
- New cross-border agreements and policy mechanisms are emerging that go beyond the text of the Paris Agreement while seeking to contribute to its goals.
- Trade and investment trends in global decarbonisation efforts will impact Australia's economy, which still relies on emissions-intensive activities.
- It's time to start preparing for a Paris Plus world.

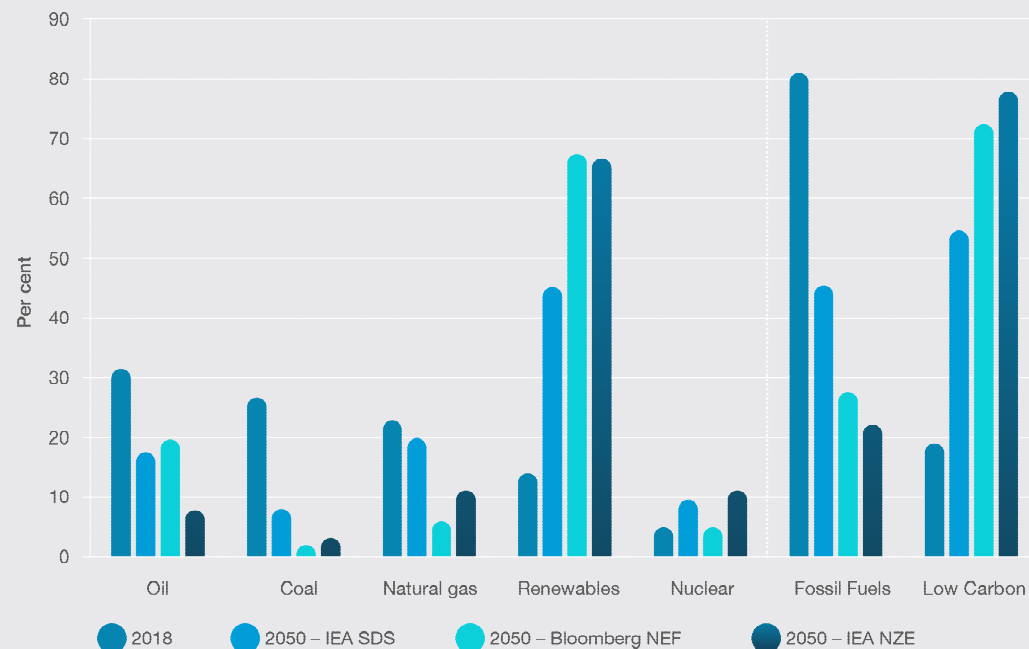
What is 'Paris Plus'?

The various agreements, targets and cross-border instruments with the purpose of contributing to the goals of the Paris Agreement, such as:

- carbon border tariffs and clubs
- climate-related financial disclosure
- subnational and corporate targets
- taxonomies and certification schemes



World energy mix 2050 under scenarios consistent with the Paris Agreement



Source: International Energy Agency (IEA) (2019). WEO data files; BloombergNEF (2020). New energy outlook 2020. BloombergNEF Insights; IEA (2021). Net-zero by 2050: Flagship report – May 2021.

Notes: Total primary energy demand; IEA Sustainable Development Scenario (SDS); BloombergNEF NEO Climate Scenario 2020; IEA Net-Zero by 2050 Scenario (NZE).

Towards net zero: global reorientation in investment

- Achieving net zero emissions will entail a major reorientation in global investment.
 - Global low carbon investment would more than triple to average US\$2.4 trillion a year over the next 30 years and
 - Fossil fuel investment would almost halve to US\$580 billion a year.¹
- “nothing short of a total transformation of the energy systems that underpin our economies” is needed.² The International Energy Agency’s net zero pathway outlines:
 - fossil fuels falling in the global energy mix, from almost 80 per cent in 2020 to just over 20 per cent in 2050
 - renewable sources supplying almost 90 per cent of electricity generation by 2050.

1. IEA (2019). WEO data files.

2. IEA (2021b). Net-zero by 2050: Flagship report – May 2021.

Towards net zero: global reorientation in investment

- Private sector actors and financial markets are mobilising to reduce emissions.
 - Over 100 major institutional investors and banks have placed restrictions on lending to new coal projects.¹
 - The gap between low carbon investment and fossil fuel investment narrowed substantially in 2020.²
 - Sustainable debt issuances have increased – from around US\$30 billion in 2012 to around US\$730 billion in 2020.³
- The global financial system is being regeared to manage climate risk, and drive low emissions investment. Major economies are moving to require investors and businesses to disclose their exposure to climate-related financial risks, and to develop 'taxonomies' that identify what constitutes a sustainable investment.
- Economies representing over half of global GDP have signed up to the International Platform on Sustainable Finance, which is coordinating approaches to sustainable finance.⁴

Global fossil fuel and green project financing



Source: Quinson, T. & Benhamou, M. (2021). Five takeaways from global banks' green vs. fossil financing. *Bloomberg Green*.

1. Institute for Energy Economics and Financial Analysis (2021). *Over 100 and counting: Financial institutions are restricting thermal coal funding*.
2. IEA (2021). *World energy investment 2021*. Paris, France. Retrieved from <https://www.iea.org/reports/world-energy-investment-2021>
3. BloombergNEF (2021). *1H 2020 sustainable finance market outlook*, January 22, 2021. BloombergNEF Insights.
4. International Platform on Sustainable Finance (2020). *Annual report, October 2020*.



Towards net zero: the emergence of climate oriented trade policies

- **The world's largest economies, and seven of Australia's ten largest trading partners, have set a mid-century net zero emissions target.**¹ Trade policies are actively being considered by these economies to help drive progress towards net zero emissions.
- **Sectors with high levels of embedded emissions in countries without ambitious climate policies could be the subject of carbon border adjustment mechanisms (CBAM)** – taxes on the carbon content of their exports. The European Union is developing a CBAM and other countries are set to follow.²
- **Emissions certification schemes are emerging and will impact trade competitiveness.** Emissions certification schemes provide a standardised process for measuring and certifying emissions associated with particular products. Several schemes are active or underdevelopment, including for hydrogen, aluminium and steel.

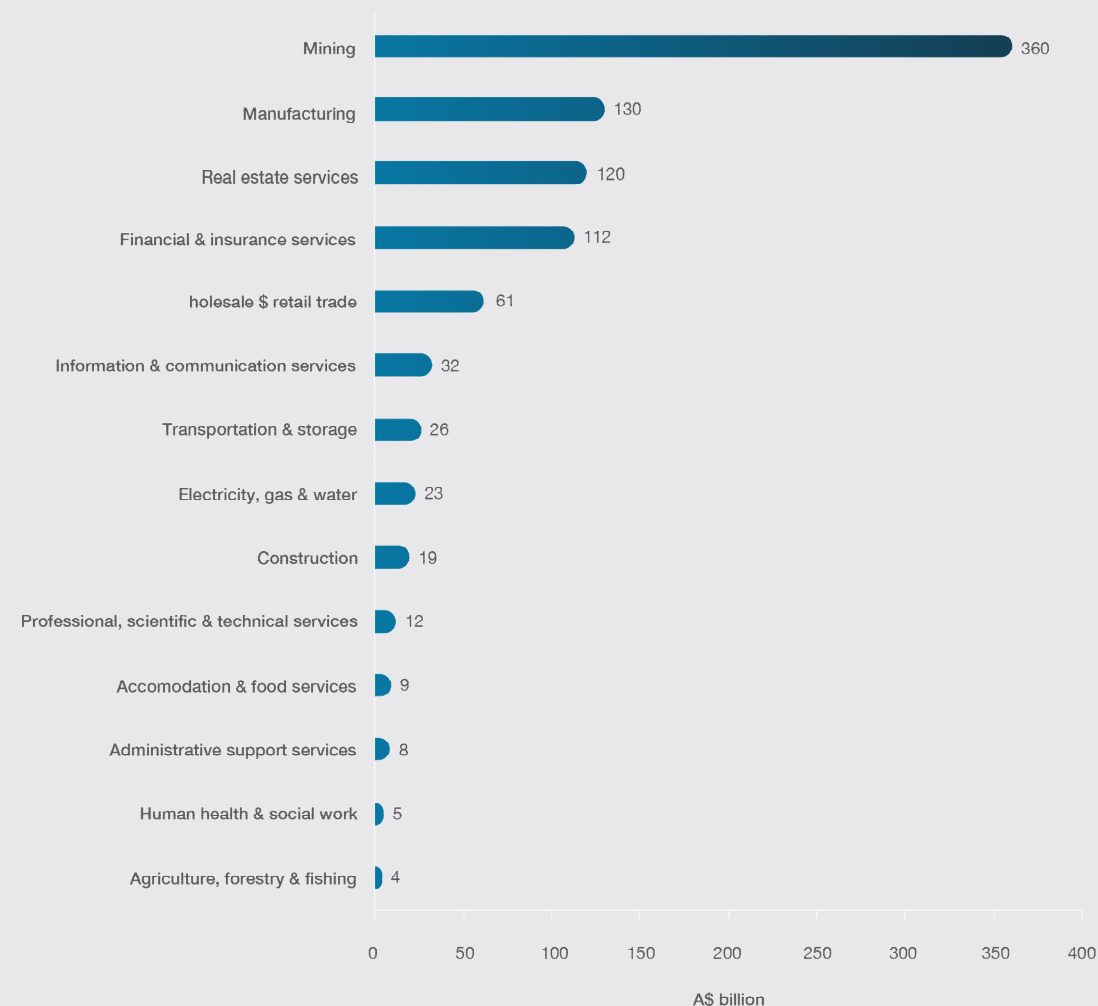
1. Department of Foreign Affairs and Trade (DFAT) (2020). *Trade statistical pivot tables*. Australian Government; Climate Watch (2021). Net Zero Tracker.

2. European Commission (EC) (2021). *Carbon border adjustment mechanism: Questions and answers* [Press release].

Investment related challenges for Australia

- **New investment rules could have significant implications for Australia.** Australia will need to show investment opportunities align with the Paris-agreement to attract global capital.
- **Nine of Australia's ten largest foreign investment partners have set net zero by 2050 targets.**¹ Several are also using sustainable finance policies to channel investment towards low carbon activities.
- **Attracting low carbon investment flows from these countries will help Australia build the industries required to drive economic growth in a net zero world.**

Foreign direct investment in Australia by industry, 2020



Source: Australian Bureau of Statistics (ABS) (2021). *International investment position, Australia: Supplementary statistics*.

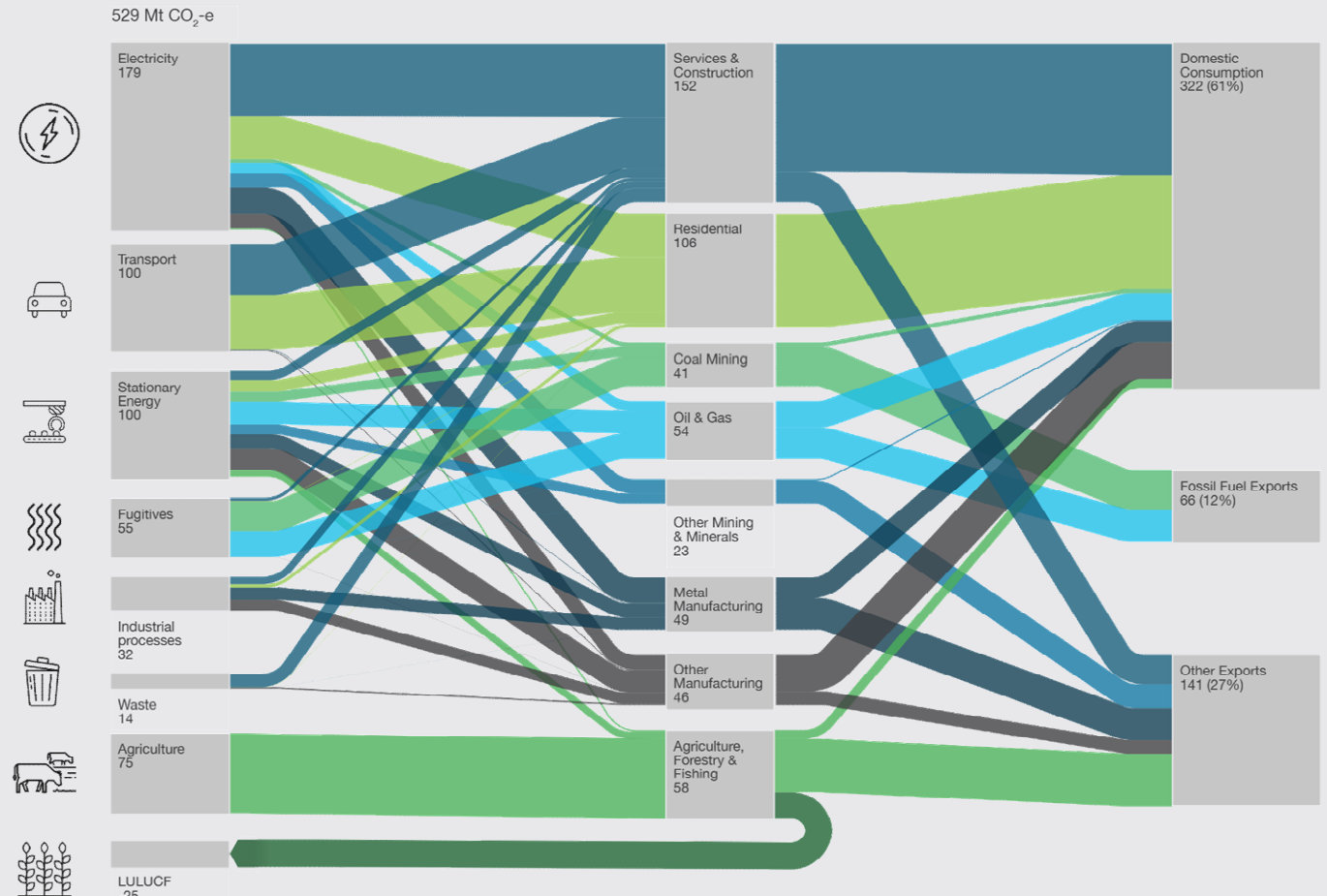
Notes: Manufacturing data not available for 2020. 2019 data shown for illustrative purposes.

1. ABS (2021). International investment position, Australia: Supplementary statistics; Energy & Climate Intelligence Unit (2020a). Net zero tracker: Net zero emissions race: 2020 scorecard; ClimateWatch (2021). Net-Zero Tracker.

Trade related challenges for Australia

- Many of Australia's key exports have high emissions associated with their production, and fossil fuel exports also release emissions at the point of combustion.
- The world of Paris Plus thus presents dual risks for Australia's exports:
 - that demand for fossil fuels will decline
 - that demand for exports with high 'embedded emissions' will decline.

Australia's emissions – inventory and economic sectors and end use



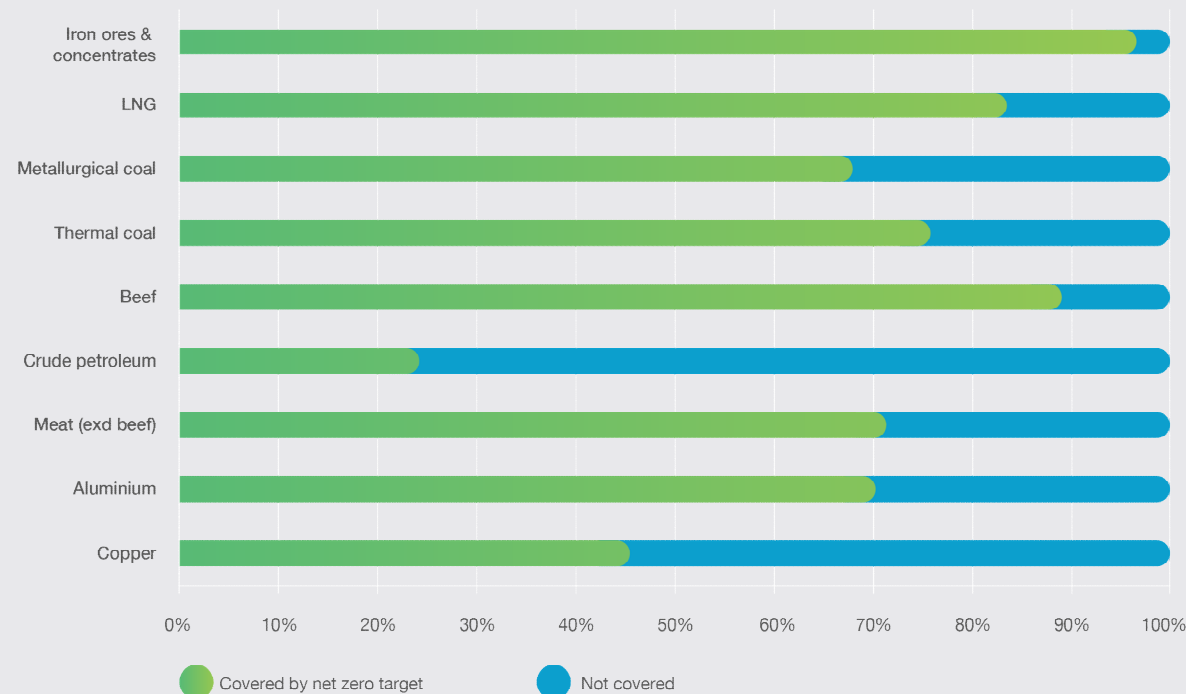
Source: Department of Industry, Science, Energy and Resources (DISER) (2018-19 data).

Trade related challenges for Australia

- Access to export markets is crucial to the health of Australia's economy, providing Australian businesses with the opportunity to expand into new and larger markets.
 - In 2019–20, the value of Australia's two-way trade was 44 per cent of its GDP, and exports stood at 24 per cent of GDP.¹
- A global trade regime aligned with net zero emissions would have implications for the relative competitiveness of countries and industries, including Australia's high emitting industries.
 - Seven of Australia's top ten trading partners have mid-century net zero emissions targets – accounting for 68 percent of two-way trade.²

1. ABS (2020). *Australian system of national accounts: Annual estimates of key economic measures, including GDP, consumption, investment, income, capital stock, productivity and balance sheets*.
2. DFAT (2020). *Trade statistical pivot tables*. Australian Government; Climate Watch (2021). Net Zero Tracker.

Percentage of selected Australian exports covered by mid-century net zero targets, 2019-20



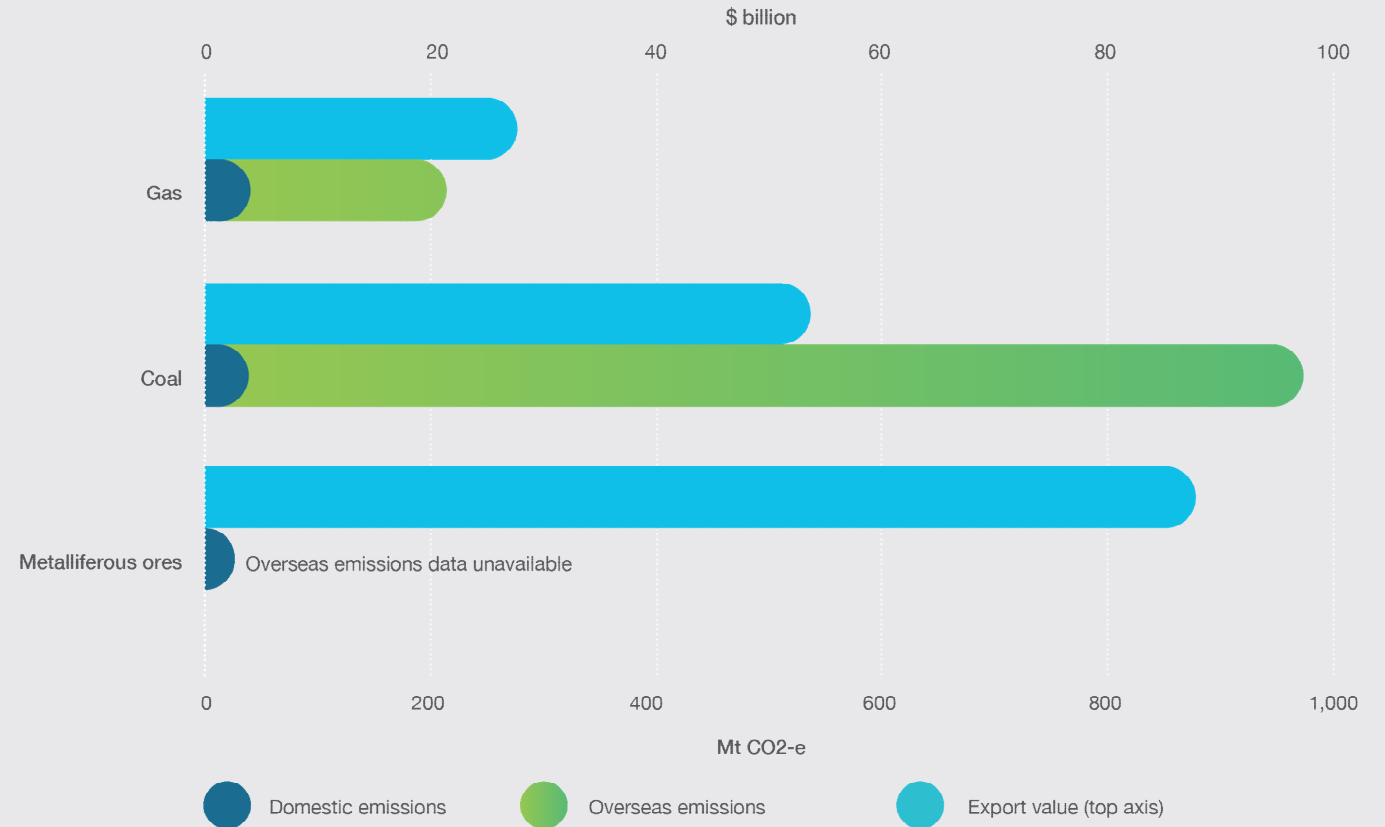
Source: DFAT (2020). Trade statistical pivot tables. Australian Government; DISER (2020c). Resources and energy quarterly; December 2020. Australian Government; Energy & Climate Intelligence Unit (2021). Net zero emissions race 2020 scorecard; ClimateWatch (2021). Net-Zero Tracker; CCA analysis of recent net zero commitments.

Notes: For the purposes of this analysis, net zero targets are national targets that are in law, proposed in legislation, in a policy document or in a high-level political pledge. This includes China's and other 2060 targets.

Low emissions opportunities for Australia

- Emissions reductions are a source of competitive advantage.
- Australia can thrive in the world of Paris Plus by:
 - producing clean exports at low cost, such as low or zero emission industrial commodities or agricultural goods
 - seizing other export opportunities with growing demand for goods and services, such as:
 - › low emissions technologies,
 - › minerals for low carbon technologies, and
 - › finance, information and carbon market services.

Australia's most valuable merchandise goods exports – value and emissions



Sources: DISER (2019). *Quarterly Update of Australia's National Greenhouse Gas Inventory*. Australian Government; DISER (2021). *Australian Energy Update*. Australian Government; DISER (2021). *National Greenhouse Account Factors*. Australian Government; CCA analysis, 2017–18 data.

Notes: The domestic emissions includes direct emissions and indirect emissions associated with all of the inputs to an export, estimated using the implied emissions factor for every real dollar of value and total export value from the June 2019 update of the greenhouse gas quarterly. Overseas emissions from coal and gas are estimated based on the emissions from the combustion of these fuels abroad, using export volumes, fuel energy contents and combustion emissions intensities consistent with the Australian Energy Update and National Greenhouse Account Factors. Overseas emissions do not include emissions associated with transport.



A strategic response: from cost to competitive advantage

ACTIONS: What does Australia need to do to respond to climate change – from both an abatement and an adaptation perspective?



Increase productive efficiency – reduce the emissions intensity of production and reduce waste of resources such as land.



Switch fuels – shift to zero or low-emissions fuels.



Electrify – generate affordable, reliable, clean electricity to meet growing demand.



Deploy technology solutions – accelerate existing mitigation and sequestration technologies and invest in new technologies.



Sequester – mitigate as much as possible and sequester the rest.



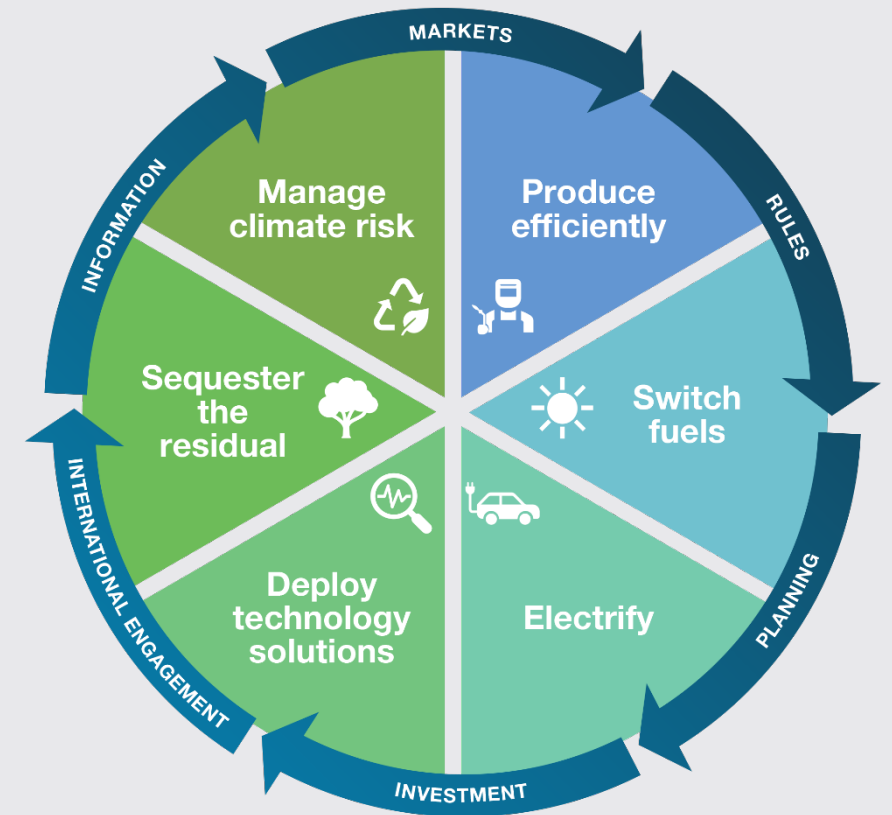
Manage climate risks – plan for and manage climate change risks to Australian industry, people and environment.

A strategic response: from cost to competitive advantage

ENABLERS: What are the enabling forces that will allow Australia to implement those actions as efficiently and effectively as possible?

- ➔ **Information** – accurate, consistent and comprehensive information on emissions and decarbonisation will help decision-makers reduce risk and realise opportunities.
- ➔ **Markets** – encouraging the development of open, competitive and transparent markets will help drive lowest cost decarbonisation outcomes.
- ➔ **Rules** – implementing rules and regulations to create trust in markets and guard against market failures, and ensuring that rules provide for new ways of reducing emissions.
- ➔ **Planning** – urban, infrastructure, workforce and land use planning can support timely and efficient mitigation, sequestration and adaptation.
- ➔ **Public investment** – public investment is needed in areas where markets are failing to make the necessary investments in a timely manner.
- ➔ **International engagement** – the Government can maintain and foster international partnerships on emissions reductions that advance Australia's interests and support efforts to decarbonise the economy.

Strategic framework: from cost to competitive advantage



Insights into navigating the Paris Plus world

Five key insights to guide the work that will help Australia navigate the world of Paris Plus:



We need to produce the cleanest exports at the lowest cost to succeed in overseas markets as the world shifts towards net zero emissions.



We should take every commercially viable opportunity to mitigate and sequester emissions fast and efficiently.



Policy choices and investment decisions should be based on information about our competitors, supply chains and the factors that contribute to Australia's competitive advantage.



Australia should be deeply embedded in international climate change rule-making.



Well-functioning global markets will accelerate and lower the cost of achieving net zero emissions.



What can Government do to help?

To ensure Australia can set increasingly ambitious emissions reduction goals and accompanying policies backed by a strong evidence base, we recommend that the Government prioritise:



Identifying the potential decarbonisation trajectory for electricity, given the importance of clean energy to achieving emissions reductions in other sectors.



Better understanding the biological and geological sequestration potential of the Australian landmass.



Assessing the 'net zero preparedness' of our high emitting industries.



Examining how different economic sectors can drive net zero emissions, in terms of the quantity and timing of abatement and jobs.



Revisiting and identifying solutions for the barriers to the take-up of zero- and low-cost abatement opportunities.

Hydrogen
FUEL CELL BUS

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