

Climate Governance

Assessment of the government's ability and readiness to transform Australia into a zero emissions society

CAT Climate governance series

AUSTRALIA

October 2019

CAT Climate Governance series

Under the Paris Agreement, governments have committed to limiting temperature increase to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C. Achieving this objective will require global greenhouse gas emissions to peak by 2020, reduce by 45% below 2010 levels by 2030 and be reduced to net zero around 2070, with carbon emissions reaching net zero around mid-century, with negative emissions thereafter.

Governments in all countries play a critical role in enabling this transformation, which involves action from all aspects of society and the economy.

The Climate Action Tracker (CAT) tracks the progress of countries towards achieving the climate targets they have set for themselves under the Paris Agreement and what the combined effect of these commitments and policies mean for global temperature levels at the end of this century.

In this series, the CAT expands on its country analysis to evaluate the ability and readiness of national governments to enable the required economy-wide transformation towards a zero emissions society.

Our assessment analyses four aspects of governance covering key enabling factors for effective climate action:

- the political commitment of the government to decarbonisation,
- the institutional framework it has put in place to achieve its emission reduction targets,
- the processes it has established to develop, implement and review mitigation policies, and
- its ability and willingness to engage with relevant stakeholders on policy development.

Each country assessment considers the national government and one or two of the highest emitting sectors critical to achieving deep decarbonisation in the country. The first round of analysis covers **Argentina, Australia, Indonesia, Kenya, the Philippines and South Africa**.

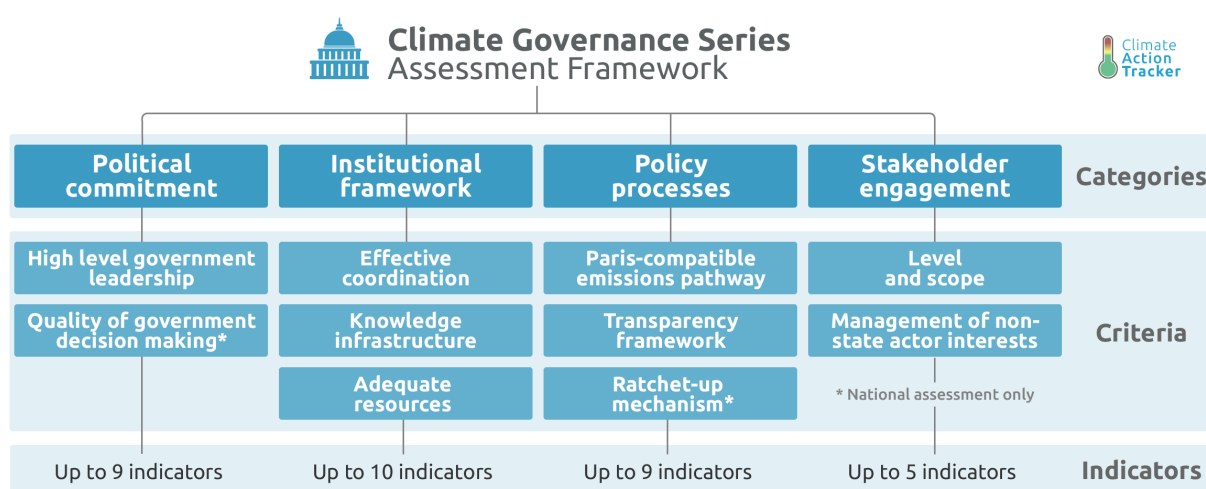
The Climate Governance Series seeks to offer a standardised and replicable approach to assessing a government's ability and readiness to achieve the required transformation, highlighting positive developments and areas for improvement. By releasing the first six country reports, the CAT aims to both generate discussion and elicit feedback on the methodology that the CAT seeks to develop further.



Legend

Understanding our indicators

This report series seeks to produce a standardised and replicable approach to assessing a country's readiness to decarbonise. To achieve this, we have assessed a number of possible indicators under four broad categories and ten **criteria**. **Criteria** are marked in bold text throughout this document. There are up to 33 indicators for national assessments and 20 for sectoral assessments.



Understanding our rating system

Our rating system highlights positive developments within countries, identifies areas of improvement, and establishes a basis on which to compare climate governance across countries.

Each individual indicator has been assessed and given a score. The categories and criteria linked to those indicators are then given a rating based on those scores.

Poor	<p>≤ 30% of possible score</p> <p>This rating indicates that this is an area where the government is deficient and could do much to improve.</p>
Neutral	<p>30 –70% of possible score</p> <p>This rating indicates that the government is showing some level of readiness to decarbonise, but improvement is still necessary.</p>
Advanced	<p>≥ 70% of possible score</p> <p>This rating indicates that while improvement is possible and beneficial, this area of governance is functioning relatively well.</p>

To find out more about our approach, please read our methodology paper on our website: climateactiontracker.org/publications/climate-governance-methodology.

Executive summary

🚩 National level readiness

Australia is lacking the national political commitment to stimulate the economy-wide transformational changes required for increased climate mitigation ambition. High level government climate leadership is not only absent, but the government is even directly undermining adequate climate mitigation. The quality of government decision making has been hampered by frequent changes in government, and the institutional and policy landscape. These events impede the likelihood of ambitious climate policies and the operations of government entities such as the Climate Change Authority.

Australia's institutional framework lacks the effective coordination across ministries, agencies and sub-national governments that is necessary for efficient and consistent climate policy. Independent research institutes provide a wealth of knowledge that could inform policy-making decisions. Despite Australia's high vulnerability to climate change, the government has a history of ignoring the climate research efforts and advice of its independent government agencies such as the Climate Change Authority, universities, non-government research organisations, as well as IPCC assessments. Human resource constraints remain barriers to effective climate governance, as there are few climate-related roles, high rates of staff turnover, and relatively low budget levels, all reflecting a government in clear denial of its climate change commitments.

Australia needs to improve its transparency framework by ensuring the timeliness and transparency of its reporting, including in relation to land based activities, clearly quantifying the projected and actual effect of its mitigation policies, and producing regular reports of how the country is tracking towards the Paris Agreement goals at sectoral, State and National levels. Increased and secured funding for the Climate Change Authority would strengthen its ability to provide independent assessment, review and tracking of mitigation policy. Furthermore, Australia needs establish a ratchet up mechanism to strengthen its current Nationally Determined Contribution (NDC) to become consistent with the Paris Agreement long-term, 1.5°C temperature goal. To date, the government has ignored the requirement under the Paris Agreement enabling decisions to submit by 2020 a revised and more ambitious NDC for 2030 and did not meet the call by the UN Secretary General and the Pacific Island Forum members to that effect. The government needs also develop a long-term Paris-compatible decarbonisation strategy, which is also to be submitted by 2020.

While there is stakeholder engagement through public consultations on specific aspects of policy, there is a strong focus on the interests of industry - in particular fossil fuel and mining industry groups - when drawing conclusions from these consultations, while ignoring the interests of other stakeholders such as youth, farmers, or the health sector. The government continues to support fossil fuel industries, through initiatives such as the Gas Acceleration Programme and possible new coal-fired power generation, as well as new coal mining, which are all inconsistent with the Paris Agreement and the need for rapid decarbonisation.

Category	Criteria	Recommendations
Political commitment	High level government leadership	<ul style="list-style-type: none">• Live up to the Paris Agreement and establish an adequate climate mitigation policy. Uphold the policy with political commitment to, and prioritisation of, climate change mitigation.• High level officials should actively engage and support climate related international initiatives.• Create a dedicated institution or team responsible for climate-mitigation related activities to support climate policy with the ability to exercise a strong influence on government decision-making.
	Quality of government decision making	<ul style="list-style-type: none">• Ensure climate change mitigation as a political priority for the Minister for Energy and Emissions Reduction.• Commit to a long-term climate policy strategy and legislation, as well as specific short- and medium-term mitigation actions, through policies and projects, spurring government and private investment in climate finance, technology, and capacity building.

Institutional framework	Effective coordination	<ul style="list-style-type: none"> Establish coordination of policy actions between and within government departments, though taking on board suggestions made by the Council of Australian Governments (COAG), such as to include climate change on the energy policy agenda.
	Knowledge infrastructure	<ul style="list-style-type: none"> Re-instate the role of the Climate Change Authority and non-governmental independent research institutes in policy development and review, and provide the Climate Change Authority and the Clean Energy Regulator with adequate resources to continue their roles.
	Adequate resources	<ul style="list-style-type: none"> Establish a climate mitigation team or institution within the Department of Environment and Energy with adequate resources and capabilities for designing and implementing ambitious climate policy and effective climate mitigation outcomes.
Policy processes	Paris-compatible emissions pathway	<ul style="list-style-type: none"> Submit by 2020 a revised and more ambitious NDC for 2030 and establish a national zero emission GHG reduction goal for 2050 in line with the Paris Agreement. Prepare a long term low GHG development strategy that couples near-term policy development and implementation with decadal milestones and emission reduction targets that lead to zero emissions in 2050.
	Transparency framework	<ul style="list-style-type: none"> Clearly and transparently quantifying the projected and actual effect of its mitigation policies with government emissions projections, detailed and transparent sector-specific models and analysis with annual reports to assess how the country is tracking towards the Paris Agreement goals at sectoral, State and National levels. Within this framework, supplement the current National Greenhouse and Energy Reporting (NGER) system to cover all sectors. Adhere to the deadlines set by the Senate for the timely release of quarterly GHG emissions updates.
	Ratchet-up mechanism	<ul style="list-style-type: none"> Increase the transparency of its reporting through, <i>inter alia</i>, quantifying the effect of its mitigation policies. Provide stable, secure and enhanced funding to the Climate Change Authority. Develop a ratchet-up mechanism to review and improve the current and future NDCs based on independent scientific advice (such as the Climate Change Authority), linked to national climate legislation and the international review process under the Paris Agreement that started in 2018 with the Talanoa Dialogue informed by the IPCC Special report on 1.5°C.
Stakeholder engagement	Level and scope	<ul style="list-style-type: none"> Create or support independent research entities to disseminate information related to climate impacts, climate mitigation and the importance of climate change to the public, such as the now defunct Climate Commission. Engage stakeholders broadly in the development of mitigation strategies and policies across sectors, ensuring buy-in from stakeholders, including those at risk from climate change - and those that profit from climate policy - into policy making.
	Management of non-state actor interests	<ul style="list-style-type: none"> Develop a national policy to address the issues of – and compensate those negatively affected by - the transition to renewable energy and decarbonisation (in particular in the fossil fuel mining and extraction sectors).

The industry sector is responsible for 28% of Australia's greenhouse gas emissions and is largely responsible for the current increase in emissions, highlighting the urgency to step up climate mitigation in this sector. However, the Department of Industry, Innovation and Science exhibits a complete lack of government leadership towards climate mitigation and it is clearly not a priority in the department.

The department ignores the existing scientific and technical analysis mainly produced by independent academic or research institutions. There is no designated unit to focus on integrating climate mitigation policy into the sector and to develop a defined Paris-compatible decarbonisation pathway. In terms of a transparency framework, the National Greenhouse and Energy Reporting scheme provides some accountability to the sector; however, it does not cover all sectoral emissions and questions have been raised about the extent to which the framework is truly transparent.

The Department has failed to manage non-state actors' interests to the detriment of climate mitigation policy development. The fossil fuel and mining industries are renowned for influencing government and receiving preferential treatment at the expense of other marginalised stakeholders' viewpoints.

Category	Criteria	Recommendations
Political commitment	High level government leadership	<ul style="list-style-type: none"> Sector Ministers acknowledge Australia's commitment to the Paris Agreement, and take charge in ensuring climate mitigation is a priority in sector policy in line with a Paris Agreement-compatible pathway.
	Quality of government decision making*	<ul style="list-style-type: none"> Establish a climate mitigation focal point in the Department of Industry, Innovation and Science to develop climate mitigation policy to decarbonise the industry sector.
Institutional framework	Effective coordination	<ul style="list-style-type: none"> An industry climate mitigation and decarbonisation focal point should establish a framework for coordination with other agencies on matters relating to industry decarbonisation. Specifically, coordinate with the Department of the Environment and Energy, the Clean Energy Regulator, the Council of Australian Governments (COAG) Energy Council, the Australian Renewable Energy Agency, and the Clean Energy Finance Corporation.
	Knowledge infrastructure	<ul style="list-style-type: none"> Ensure climate change mitigation is considered in all industry policy, align sector policy with national level climate mitigation policy, including Australia's NDC commitment, and any further climate policy developments.
	Adequate resources	<ul style="list-style-type: none"> Utilise knowledge infrastructure through consideration of sector specific analysis from independent research institutes to inform strategic planning to decarbonise the industry sector. Designate adequate human capital and budget for the department focal point team to implement a climate change mitigation and decarbonisation policy for the sector, as well as align existing policies with a decarbonisation agenda.
Policy processes	Paris-compatible emissions pathway	<ul style="list-style-type: none"> Establish an ambitious and defined Paris-compatible pathway for the industry sector, with short term policy feeding into long term decarbonisation plans.
	Transparency framework	<ul style="list-style-type: none"> Improve upon the transparency framework for the Emissions Reduction Fund and Safeguard Mechanism. For example, allow for transparency by releasing information related to penalty avoidance or additionality and how such issues are being addressed for policy development and improvement.
	Ratchet-up* mechanism	

Stakeholder engagement	Level and scope	<ul style="list-style-type: none"> • The Department should consult with non-state actors in developing climate change mitigation and decarbonisation policy, particularly peak environmental or climate change organisations, and independent climate research institutes. • Develop policy to address a “Just Transition” for stakeholders vulnerable to the transition to a decarbonised economy, such as workers facing unemployment due to decommissioned coal mines.
	Management of non-state actor interests	

** National assessment only*

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1 Introduction

1.1 Domestic context

The Commonwealth of Australia is a developed country, with a high-income economy and a population of 25.5 million (ABS, 2019b). Australia has sustained population growth, economic growth, and has high levels of health and education (OECD, 2018). However, some groups face issues of poverty and unemployment with income inequality above the OECD average (OECD, 2019). These groups at risk of poverty include the elderly, unemployed, casual and part-time workers, those with low levels of education, those that live alone, single parents, and, significantly at risk, are indigenous Australians. Australia is a member of the G20 and is the world's 13th largest economy. In 2018, its GDP was 1.4 trillion USD (World Bank, 2019). Australia is tied for 13th place on Transparency International's (2018) Corruption Perceptions Index with a score of 77.

Australia has a federal parliamentary constitutional monarchy and a liberal democratic political system. Its government has a bicameral parliament, with two houses - an upper (the Senate) and lower (the House of Representatives). The Liberal-National Party Coalition is currently in government, with the Australian Labor Party in opposition. The government has relied on the support of smaller parties for some years, and other smaller parties are represented. The past twelve years have been marked by instability at the highest levels of government, with five Prime Ministers assuming office. It is almost as common for a leader to be chosen by the party through leadership spills, as it is for him or her to win a general election. Scott Morrison became the 30th Prime Minister of Australia on 24 August 2018, after a leadership spill, and went on to win the election in May 2019.

Australia is a major exporter of fossil fuels. It surpassed Qatar as the world's largest exporter of LNG in November 2018. It is also the world's largest exporter of coal, which represents 57% of the total value of the country's exports, where 34% of the value of all exports are destined for China (ABS, 2019a). Australia is also the world's third largest exporter and fifth largest miner of fossil fuels by carbon dioxide potential (Australia Institute, 2019). Its emissions have been increasing since the repeal of the carbon tax in 2014. The country's domestic carbon emissions constitute 1.4% of the global total; however, if one were to factor in the emissions from the exported fossil fuels, Australia's share increases to 3.6% and is projected to grow to 17% of global emissions in 2030 if all planned projects go ahead (Climate Analytics 2019).

Yet, there is a tendency to overestimate the importance of the natural resource sector to the Australian economy (CSIRO, 2018). In fact, the service sector generates three-quarters of economic output. The financial services contribute the highest share (9.5%) of total gross value added (GVA) to the economy, followed by construction (8.1%), healthcare and social services (7.9%), professional, scientific and technical services (7.4%), all of which contribute a higher level of total gross value for the economy than mining (6.4%) and manufacturing (6.3%) (ATIC, 2019).

The Climate Action Tracker has rated Australia's Nationally Determined Contribution as "Insufficient" (Climate Action Tracker, 2019). It is far behind many developed countries in its decarbonisation of the energy mix (Climate Analytics, 2018b). Australia's industry sector greenhouse gas emissions amount to 28% of the country's overall emissions (Climate Analytics, 2018a).

1.2 Approach to Climate Change

The following table gives an overview of key institutions, strategies, targets, as well as legislation, that refers to Climate Change mitigation at national level, as well at sectoral level for the selected sector (industry).

 <p>Key Institutions</p>	<p>National agencies</p> <p>Department of Environment and Energy (DEE) DEE is responsible for Emission Reduction Fund (ERF) policy development, including legislation and methods for activities that reduce emissions under the Emissions Reduction Fund.</p> <p>Clean Energy Regulator (CER) An independent statutory authority responsible for administering schemes legislated by the government, such as the ERF, the Safeguard mechanism and the Renewable Energy Target. Responsibilities include measuring, managing, reducing or offsetting carbon emissions.</p> <p>Climate Change Authority (CCA) An independent institution intended to advise on decarbonisation efforts. Its mandated functions include reviewing various pieces of climate legislation and making recommendations, as well as conducting research on climate change-related matters.</p> <p>The Clean Energy Finance Corporation A government owned corporation that co-invests with the private sector to spur investment in the deployment of renewable energy, energy efficiency and low-emissions technology.</p> <hr/> <p>Industry sector lead agencies</p> <p>Department of Industry, Innovation and Science (DIIS) The DIIS conducts the administrative and regulatory government functions for the industry sector.</p>
 <p>Key Plans & Strategies</p>	<p>National level</p> <p>National Energy Productivity Plan (NEPP) A plan to improve Australia's energy productivity to boost competition and growth, reduce energy costs and greenhouse gas emissions.</p> <hr/> <p>Industry sector level</p> <p>Australia has no key plan or strategy specifically focussed on the industry sector</p>
 <p>Pledges & Targets</p>	<p>National level</p> <p>Nationally Determined Contribution 26-28% below 2005 emissions (including LULUCF) by 2030</p> <p>Renewable Energy Target 33,000 gigawatt-hours of renewable electricity generation by 2020</p> <p>National Energy Productivity Plan (NEPP) target Improve energy productivity by 40% by 2030 compared to 2015</p> <hr/> <p>Industry sector level</p> <p>Australia has targets specifically focussed on the industry sector</p>



Key Laws & Regulations

National level

Climate Change Authority Act 2011

The Act establishes the Climate Change Authority and outlines its functions.

Carbon Credits (Carbon Farming Initiative) Act 2011

The Act governs Australia's system for the issuing and use of carbon credits.

Renewable Energy (Electricity) Act 2000

The Act establishes Australia's 2020 renewable electricity target as well as contains other measures to promote the development of additional renewable electricity capacity.

Industry sector level

National Greenhouse and Energy Reporting Act (NGER) 2007

The Act establishes reporting obligations for entities with GHG emissions above a certain threshold. It was amended in 2014 to establish the Safeguard Mechanism, the purpose of which is to ensure emissions from large industrial facilities do not exceed emissions baselines.

2 National assessment

2.1 Political commitment

Political commitment

High level government leadership

Quality of government decision making

Australia has a poor political commitment to climate mitigation, lacking in both high-level government leadership and in the quality of government decision making regarding climate mitigation. At the international level, commitments are weak, and the government has effectively reduced its Nationally Determined Contribution (NDC) commitment under the Paris Agreement, as it plans to achieve about half of its NDC abatement task through carryover units from the Kyoto Protocol. At the national level, there is a history of climate policy reversal and little agreement between and within parties. Overall, there is perpetual uncertainty and the constant risk of policy back-sliding on climate-related issues.

High-level government leadership can be a driving force for stimulating economy-wide transformational changes and scaling up climate mitigation actions through top-down strategy setting and sending effective policy signals.

There has been no commitment by the head of state to adequate action on climate change. Prime Minister Morrison has shown no leadership on climate action, nor is it a priority for his government. To the contrary, the Prime Minister openly supports a denialist approach, rejecting international assessments by the IPCC and the call by the UN Secretary General for urgent additional climate action. During his tenure as Treasurer, Morrison famously brought a lump of coal to parliament in support of the fossil fuel industry (Murphy, 2017).

While he has reiterated Australia's commitment to meeting its 2030 emissions reduction target on several occasions (Australian Government, 2019c; Prime Minister Morrison, 2019b), the Prime Minister contends that the 2030 target will be achieved easily, contrary to current emissions projections and evidence (Climate Action Tracker, 2019; Morton, 2018). The government intends to achieve the target largely by using carryover units, contrary to the intent and spirit of the Paris Agreement as well as continuing to rely on policies that have not been able to reduce emissions so far (Climate Action Tracker, 2019).

Australia does not have a dedicated institution or high-level cabinet official responsible for climate mitigation policy. Climate change mitigation responsibilities are just an add-on unit within an existing institution. There is a climate change section within the Department of the Environment and Energy, led by a Deputy Secretary for Climate Change and Energy Innovation (DEE, 2018c). There is no evidence to suggest that the climate change section of the DEE exerts influence on government-decision making, that they aspire for more ambitious climate policy, nor that they prioritise climate mitigation above other political issues.

Australia occasionally participates in international initiatives that support domestic mitigation action. However, its actions are limited, and are counterbalanced by other regressive behaviours in the international space. Australia is an active member of Mission Innovation, a coalition of countries that seek to accelerate clean energy innovation by doubling R&D investments by 2021 (Mission Innovation, 2019). Australia also belongs to the International Solar Alliance, which aims to increase solar energy use, and the Climate & Clean Air Coalition, which aims to reduce short-lived climate pollutants (CCAC, 2019; ISA, 2019). However, its participation in these fora is limited. Australia is not a member of the Powering Past Coal Alliance, a coalition committed to phasing out unabated coal-

fired electricity generation in OECD countries by 2030, but Sydney, Melbourne, and the Australian Capital Territory are members (PPCA, 2019).

At the 2019 Pacific Islands Forum, Australia insisted on any references that would require the scaling-up of domestic climate action be removed from in the group's communiqué, such as the phasing out of coal, and the cessation of new coal mining (Farand, 2019; Lyons, 2019; Pacific Islands Forum, 2019). Australia has also announced that it will no longer provide funds to the Green Climate Fund (GCF) (Mathiesen, 2019; Prime Minister Morrison, 2019a). The GCF is a financial mechanism under the UNFCCC that aims to limit or reduce greenhouse gas emissions in developing countries.

The **quality of government decision making** at the highest levels is a key factor in implementing ambitious climate policies, as national governments provide resources and direction for lower levels of government and can stimulate horizontal dynamics through mainstreaming, lesson-drawing and cooperation (Jänicke, Schreurs, & Töpfer, 2015).

The quality of government decision making on climate mitigation has been marred by frequent changes to the institutional and policy landscapes, ushered in by changes in government. Following the defeat of the Rudd Government in 2013, the newly-elected Liberal-National Coalition sought to dismantle much of the institutional landscape of entities with climate mitigation-related responsibilities. It abolished the Department of Climate Change and Energy Efficiency in March 2013 and eliminated the role of the Minister for Climate Change position six months later. It also abolished the Climate Commission, an entity focused on disseminating information on climate change to the public, in September 2013 (Arup, 2013).

Attempts were made to abolish the Australian Renewable Energy Agency, the Climate Change Authority, and the Clean Energy Finance Corporation in 2013-2014 (Browne, Campbell, & Cass, 2018). As a consequence, the Climate Change Authority noted that its ability to undertake a review of the Renewable Energy Target in 2014 was limited by uncertainty over its future (CCA, 2014d). Attempts to improve the institutional landscape have not been successful. The Office of Climate Change of Renewables Innovation that was announced in October 2015 has not materialised (Parliament of Australia, 2016a).

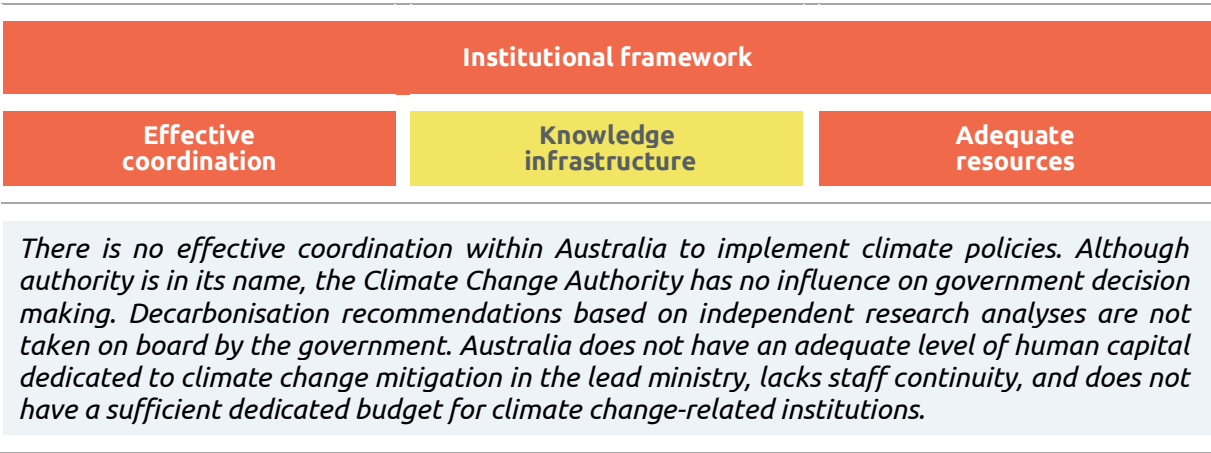
The portfolio of cabinet ministers related to responsibility for climate change has changed frequently. Up to May 2019, the coalition government separated the responsibilities for climate change (under the environment minister) from energy policy. After the May 2019 election, Angus Taylor became Australia's Minister for Energy and Emissions Reduction, but his political priority is not climate mitigation: instead he is prioritising electricity affordability and reliability, falsely claiming that this would justify coal generation upgrades (Taylor, 2019).

Australia has a high historical frequency of change in climate policy strategy and a long history of climate policy reversal (Parliament of Australia, 2016b). Most recently, the government abandoned the National Energy Guarantee (NEG), a policy that would have imposed 2030 emission reduction targets on energy retailers (The Guardian, 2018).

In 2015, the government reduced the 2020 Large-scale Renewable Energy Target from 41 TWh to 33 TWh (Australian Government, 2015). In 2014, much of its Clean Energy legislation was repealed (Parliament of Australia, 2016a), including the carbon pricing mechanism. Despite the government's attempts, it did not get the majority vote in parliament to completely abolish the core institutions for independent review and advice on climate policy, as well as agencies to support investment into renewable energy (Parliament of Australia, 2016b).

Australia's government and opposition parties do not show consistent attitudes on climate mitigation policy. Actors within government as well as between government and opposition have completely contrary positions. There has been an 'endless battle' on climate policy between parties and the Coalition government is internally divided on climate matters (Ketchell, 2019). In his final press conference as Prime Minister in 2018, Malcolm Turnbull remarked that "the truth is that the Coalition finds it very hard to get agreement on anything to do with emissions" (Turnbull, 2018). The difference in opinion within and between parties, and the history of policy change indicates that there is a continually high risk of backsliding on policy commitments with every election, every three years.

2.2 Institutional Framework



Effective coordination across ministries and agencies as well as with sub-national governments affects the ability of actors to align overarching climate policy targets efficiently and consistently.

There is no evidence of effective coordination, nor any framework for the coordination of policy actions between line ministries, nor between the “key players” in government (DEE, 2019a). The coverage of climate change in line ministries is poor, as only a few line ministries have a climate change focal point:

- The Department of Agriculture has a Climate & Resilience Policy section with its Rural Policy & Farm Performance unit in its organisational structure, although it is unclear whether this branch addresses mitigation efforts (DOA, 2019).
- The Department of Foreign Affairs and Trade has a Sustainability and Climate Change Branch.
- The Department of the Environment and Energy has an International Climate Change and Energy Innovation Division.
- The Department of Industry, Innovation and Science, the Department of Infrastructure, Regional Development and Cities, and the Department of Finance have no climate mitigation-related focal point within their organisational structures.

Concerns have also been expressed over the lack of subnational coordination in some sectors (Ludlow & Macdonald-Smith, 2019; Mazengarb, 2019). The Coalition government voted against the Council of Australian Governments’ (COAG) push to ensure climate change was on the energy policy agenda (RenewEconomy, 2018).

Another important criterion is the existence and utilisation of **knowledge infrastructure capable of supporting strategic planning and policy development**, as this aids in the elaboration and application of decarbonisation analyses in climate policy development.

Australia has knowledge infrastructure capable of supporting strategic planning and policy development, but does not utilise this knowledge to inform evidence-based policy-decision making.

The Climate Change Authority (CCA) is a government agency, and was intended to be an independent and authoritative institution to advise on decarbonisation efforts. Despite the comprehensive research output by the CCA, the government ignores its research. The CCA released a report reviewing the renewable energy target, advising there should be no scaling back of the 2020 Large-scale Renewable Energy Target of 41,000 GWh (CCA, 2014a). Yet in 2015, the government reduced the legislated target to 33,000 GWh. The CCA has also provided review and recommendations of Australia’s climate policy (CCA, 2016); however, the government decided to conduct its own ‘review’ and, contrary to the advice of the CCA, concluded it had enough policies in place to play its role in the global effort to reduce emissions (Australian Government, 2017). In addition, the government did not take on board CCA’s science-based research determining Australia’s share of the global climate emissions budget or the recommended NDC targets (CCA, 2014c). The CCA recommended emissions reduction target of 19% below 2000 levels by 2020, and 40-60% by 2030 (CCA, 2014c). Australia’s official target was a less significant emissions reduction of 26-28% below 2005 levels by 2030. The CCA is in the process of updating its advice on Australia’s

emission reduction commitments under the Paris Agreement; however, the Authority has explicitly stated that it will not make any recommendations about the level of ambition of the 2030 target (CCA, 2019b).

The government has not worked on or commissioned any decarbonisation study across all sectors of the economy. The few – and not recent – available studies have been provided by independent think tanks or research institutes, and the government fails to consider this available independent analyses and advice from many research institutes. One of the first of these analyses was ClimateWorks Australia's (2014) Pathways to Deep Decarbonisation 2050. Since then, there have been a number of decarbonisation studies from think tanks that focus on specific sectors – such as ClimateWorks' (2018) decarbonisation analysis of building codes, and Beyond Zero Emissions' analysis of industry (BZE, 2018b) and local communities (BZE, 2018a). and the Institute for Sustainable Futures (2016) has analysed the energy sector. Earlier work includes topics such as energy, land use, transport (BZE, 2019). The studies performed on behalf of government such as the CSIRO Low Emissions Technology Roadmap in (2017) or the Finkel Review for the climate policy review only focus on the energy sector.

There is also modelling available on emissions reduction policies and implications for various targets, including modelling commissioned as part of the Finkel Review of the Future Security of the National Electricity Market and independent research commissioned by a leading environmental organisation, the Australian Conservation Foundation (Jacobs Group, 2017; RepuTex, 2017). The government did not follow the key recommendation of the COAG-commissioned Finkel Review to adopt a clean energy target to reduce emissions from the electricity sector (Finkel, 2017).

Capital and resource constraints are significant barriers to effective climate governance. **Adequate resources and capacity** are thus needed to be made available to implementers and efficiently used by them in climate policy processes.

Australia does not have an adequate level of human capital dedicated to climate change mitigation in the lead ministry. The Department of the Environment and Energy has over 2000 permanent staff (APSC, 2019). Within the DEE, the Clean Energy Regulator has permanent staff in excess of 300 (APSC, 2019). The Climate Change Authority saw significant staff reductions in 2016 going from a total staff (permanent and temporary) of 23 to six, but added four new staff members in 2017 (APSC, 2019). The CCA budget provides for an average staffing level of nine employees for 2018-19; though until recently it had been the government's position that the Authority should be wound up (CCA, 2019a; DEE, 2018d). From the data available, comparing the staff levels of the Clean Energy Regulator and the Climate Change Authority to the overall level of staff in the Department of Environment and Energy, the climate-related roles account for only 15% of the total staffing level.

Australia does not have a sufficient dedicated budget for climate change-related institutions. For example, the Climate Solutions Package amounts to \$2 billion spread over 15 years, rather than ten years as initially intended (The Guardian, 2019). The Climate Change Authority has faced significant uncertainty with respect to its financial stability and seen its budget reduced substantially in recent years (CCA, 2015, 2018a).

The relevant government agencies have a lack of continuity of staff and processes and a poor ability to retain staff. There was a significant turnover at the CCA in 2016, with only one of 18 employees remaining at the end of that year (APSC, 2019). The CCA board has experienced a significant turnover, with a number of members resigning (Readfearn, 2017). There has also been high turnover at the Clean Energy Regulator with 21% and 18% non-retention rates in 2016 and 2017, respectively (APSC, 2019). The Department's annual non-retention rate is around 12% over this period (APSC, 2019). In 2017, the median length of service of permanent staff is nine years in the Department of Environment and Energy, eight years in the Clean Energy Regulator and six years in the Climate Change Authority (APSC, 2019).

2.3 Process for policy development, implementation and review

Policy processes		
Paris-compatible emissions pathway	Transparency framework	Ratchet-up mechanism
Australia needs to develop a Paris-compatible decarbonisation pathway. Its transparency framework lacks adequate coverage of the full scope of emissions and adequate transparency of projections analysis; nor has it been effective in prompting the adoption of further mitigation measures. The government has no intention to ratchet-up climate policy and lacks an adequate ratchet up mechanism.		

A **defined Paris-compatible decarbonisation pathway** is an important component to aid the long-term planning for, and alignment with, the Paris Agreement’s overall objectives. The current government has not established an ambitious long-term reduction target; however, it has committed to developing a 2050 emissions reduction strategy by 2020 (Australian Government, 2017).

Australia has a number of pieces of legislation that address climate mitigation; however, its 2030 emission reduction target has not been enshrined in law (Australian Government, 2007). The 2030 renewable energy target is enshrined in legislation in terms of required GWh generated (Australian Government, 2000). There is no process to feed long-term considerations into near-term policy development and implementation. A long-term emissions reduction target or plan does not exist at the national level; thus, it is not possible for line ministries to undertake back-casting exercises.

An **enhanced transparency framework mechanism** is necessary in order to track progress towards achieving emission reduction targets in line with the Paris Agreement, as well as providing checks and balances for the government’s climate commitments.

The scope of Australia’s transparency framework is limited. The Department of the Environment and Energy is responsible for preparing its national inventory; however, it lacks a national framework to monitor and report on mitigation actions (DEE, 2017). Mechanisms set up under the National Greenhouse and Energy Reporting Act 2007 only cover some sectoral activities (Australian Government, 2007).

In the past, there have been issues with the timeliness of releasing data and reporting; however, this could improve in the future. Inventory data is updated quarterly and publicly available on the Department’s website; however, the government has a track record of delaying the release of these updates and timing the release to coincide with holidays or other major events (Climate Council of Australia, 2019; DEE, 2019b). Following one such delayed release in late 2018, the Senate issued an order for the production of the inventory no later than five months after the end of the quarter (Australian Senate, 2018; Slezak, 2018). This deadline was not adhered to for the December 2018 update, despite the report being ready for release by that deadline; however, the March 2019 was issued on time (Cox, 2019; DEE, 2019b; Slezak, 2019).

Concerns have also been expressed about the transparency of the reports available. Prior to the December 2017 update, the government had given total emissions both including and excluding the land sector. Since the December 2017 update, the government has only given the total including land sector emissions (DEE, 2019b). (The land sector acts as sink, thus reducing total emissions.) The Climate Council of Australia argues that the effect of this change in reporting format is to obscure the fact that Australia’s emissions are at the highest they have ever been (Climate Council of Australia, 2019). Australia has also been criticised for a lack of transparency in the reporting on its mitigation policies. International expert reviewers have repeatedly recommended that Australia quantify the effect of its mitigation policies or clearly explain why this cannot be done (UNFCCC, 2018).

The review elements of Australia’s transparency framework are not completely independent. The inventory is reviewed by representatives of the federal and sub-national governments, as well as by a group of external stakeholders prior to its release (DEE, 2017). The Climate Change Authority is an independent entity tasked, *inter alia*, with reviewing the operation of the National Greenhouse and Energy Reporting Act 2007 and Carbon Credits (Carbon Farming Initiative) Act 2011 (Australian Government, 2007, 2011a). The Authority may also conduct special reviews at the request of the relevant Minister or Parliament, but cannot initiate reviews on its own accord (Australian Government, 2011b). The Authority may conduct its own research.

The Coalition government was unsuccessful in its efforts to abolish the Authority when it first assumed office (Australian Government, 2013). The government maintained the view that the Authority should wound up and has only reversed this position after the 2019 election (CCA, 2019a). Throughout this period the Authority has faced significant uncertainty with respect to its financial stability and seen its budget reduced substantially (CCA, 2015, 2018a). While funding has been allocated through to 2023, at its current reduced level, there is no separate allocation for the Authority in the current Appropriation Bill before Parliament and the Authority maintains its funding situation is still an issue (Australian Government, 2019a; CCA, 2019a).

The review processes that do exist have not been effective. In 2016, the Authority noted that the government would need to adopt further measures in order to meet its 2030 emission reduction target and proposed a suite of policy actions that could be taken (CCA, 2016). The Authority continues to recommend the adoption of a number of these measures (CCA, 2018b). Rather than heed this advice, the government undertook its own policy review in 2017, concluding that current policies were sufficient and that it was on track to meet its 2030 target (Australian Government, 2017).

The government has no national ratchet-up mechanism and there is no evidence to suggest it intends to scale up its 2030 NDC target by the end of 2020. The Climate Change Authority is in the process of updating its advice to the government regarding its commitments under the Paris Agreement; however, the Authority has explicitly stated that this will not include recommendations regarding the ambition level of the 2030 target (CCA, 2019b). The Authority’s prior advice to ratchet up the country’s 2020 target was ignored (CCA, 2014c). The government has signalled that it will implement a five-year ‘review and refine’ process as required by the Paris Agreement; however this will only apply to the 2035 NDC, due to be provided by 2025, and not the need to increase the ambition of the current NDC as called for by the Paris Agreement decision (Australian Government, 2017).

2.4 Stakeholder engagement

Stakeholder engagement	
Level and scope	Management of non-state actor interests
<p><i>The Australian government’s stakeholder engagement is insufficient and suffers from fossil fuel and mining lobby group influence. The government fails to provide ample climate mitigation content dissemination, a vacuum that is filled by independent research institutes and organisations, but which is repeatedly ignored by government decision-makers.</i></p>	

The government’s **level and scope of engagement** with stakeholders reflect how well it is aware of external knowledge and the expectations of its constituents which, in turn, affects the ability for sound government decision-making.

Australia has a low level and scope of engagement, reflected in the content dissemination and generation of climate change-related topics. In 2013, the government abolished the Climate

Commission, the entity tasked with providing information about climate change to the public (Arup, 2013). Some of the Commission's former members, including the head of the Commission, went on to establish the independent, non-profit, crowd-funded Climate Council to fill the void (Milman, 2013).

Sixty percent of Australians think global climate change is the top threat to the country, ahead of other global concerns such as terrorism (Poushter & Huang, 2019). Ipsos data shows that the environment entered the top five issues for Australians in 2019, reaching the top three in June 2019, with climate change being a top environmental concern (Ipsos, 2019b, 2019a). However, any climate-related content dissemination is due to non-governmental institutions or state governments picking up the slack from national government inaction.

State-level content dissemination can be seen, for example, on the websites of New South Wales Government (2019) and Victoria Government (2019). Notwithstanding these efforts, there is a portion of the population that do not consider climate change a threat or to be man-made (Milman & Harvey, 2019; Poushter & Huang, 2019), suggesting content dissemination is drowned out by the fossil fuel industry-funded climate denial campaigns and their support by high level of government.

The DEE regularly undertakes public consultations but does not aim at ensuring broad buy-in of stakeholders for meaningful policy ambition. In the past two years, these consultations have ranged from detailed regulations to a broad review of the government's climate change policies (DEE, 2019c). The consultation on the operation of the Emissions Reduction Fund Safeguard Mechanism aimed to bring the Safeguard Mechanism "up-to-date with current circumstances" (DEE, 2018b). After the consultation the Safeguard Mechanism baselines were adjusted through an amendment to the NGER Act (Australian Government, 2019d), allowing emissions to increase.

The **management of non-state actor interests** is another important consideration, as it depicts whether governments have succeeded in addressing resistance created by vested interests as well as communicating the fairness of their policies to the public. An assessment of the ability to manage non-state actor interests reveals how much public support or opposition policies receive.

The Australian government's management of non-state actor interests is entirely lacking, as is shown in its tight relationship with fossil fuel industry groups which have a strong influence on government policy instead of being managed by the government. The government does not consider the need for a just transition away from fossil fuels.

Australia is the textbook example of a government that integrates non-state actor interests at risk from climate policy into policy-making. Australia has been criticised by Transparency International Australia for inappropriate industry lobbying and the revolving door between industry and government (Transparency International Australia, 2018). Relevant policy decisions actively reflect positions held by non-state actor groups at risk under climate mitigation policy. The influence of the fossil fuel and mining sector lobby on climate policy in Australia has been widely documented (ACF, 2019; Crowley, 2013; Grattan Institute, 2018; Langley, 2017; Pezzey, Mazouz, & Jotzo, 2010; The Australia Institute, 2017). For example, in the aftermath of the Finkel Review, media reports suggested that the Minerals Council of Australia was lobbying to ensure that new coal-fired power stations would still be allowed under any clean energy target (The Guardian, 2017).

Australian tax-based subsidies supporting the fossil fuel industry amount to over \$12 billion per year based on estimates from the Australia federal government's budgets (Market Forces, 2019). Lobby groups including the Minerals Council of Australia, the Australian Coal Association, the NSW Minerals Council, the Queensland Resources Council, and the Australian Petroleum Production and Exploration Association spent over \$300 million on advocacy from 2010 to 2014 including on an anti-carbon tax campaign, which was appealed in 2014 (Grattan Institute, 2018).

There is evidence to suggest that the government does not integrate non-state actor interests that profit from climate policy into policy-making. As part of the 2017 review of government climate policy, the Clean Energy Council, an advocacy group for the clean energy industry, called for strong and long-term renewable energy targets post-2020 (Clean Energy Council, 2017). The government has indicated that it will not adopt renewable energy targets beyond 2020 (The Guardian, 2018).

In addition, professions from different industries demand further action from government. For example, those from the medical profession and from the farming industry call for more ambitious

climate action, but their calls go unaddressed (Chambers et al., 2017; Farmers For Climate Action, 2019)

The government does not have a broad strategy to address the transition to a carbon-free future, notwithstanding the fact that this has been a continuous demand from trade unions (ACTU, 2016; ETU, 2018). Environmental groups have expressed concern that the government's broader legislative agenda with respect to workers and unions will only further delay efforts to develop a just transition strategy (Environmental Justice Australia et al., 2019).

The government has largely been reactive - rather than proactive - in addressing negative externalities. In the aftermath of the Hazelwood power station closure announcement, the Prime Minister created a Ministerial Committee to coordinate the federal government's response and committed \$43 million AUD in financial support (DIIS, 2016). However, it was the Victorian State Government that took charge of attempting a Just Transition and committed \$266 million for a transition package (Premier of Victoria, 2017).

3 Sectoral assessment – Industry

3.1 Political commitment

Political commitment	
High level government leadership	Quality of government decision making*
<i>Australia's industry sector has a low level of government leadership toward climate mitigation. The responsible ministers are not committed to climate mitigation. Official sector documents only mention climate mitigation, without prioritising the matter.</i>	

** Not rated under sectoral assessments*

High-level sector leadership in the industry sector is integral to ensure prioritisation of resources towards integrating top-down national policy signals with long-term sectoral planning.

The commitment by sector leads is beyond insufficient. The Department of Industry, Innovation and Science (hereafter referred to as Department of Industry or DIIS) is responsible for the industry sector. The relevant Ministers have not expressed support publicly for any specific sectoral climate mitigation policies in 2018 or 2019.

The Department of Industry has two Ministers – one for Resources and Northern Australia (Matt Canavan) and the other for Industry, Science and Technology (Karen Andrews). Canavan gave a speech commenting on the uncertainty of climate science, and suggested in 2018 that Australia is not bound to the Paris Agreement (ABS News, 2018; Canavan, 2015).

Similarly, the sector suffers from a non-existent level of ownership and commitment by the line ministry on climate mitigation duties. The Department of Industry does not have a climate change focal point (DIIS, 2018a) and there is no evidence of the Department of Environment and Energy or the Climate Change Authority having any influence on sector-decision making of the Department of Industry.

In terms of the relative ranking of climate mitigation, the emphasis of the Department of Industry is on other issues, although climate mitigation is explicitly mentioned in official sector plans. Neither the Department's Strategic Plan 2016-2020 nor its Corporate Plan 2018-2019 mention climate change, the Paris Agreement or Australia's 2030 emissions reduction target (DIIS, 2017b; DIIS, 2018c). The Corporate Plan lists a number of climate mitigation related policies, such as the support for carbon capture and storage and coal mining emissions abatement along with supporting new gas projects, which impact Australia's ability to meet the Paris Agreement (DIIS, 2018c; Hare, Roming, Hutfilter, Schaeffer, & Beer, 2018).

It is clear that climate mitigation is not a priority for the Department as emission reduction policies are listed alongside projects to accelerate fossil fuel production. The Department supports the expansion of fossil fuel resources through the Gas Acceleration Program and seeks to attract further investment in offshore petroleum (DIIS, 2018c).

3.2 Institutional Framework

Institutional framework		
Effective coordination	Knowledge infrastructure	Adequate resources
<i>The Department of Industry does not effectively coordinate with other agencies on matters relating to decarbonisation. There is some knowledge infrastructure to support decarbonisation efforts within the industry sector, but the department does not utilise the material in its policy development and strategic planning. The department lacks a designated unit, budget, and personnel to focus on climate mitigation policies.</i>		

Effectiveness of coordination of policy actions between the various sector-specific agencies is an essential cornerstone to implementing national policy priorities in a resource-efficient manner.

There is no evidence of any framework for the coordination of policy actions between sectoral agencies (DIIS, 2019b). To adequately address industrial emissions, one would expect coordination between the Department of Industry, the Department of the Environment and Energy, the Clean Energy Regulator, the Council of Australian Governments (COAG) Energy Council, the Australian Renewable Energy Agency, and possibly the Clean Energy Finance Corporation. The only coordinating committee listed on the Department’s website is the National Climate Science Advisory Committee for which both the Department of Industry and the Department of the Environment and Energy provide secretariat support.

In terms of the alignment of the line ministry policy actions with national emission mitigation strategy, the need to decarbonise has not been mainstreamed within the Department of Industry. The Department supports the expansion of fossil fuel resources and seeks to attract further investment in these resources, which will lead to further increases in greenhouse gas emissions (DISS, 2018).

The existence of a **knowledge infrastructure capable of supporting strategic planning and policy development** is an important precondition to generate climate-relevant and sector-specific analyses.

The government does not utilise the knowledge infrastructure capable of supporting strategic planning and policy development. There is a degree of sector-specific analysis available from government research institutes or independent think tanks, such as CSIRO’s Low Emissions Technology Roadmap, which addressed direct combustion by industry and fugitive emissions (CSIRO, 2017) but not the full sectoral emissions.

Most sector-specific analyses are produced by non-governmental organisations, such as the think tank Beyond Zero Emissions, which has analysed electrifying industry and decarbonising cement production (BZE, 2017, 2018b). The Australian Alliance for Energy Productivity has produced sectoral roadmaps for mining and manufacturing (Australian Alliance for Energy Productivity, 2016). Industrial sector emissions are also considered as part of broader decarbonisation analysis, such as ClimateWorks Australia’s Pathways to Deep Decarbonisation in 2050 (ClimateWorks Australia, 2014). There is no evidence that any of these analyses mentioned here have been considered by the responsible Department.

While some analyses related to energy productivity have been considered in preparing the department’s broad plans, this has not translated into specific policy action on industrial emissions, and not at all in any plan for decarbonisation. In 2015, the Department developed the National Energy Productivity Plan, which was agreed by the Council of Australian Governments Energy Council (COAG Energy Council, 2016). The plan included estimated energy savings from manufacturing, mining and other industry provided by ClimateWorks Australia (COAG Energy Council, 2015, p. 13). The 2016 and 2017 Annual Reports tracking progress on the plan’s

implementation noted the need for further measures in the industrial sector and that emissions were increasing from mining and LNG extraction (COAG Energy Council, 2016, 2017).

More recently, the Commonwealth Scientific and Industrial Research Organisation was commissioned by the Commonwealth Government to develop a Low Emissions Technology Roadmap to feed into the Government’s 2017 review of climate policy (CSIRO, 2017). Notwithstanding the fact that the report outlined opportunities to reduce fugitive emissions and emissions from direct combustion, the Government and the Department of Industry have not taken further action in these areas. The Government concluded that it was on track to meet its 2030 target and did not need any new policies (Australian Government, 2017). Yet recent government projections find that emissions levels will not meet the 2030 target (DEE, 2018a).

The **adequacy of resources and capacities** is critical for effectively planning and executing sectoral policy decisions.

In terms of adequate resources and capacities, the Department of Industry does not have a designated unit focused on climate mitigation policies and is thus unable to implement mitigation policies and achieve decarbonisation. In addition, the Department does not have a sufficient dedicated budget for implementing mitigation policies. The Department’s 2017-2018 Annual Report does not provide a breakdown of financial resources by policy activity; however, it is unlikely that sufficient funding is available to implement mitigation policies for industrial emissions given the Department limited number of initiatives (DIIS, 2017a).¹

3.3 Process for policy development, implementation and review

Policy processes		
Paris-compatible emissions pathway	Transparency framework	Ratchet-up* mechanism
Australia’s industry sector urgently needs to define a Paris-compatible decarbonisation pathway, as this sector has a significant impact on greenhouse gas emissions. The sector does have a transparency framework in place for the Emissions Reduction Fund and the Safeguard Mechanism; however, the framework suffers from a lack of transparency in a more fundamental sense, namely being able to evaluate the effectiveness of the underlying policy measures. Nor does the transparency framework cover the entirety of the sector.		

* Not rated under sectoral assessments

Similar to the national level assessment, a defined, **Paris-compatible decarbonisation pathway** is essential to align sectoral policy processes with international long-term climate goals.

Australia’s industry sector does not have a defined Paris-compatible decarbonisation pathway, and there is no ambitious long-term reduction target for the sector. The Council of Australian Governments (COAG) has developed a National Energy Productivity Plan, which addresses some industrial emissions, however, this plan only extends to 2030 and does not address decarbonisation. Subsequently, the sector has no identified process to feed long term considerations into near-term policy development and implementation, as there are no long-term policies to 2050.

A transparent and mandatory **enhanced transparency framework** provides accountability to the sector. Australia has a mandatory system of reporting that covers some industrial sector emissions covered by specific policies (Emission Reduction Fund and Safeguard Mechanism).

1 The report does mention a Special Account created in 2009 to support clean energy (renewables and others) with \$36 million. It is unclear what it currently funds and what its relationship is to other clean energy initiatives and funds or the various funds listed on the Department’s website (DIIS, 2017a).

The National Greenhouse and Energy Reporting Act 2007 (NGER Act) establishes reporting obligations for companies with GHG emissions above a certain threshold as well as those large emitters subject to emission limits under what is known as the safeguard mechanism (Australian Government, 2007). The reporting scheme covers the majority Australia's industrial emissions (CCA, 2018b). The Carbon Credits (Carbon Farming Initiative) Act 2011 sets out the modalities for the Emissions Reduction Fund register and crediting mechanism (Australian Government, 2011a). A number of industry related emission reduction activities are eligible under this Fund (DEE, n.d.). The Clean Energy Regulator is the centralized body that coordinates GHG emissions and energy reporting under the Act, emissions limits under the Safeguard Mechanism, the Emissions Reduction Fund, and the use of Australian emission units. Since 2014, arrangements for data sharing have been in place with all state and territory governments (CER, 2015, 2018). The Regulator has also signed memorandum of understanding with various Commonwealth agencies to allow for information sharing. It is the secretariat for both the Commonwealth Information Sharing Network and the State and Territory Information Sharing Network, the latter has met annual since 2014.

The Climate Change Authority is required to conduct reviews of the NGER Act every five years (Australian Government, 2007). The first review was completed in December 2018 and generally found that the system was fit for purpose (CCA, 2018b). The Authority is required to review the Carbon Credits (Carbon Farming Initiative) Act 2011 every three years and completed reviews in 2014 and 2017 (Australian Government, 2011a; CCA, 2014b, 2017). The most recent review has been criticised for failing to consider the effectiveness of the Fund at reducing GHG emissions (Baxter, 2017). The methodology determinations of the Emissions Reduction Fund are reviewed by Emissions Reduction Assurance Committee, an independent committee comprised of members from the private and public sectors established under the Carbon Credits (Carbon Farming Initiative) Act 2011 (DEE, 2019d).

There is room to improve the transparency of the framework. The Clean Energy Regulator is required to publish the annual greenhouse gas emissions data reported to it, compliance with the Safeguard Mechanism, as well as the quarterly reports about Australian carbon credit units (Australian Government, 2007). The Authority is required to publish the results of its reviews (Australian Government, 2007). This information is publicly available on the respective entities' websites in a timely manner, though the government has been slow in responding to the Authority's most recent review of the NGER (Australian Government, 2007; Australian Government, 2019b; CCA, n.d.; CER, 2019b, 2019c, 2019a).

Notwithstanding this accessibility, the framework suffers from a lack of transparency in a more fundamental sense, namely being able to evaluate the effectiveness of the underlying policy measures. For example, companies under the Safeguard Mechanism have been allowed to backdate baselines so that they did not pay penalties on emission increase (The Guardian, 2019). This information was brought to light through a freedom of information request, not through the established reporting mechanisms. Australia did not quantify the effect of the Safeguard Mechanism on emissions in 2020 as part of its most recent reporting to the UNFCCC (UNFCCC, 2018). International expert reviewers have repeatedly recommended that Australia quantify its estimate mitigation effect of its policies or clearly explain why this cannot be done (UNFCCC, 2018). These reviewers have also noted that further information on how such mitigation estimates are derived would be useful. International reviewers were not able to assess the accuracy of the estimated mitigation impact of the ERF due to a lack of information.

3.4 Stakeholder engagement

Stakeholder engagement	
Level and scope	Management of non-state actor interests
<i>The Department of Industry has an inadequate level of stakeholder engagement regarding climate mitigation policies, due to its lack of policies on the topic. The Department has failed to manage non-state actors' interests to the determinant of climate mitigation policy development.</i>	

The **level and scope of stakeholder engagement** are essential to developing low carbon sectoral roadmaps that foster high levels of collaboration throughout all levels of society.

The Department exhibits a poor level and scope of engagement regarding consultation on specific mitigation policies, as none were proposed in 2018. The Department consults on specific policies and regulations as well as broad plans, such as the Resources 2030 Taskforce, but these do not include mitigation policies (DIIS, n.d., 2019a).

The Department did establish a task force to consult on the resources sector, the purpose of which was to recommend reforms that would ‘ensure the sector’s competitiveness and sustainability to 2030 and beyond’, which included potential reforms to improve environmental performance, yet no mention was made of climate change nor GHG emissions (DIIS, n.d.). The task force consulted with subnational resource ministers and industry bodies and held a number of issue-specific roundtables. No individuals from peak environmental or climate change organisations participated in the environment roundtable (DIIS, 2018b).

The Department of Environment and Energy did consult with non-state actors at an early stage of policy development of the Safeguard Mechanisms. For example, there were 80 submissions regarding the design of the mechanism (DEE, 2015). Responses were received from the fossil fuel industry as well as environmental groups, among others. However, the DEE largely referred to the industry views in its final decision regarding the Safeguard Mechanism.

The **management of non-state actor interests** is also of vital importance to increase support for climate policies in the sector and ensure policy continuity.

The Department of Industry has failed to manage non-state actor interests. They have not addressed the need for a just transition, let alone any potential negative externalities of a just transition. The Department has a number of activities focused on economic transition, but these are not geared towards responding to the transition away from high industrial sector emissions.

As demonstrated in the national analysis, the integration of non-state actor interests at risk from climate policy into policy-making has been extensive. The fossil fuel and mining industry sector is renowned for influencing government and receive preferential treatment in tax rebates and exemptions, including the Fuel Tax Credit Scheme subsidies, statutory effective life caps, capital works expenditure to name just a few (Makhijani & Doukas, 2015; Market Forces, 2019).

The recent Adani coal mine project exemplifies how all levels of government go to extraordinary efforts to support industry, including amending legislation, such as removing environmental protections and approvals regardless of environmental issues (ACF, 2017; Ogge & Campbell, 2018). There is no evidence the Department of Industry integrates non-state actor interests who profit from climate policy into policy-making, especially evident in the lack of climate policy by the department.

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The pilot phase of the Climate Governance Series is made possible due to generous support from the ClimateWorks Foundation.



The Climate Action Tracker (CAT) is an independent scientific analysis produced by three research organisations tracking climate action since 2009. We track progress towards the globally agreed aim of holding warming well below 2°C, and pursuing efforts to limit warming to 1.5°C.

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NewClimate Institute is a non-profit institute established in 2014. NewClimate Institute supports research and implementation of action against climate change around the globe, covering the topics international climate negotiations, tracking climate action, climate and development, climate finance and carbon market mechanisms. NewClimate Institute aims at connecting up-to-date research with the real world decision making processes.

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Climate Analytics is a non-profit climate science and policy institute based in Berlin, Germany with offices in New York, USA, Lomé, Togo and Perth, Australia, which brings together interdisciplinary expertise in the scientific and policy aspects of climate change. Climate Analytics aims to synthesise and advance scientific knowledge in the area of climate, and by linking scientific and policy analysis provide state-of-the-art solutions to global and national climate change policy challenges.

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