

PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

**Advisory report on the Climate
Change (National Framework for
Adaptation and Mitigation) Bill
2020 and Climate Change
(National Framework for
Adaptation and Mitigation)
(Consequential and Transitional
Provisions) Bill 2020**

House of Representatives
Standing Committee on the Environment and Energy

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CANBERRA

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List of Recommendations

Recommendation 1

2.154 The Committee recommends that the Bills not be passed.

Abbreviations

ACCUs	Australian carbon credit units
ACF	Australian Conservation Foundation
ACTU	Australian Council of Trade Unions
ACS	Australian Climate Service
AiG	Australian Industry Group
ANREU	<i>Australian National Registry of Emissions Units Act 2011</i>
ANUCCI	Australian National University Climate Change Institute
ATSE	Australian Academy of Technology and Engineering
CCA	Climate Change Authority
CCC	Climate Change Commission
CFI Act	<i>Carbon Credits (Carbon Farming Initiative) Act 2011</i>
COP 26	2021 United Nations Climate Change Conference (26 th Conference of the Parties to the UNFCCC)
COSBOA	Council of Small Business Organisations Australia
DAWE	Department of Agriculture, Water and the Environment
DISER	Department of Industry, Science, Energy and Resources
ERF	Emissions Reduction Fund
EMM	Energy Ministers' Meeting
ENCRC	Energy National Cabinet Reform Committee
IEEFA	Institute for Energy Economics and Financial Analysis
IPCC	Intergovernmental Panel on Climate Change

IRENA	International Renewable Energy Agency
NDC	Nationally determined contribution
NGER Act	<i>National Greenhouse and Energy Reporting Act 2007</i>
PGPA Act	<i>Public Governance Performance and Accountability Act 2013</i>
PIA	Planning Institute of Australia
PJCCAM	Parliamentary Joint Committee on Climate Adaptation and Mitigation
RIAA	Responsible Investment Association Australasia
UK CCC	United Kingdom Climate Change Committee
UNFCCC	United Nations Framework Convention on Climate Change
WACRA	Western Adelaide Coastal Residents' Association

Foreword

Climate change is one of the most challenging and complex areas of public policy across the world, including in Australia, where it has been a hotly contested debate for nearly 20 years.

What is often left unrecognised amidst the growing ambition to decarbonise Australia's economy is our strong track record in emissions reduction and also emissions accounting and reporting. The evidence that came before the Committee bore this out.

Australia is not only meeting its international obligations but is on track to exceed its 2030 emissions reduction target, and work is being done to determine a longer-term emissions reduction pathway in line with the Government's net zero objective.

Australia's reporting and accountability framework is world-leading, providing quarterly reporting on emissions, annual forecasts, and an annual low emissions technology statement.

However, no area of public policy is without room for constant improvement, and thus the Climate Change Bills proposed by Ms Zali Steggall OAM MP came as a welcome contribution to the debate. The proposed Bills, and related submissions, were diligently considered by the Committee.

As presented in this inquiry report, the Committee commended positive aspects of the Bills, including requirements to consult with experts and the community in framing future climate policies; ensuring fair employment transition for those industries and workers impacted by change; making more use of the Climate Change Authority as an expert adviser to Government; and working towards even greater clarity of future emission reduction plans in advance of the United Nations (UN) COP 26 conference in December 2021.

The Committee's report also identified deficiencies in the proposed Bills, including:

- 1 The proposed Climate Change Commission (CCC) would steer formal policy decisions away from the Parliament and the Executive to an unelected body. Our system of liberal democracy is well recognised as one of the most mature and well-functioning in the world, and it is imperative that its integrity be maintained. No matter how difficult it is to meet the substantive and political challenges of climate change, we parliamentarians cannot shirk our responsibility to determine the national response. What's more, the Australian people should not be stripped of their right to choose between alternative policy positions at the ballot box. Their voice, especially on an issue as important as climate change, must be protected.
- 2 The proposed CCC would also replicate work already undertaken within the federal bureaucracy, including by the Climate Change Authority, and the Bills would create additional and potentially inappropriate reporting burdens on other Commonwealth agencies.
- 3 The proposed requirement to reach net zero emissions by 2050 by legislative force without recognising the importance of addressing the question of 'how' it is to be achieved, would give rise to a series of risks including adverse impacts on the economy, specific sectors and jobs. It should also be noted that the Australian Government has already committed to achieving net zero as soon as possible, and preferably by 2050.

Climate change is, of course, a global problem that can only be solved with a global solution. Australia has been making its contribution, and it should continue to do so.

However, in a liberal democracy like Australia, it would be unrealistic and naïve to expect a national consensus on how to meet the challenge of climate change. At times, this lack of consensus can be frustrating for everyone involved, including government and industry – for example, despite great strides being made and targets being exceeded, there remains a chorus of critics talking down achievements and demanding more. Similarly, climate change advocates, and some representatives of business and community can be frustrated – for example, despite putting forward proposals in pursuit of greater emissions reductions, their ideas and arguments are often not taken up.

No matter how challenging it is to tackle the problem of climate change, we should take heart that Australia has the best system of government in the world to ensure the issue is openly debated and to allow solutions to be advanced and critiqued.

I am grateful to my parliamentary colleagues from the Liberal, National and Labor Parties, and the cross bench, who actively participated in, and brought a critical lens to, this inquiry; and also to the ever capable Committee Secretariat.

Ted O'Brien MP

Chair

Members

Chair

Mr Ted O'Brien MP

Fairfax, QLD

Deputy Chair

Mr Josh Wilson MP

Fremantle, WA

Members

Mrs Bridget Archer MP

Bass, TAS

Mr Josh Burns MP

Macnamara, VIC

Hon Dr David Gillespie MP

Lyne, NSW

Ms Zali Steggall OAM MP

Warringah, NSW

Mr Rick Wilson MP

O'Connor, WA

Mr Trent Zimmerman MP

North Sydney, NSW

1. Introduction and background

Referral of the Bills

- 1.1 On 9 November 2020, Ms Zali Steggall MP introduced the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 (the substantive Bill) and the Climate Change (National Framework for Adaptation and Mitigation) (Consequential and Transitional Provisions) Bill 2020 (the consequential Bill) in the House of Representatives.
- 1.2 On 11 November 2020, the House of Representatives Selection Committee referred both Bills to the House of Representatives Standing Committee on the Environment and Energy for inquiry and report.
- 1.3 On the same day, the Committee resolved to open the inquiry for public submissions. The Committee published details of the inquiry on its website, and issued a media release announcing the inquiry.

Conduct of the inquiry

- 1.4 The Committee's inquiry received 2047 written submissions as listed in Appendix A. Three exhibits were also received and are listed in Appendix C.
- 1.5 The Committee's inquiry was the subject of two email campaigns originating from GetUp! and the Australian Conservation Foundation (ACF). In all, the Committee received 4531 emails as a result of these campaigns.
- 1.6 The Committee considered how best to treat these contributions, observing that many expressed general concerns about climate change and the need for action, but few directly addressed the content of the Bills. The Committee

decided to accept and publish a sample from each campaign under a single submission number.¹

- 1.7 Three public hearings were held on 29 January, 1 February, and 24 March 2021 during which 49 witnesses gave evidence in person or via video conference or teleconference. Public hearing details are listed in Appendix B.
- 1.8 The Committee is grateful to all the individuals and organisations who contributed to the inquiry.

Purpose and overview of the Bills

- 1.9 The Bills recognise that climate change comes ‘with immediate and deepening risks to our natural environment, economy and way of life’,² and set out ‘a clear framework for development of national plans as our climate changes, and for progress to be rigorously monitored and reported’.³ According to the Explanatory Memorandum for the substantive Bill, the framework set out in the Bill will ensure that Australia has:
 - a positive response to the challenges of climate change that is effective, fiscally responsible and fair, and part of an effective international effort;
 - national plans for adapting to a changing climate, so that the different parts of our continent and economy can respond positively to changing physical conditions and international policies;
 - national plans for reducing greenhouse gas emissions, to meet emissions reduction targets that align with scientific imperatives and state government and international commitments, which may change over time; and
 - transparent monitoring, reporting and accountability for national adaptation planning and emission reduction actions, with an independent Climate Change Commission to advise Government and Parliament.⁴

¹ See: Sample of the Get Up! campaign submission 2,618 received, *Submission 2030* and Sample of the Australian Conservation Foundation via DoGooder submission 1,913 received, *Submission 2031*.

² Explanatory Memorandum, Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, p. 2.

³ Explanatory Memorandum, Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, p. 2.

⁴ Explanatory Memorandum, Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, p. 2.

1.10 The specific objects of the Bills are to establish a national climate change adaptation and mitigation framework and a Climate Change Commission (CCC). The proposed framework contains measures to establish and implement:

- a national climate change risk assessment;
- a national adaptation plan;
- a target to reach net zero emissions by 31 December 2050;
- a mechanism to set emissions budgets and implement emissions reduction plans;
- an independent CCC; and
- a Parliamentary Joint Committee on Climate Adaptation and Mitigation.

Key provisions of the Bills

Climate Change (National Framework for Adaptation and Mitigation) Bill 2020

Part 1: Introduction

Division 1: Preliminary

1.11 Clause 3 of the Bill specifies the objects of the Bill and acknowledges that climate change is a serious challenge to Australia's prosperity and security, requiring a planned transition towards a net zero emissions economy and implementation of adaptation measures to protect livelihoods, business and the environment.⁵

1.12 The core object of the Bill is to establish a framework to address the challenge of climate change through:

- (a) setting a target of achieving net zero emissions by a target day (which is 31 December 2050 unless the Minister determines an earlier day because of a significant change in relevant factors);
- (b) providing for a system of emissions budgeting;
- (c) assessing the risk of, and preparing for, climate change impacts;
- (d) assisting the national economy to adapt to climate change;

⁵ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclause 3(1)(a).

(e) establishing an independent body to ensure accountable and transparent plans to manage the climate challenge;

(f) aligning government and the private sector in the assessment of climate risks;

(g) providing policy certainty to assist the private sector in decision making;

(h) assisting and guiding the taking of action by government and the community to reduce emissions in order to meet Australia's obligations under the following:

(i) the Climate Change Convention;

(ii) the Kyoto protocol;

(iii) the Paris Agreement;

(iv) any other international agreement relating to climate change.⁶

1.13 Subclause 3(1)(b) in particular states:

that decisions under this Act should be consistent with limiting the increase in global warming to well below 2°C and pursuing efforts to limit it to 1.5°C above pre-industrial levels.

1.14 Clause 5 of the Bill defines key terminology in the Bills.

Division 2: Guiding principles

1.15 Clauses 9 through 16 list the guiding principles that decision makers must have regard to in relation to the performance of functions or duties, or exercise of powers under the Bill. These include:

- Clause 10, effective, efficient and equitable action;
- Clause 11, informed decision making, including:
 - a. the best available academic peer reviewed research and public reports on the contributing causes and potential impacts of climate change [sources for such research are set out in subclause 11(2)];
 - b. any Technology Investment Roadmap;
 - c. the most recent low emissions technology statement;⁷

⁶ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclause 3(2).

⁷ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclause 11(1).

-
- Clause 12, risk-based, integrated decision making which requires:
 - a. assessing the competing long-term, medium-term and short-term environmental, economic and community consequences relating to climate change; and
 - d. explicitly addressing the relevant climate change risks; and
 - e. applying the precautionary principle to prevent likely serious or irreversible loss;
 - Clause 13, fiscal responsibility, where consideration must be given to:
 - a. the direct costs of climate change;
 - b. their impact on weakening asset values, corporate profitability, national productivity and public finances;
 - c. these costs are highly likely to be substantially greater than the costs of mitigating climate change;
 - d. the costs of early action to mitigate climate change are highly likely to be substantially lower than the costs of later action; and
 - e. the growing burden of debt upon future generations which, in failing to act early, will grow significantly;
 - Clause 14, fair employment transition which requires:
 - a. applying the principle of community engagement to any affected communities;
 - b. pursuing sustainable economic, social and ecological solutions for those communities;
 - c. prioritising employment transition opportunities to new or existing industries within those communities;
 - d. offering appropriate education and training for those opportunities;
 - e. allowing reasonable time for implementation of transition solutions for those communities;
 - f. for those unable to pursue transition opportunities—without undermining the incentives for transition, providing a mechanism for compensated redundancy or voluntary redeployment of workers to other sites where the workers wish to continue working;
 - Clause 15, community engagement and self-determination, which requires:

- a. providing appropriate information to members of affected communities, especially vulnerable or marginalised communities; and
- b. enabling those communities to be involved in its determination or implementation, with adequate public consultation;
- Clause 16, national and international cooperation, which requires regard to the pursuit of coherent, clear, effective policy frameworks across the Commonwealth, States and Territories; and ensuring the fulfilment of Australia's international obligations. It also requires that Australia demonstrate international leadership by reducing emissions through technology and considering opportunities as both a potential generator of renewable energy and greenhouse gas sink.

Part 2: National climate change risk assessment

- 1.16 Clause 17 requires the CCC to prepare and give to the Minister national climate change risk assessments, which identify the full risks of climate change to Australia. The initial assessment is to be prepared within one year of the commencement of the proposed Act and be published on the CCC's website as soon as practicable after its completion. Subsequent assessments are required to be undertaken at least every five years. Evidence commissioned to support the risk assessment must also be published on the CCC's website.
- 1.17 Clause 18 outlines the factors that that a national climate change risk assessment must take into account including:
- (a) economic, social, health, water and food security, environmental, ecological, and cultural effects of climate change, including effects on Indigenous Australians;
 - (b) the distribution of the effects of climate change across society, taking particular account of vulnerable groups or sectors;
 - (c) Australia's relevant obligations under international agreements;
 - (d) how the assessment aligns or links with any other relevant national risk assessments;
 - (e) current effects and likely future effects of climate change;

- (f) the best available academic peer reviewed research and public reports including that of the Bureau of Meteorology, and Commonwealth Scientific and Industrial Research Organisation;
- (g) economic, financial and fiscal advice from financial regulators, including the Australian Prudential Regulation Authority, the Australian Securities and Investments Commission and the Reserve Bank of Australia;
- (h) opportunities arising for Australia's economy, society, regions and environment as a result of the effects of climate change;
- (i) existing State and Territory strategies, policies and proposals in relation to climate change;
- (j) any other relevant factors.

Part 3: National adaptation plan

- 1.18 Clause 19 requires that the Minister prepare a national adaptation plan in response to each national climate change risk assessment. The plan should be prepared no later than one year after the relevant risk assessment is made publicly available. A national adaptation plan must set out the following:
- (a) Australia's objectives to protect against and mitigate risks as identified in the national climate change risk assessment;
 - (b) the strategies, policies, and proposals for meeting those objectives;
 - (c) the time frames for implementing the strategies, policies, and proposals;
 - (d) how the matters in paragraphs (a) to (c) address the most significant risks identified in the most recent national climate change risk assessment;
 - (e) the measures and indicators that will enable regular monitoring of and reporting on the implementation of the strategies, policies, and proposals;
 - (f) how the strategies, policies and proposals will be funded.⁸
- 1.19 Clause 19 also provides that the Minister must consider the factors listed in section 18 and any relevant advice or reports from the CCC, including the need to undertake public consultation.⁹

⁸ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclauses 19(1) to (3).

- 1.20 Clause 20 requires the national adaptation plan to be tabled in each House of Parliament within 15 sitting days after its preparation, and that it must also be published on the CCC's website as soon as practicable thereafter.
- 1.21 Clause 21 provides that the Commission must provide the Minister with an annual progress report that evaluates the implementation of the adaptation plan and its effectiveness. The Minister must prepare a statement in response to the progress report to be tabled in Parliament within 15 sitting days of its completion and published on the CCC's website as soon as practicable thereafter.

Part 4: Emissions reduction target

- 1.22 Clause 22 sets a target of net zero emissions for Australia to be reached by 31 December 2050 or earlier if determined by the Minister.
- 1.23 Clauses 23 and 24 allow for the target to be reviewed and for a recommendation to amend the target date to be made and implemented. A change to the target can only be recommended in certain circumstances, set out in Clause 24.
- 1.24 Clause 25 provides that the CCC must report to the Minister on the effect of Australia's fossil fuel export emissions in meeting the objects of the proposed Act. It sets out details for that reporting which must be made public.

Part 5: Setting emissions budgets etc.

Division 1: Emissions budgets

- 1.25 Clause 26 requires that the Minister set an emissions budget for a prescribed period. Importantly, the Minister must ensure that the net emissions for that period do not exceed the emissions budget. The Minister must seek advice from the CCC on the proposed budget, and that advice must be published along with the Minister's response to that advice.
- 1.26 Clause 27 specifies the matters relevant to setting an emissions budget upon which the CCC must provide advice to the Minister:
- (a) the amount of emissions that will be permitted in each emissions budget period;

⁹ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclauses 19(5) and (6).

(b) how to measure progress towards meeting emissions budgets and the Target;

(c) the means by which emissions budgets and the Target may be met (including pricing and policy methods);

(d) the proportion of an emissions budget to be met through reductions of emissions, and removal of greenhouse gases, in Australia;

(e) the amount by which emissions of each greenhouse gas should be reduced to meet emissions budgets and the Target.¹⁰

1.27 Clause 27 also requires that in providing such advice, the CCC must have regard to the Bill's guiding principles and matters set out in clause 28. Prior to providing its advice, the CCC must also make its advice public, and invite submissions on the advice.¹¹

1.28 Clause 28 outlines the matters relevant to emissions budgets that must be considered by the CCC in preparing advice for the Minister, and the Minister when setting an emissions budget, including:

- key opportunities and risks for reduction of emissions, and removal of greenhouse gasses;
- emissions and projected emissions for the budget period;
- scientific advice and technological uptake and developments;
- emissions budgets that maintain energy security, reliability and affordability;
- public consultation on the emissions budget;
- impacts of actions to achieve the emissions budget including its ability to adapt to climate change across states and territories, between generations, on regional, rural and remote Australia, between employers and workers, on economic circumstances, and land use; and
- responses by all parties to the Paris Agreement, Climate Change Convention or other international agreements.

1.29 Clause 29 requires that at the end of each emissions budget period, the CCC must report on and evaluate the progress towards the emissions budget during the period. The Minister must prepare a statement in response that is

¹⁰ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclause 27(1).

¹¹ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclauses 27(2) and (3).

to be tabled in Parliament within 15 sitting days of its completion and published on the CCC's website as soon as practicable thereafter.

Division 2: emissions reduction plans

- 1.30 Clause 30 provides that the Minister must prepare an emissions reduction plan setting out the policies and strategies for meeting each emissions budget. The Clause specifies the matters to be included in the plan, the consultations that must be undertaken in its formulation and the timing for the tabling and publication of the plan.
- 1.31 Under the Clause, an emissions reduction plan prepared by the Minister must include:
- (a) sector-specific policies to reduce emissions and increase removals of greenhouse gases; and
 - (b) a multi-sector strategy to meet emissions budgets and improve the ability of those sectors to adapt to the effects of climate change; and
 - (c) a strategy to mitigate the impacts that reducing emissions and increasing removals of greenhouse gases will have on employees and employers, rural and regional Australia, Indigenous Australians and wider communities, including the funding for any mitigation action; and
 - (d) policies, strategies and proposals for the deployment and development of low emissions technologies; and
 - (e) any other policies or strategies that the Minister considers necessary.¹²
- 1.32 Clause 30 also requires the Minister to obtain and consider the advice of State and Territory ministers with responsibility for climate change or emissions reduction; and the CCC. The Minister must cause an emissions reduction plan to be tabled in Parliament within 15 sitting days of its completion and published on the CCC's website as soon as practicable thereafter.¹³
- 1.33 Clause 31 requires that the CCC is to provide the Minister with advice on the direction of the policy required in the emissions reduction plan for an emissions budget period, no later than 24 months before the beginning of the relevant period.

¹² Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclause 30(3).

¹³ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclauses 30(4) and (5).

Part 6: Climate Change Commission

- 1.34 Clauses 32 to 34 provide for the establishment, functions and powers of the CCC.
- 1.35 Clause 32 establishes the CCC as a listed entity and outlines the accountability of the CEO.
- 1.36 Clause 33 establishes the functions of the CCC as:
- (a) to advise the Minister to enable the preparation of emissions budgets;
 - (b) to advise on any necessary amendments to emissions budgets;
 - (c) to advise the Minister to enable the preparation of emissions reduction plans;
 - (d) to monitor and report on progress towards meeting emissions budgets and the Target;
 - (e) to prepare national climate change risk assessments and low emissions technology statements;
 - (f) to prepare reports on the implementation of national adaptation plans;
 - (g) to conduct reviews under [the Carbon Credits (Carbon Farming Initiative) Act 2011; the National Greenhouse and Energy Reporting Act 2007; and this Act].¹⁴
- 1.37 Clause 34 provides that the CCC has power to do all things necessary or convenient to be done for or in connection with the performance of its functions.
- 1.38 Clause 35 provides that the CCC is not subject to direction by, or on behalf of, the Commonwealth Government in relation to its functions or powers.

Division 2: Membership of the Commission etc.

- 1.39 Clause 36 provides for the membership of the CCC, which consists of the Chair, Australia's Chief Scientist and between five and seven other members.
- 1.40 Clause 37 provides that each member of the CCC (except the Chief Scientist) is to be appointed by the Minister by written instrument. The clause also provides that in making appointments to the CCC, the Minister must ensure

¹⁴ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 33.

that its membership consists of persons with experience or knowledge in business competitiveness; climate change policy; climate science; economic analysis and forecasting; energy production and supply; financial investment; regional development; industrial relations; agriculture; and technology development and diffusion.¹⁵

1.41 Clause 37 further requires that:

(a) a minimum of two members of the Commission must hold expertise in climate science and climate policy; and

(b) a minimum of one member of the Commission must be an Indigenous Australian.¹⁶

1.42 Clause 38 requires that appointments to the CCC be must be referred by the Minister for approval by a Parliamentary Joint Committee on Climate Adaptation and Mitigation.¹⁷ The Committee is required to report its decision to both Houses of Parliament.¹⁸

1.43 Clause 39 provides that appointees to the CCC, other than the Chief Scientist, may be for a period not exceeding 10 years.

1.44 Clause 40 outlines the provisions for Acting Members of the CCC.

Division 3: Terms and conditions for members of the Commission

1.45 Clauses 41 to 47 outline the terms and conditions for members of the CCC.

Division 4: Parliamentary Joint Committee on Climate Adaptation and Mitigation

1.46 Clauses 48 to 50 establish a Parliamentary Joint Committee on Climate Adaptation and Mitigation, which is to be appointed according to the practices of the Parliament and consist of 11 members. These clauses also establish the powers, proceedings and functions of the Committee.

1.47 The proposed functions of the Committee are to:

- approve the appointment of CCC members;
- review the administration and expenditure of the CCC; and

¹⁵ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclauses 37(1) and (2).

¹⁶ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclause 37(5).

¹⁷ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclause 38(1).

¹⁸ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclause 38(9).

- review any matter in relation to the CCC referred by the Minister or either House of the Parliament.¹⁹

Division 5: Decision making of the Commission

- 1.48 Clauses 51 to 56 outline the decision-making processes to be used by the proposed CCC including the convening, quorum, voting, conduct and minuting of CCC meetings.

Division 6: Chief Executive Officer of the Commission

- 1.49 Clauses 57 to 66 outline the role, appointment, and terms and conditions of the Chief Executive Officer of the CCC.

Division 7: Staff of the Commission

- 1.50 Clauses 67 to 69 outline the terms upon which staff of the CCC, persons assisting the CCC and consultants to the CCC are to be engaged.

Part 7: Miscellaneous

- 1.51 Clauses 70 to 75 establish a range of miscellaneous provisions.

- 1.52 Clause 70 sets out matters that must be included in the annual report to be prepared by the CCC and provided to the Minister. One of these matters is a low emissions technology statement that should include:

- (i) a summary of progress towards the Commonwealth's defined technology goals;
- (ii) an update of global technological developments;
- (iii) a review of the Clean Energy Finance Corporation and Australian Renewable Energy Agency's investment portfolios;
- (iv) any recommendations to improve the performance of those agencies in assisting efforts to deploy and develop low emissions technologies.²⁰

- 1.53 The Bill also requires that:

- The Minister must respond within three months of receiving the annual report. The response must be tabled in Parliament and published on the CCC's website.²¹

¹⁹ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 50.

²⁰ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, subclause 70(d).

²¹ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 71.

- The Minister or CCC may request information from a constitutional corporation as to its governance and management of the risks and opportunities arising from climate change. The information must be provided by the requesting party to either the Minister or the CCC and penalties apply for non-compliance.²²

Climate Change (National Framework for Adaptation and Mitigation (Consequential and Transitional Provisions) Bill 2020

1.54 The consequential Bill makes amendments to Commonwealth laws to support the operation of the substantive Bill.²³

Schedule 1: repeals and amendments

1.55 Part 1 repeals the *Climate Change Authority Act 2011*.

1.56 Part 2, Items 2 to 20 make consequential amendments, namely to omit 'Climate Change Authority' and substitute 'Climate Change Commission' in relevant sections of the:

- *Australian Security and Investments Commission Act 2001*;
- *Carbon Credits (Carbon Farming Initiative) Act 2011*;
- *Clean Energy Regulator Act 2011*;
- *Competition and Consumer Act 2010*; and
- *National Greenhouse and Energy Reporting Act 2007*.

1.57 Part 3, Items 21 and 22 require amendment of the *Public Governance and Accountability Act 2013* to insert a duty upon the accountable authority of a Commonwealth entity to consider climate change impacts when performing functions or duties, or exercising powers. Potential risks from, and impacts of, climate change may include:

- biophysical impacts;
- long and short term economic, environmental, health and social impacts;
- beneficial and detrimental impacts;
- direct and indirect impacts; and
- cumulative impacts.

²² Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 73.

²³ Explanatory Memorandum, Climate Change (National Framework for Adaptation and Mitigation)(Consequential and Transitional Provisions) Bill 2020, p. 2.

- 1.58 A Commonwealth entity's annual report must include information about the climate risks relevant to the performance of its functions, duties and exercise of power.²⁴

Schedule 2: transitional provisions

- 1.59 Schedule 2 makes transitional and administrative provisions including:
- definitions and reviews of relevant legislation;
 - transition of the Climate Change Authority's CEO, staff and consultants;
 - the Authority's final annual report, transfer of records and documents;
 - termination of Authority appointments; and
 - the Minister's power to make rules required or permitted by the Bills.²⁵

Existing frameworks

- 1.60 The Bills propose a change in how Australia mitigates and adapts to climate change, seeking to amend the current framework. This section broadly outlines Australia's international climate change obligations and commitments, and Australia's current climate change frameworks including the key responsibilities held by Australian Government agencies and existing domestic climate change architecture. Also outlined is the climate change framework of the United Kingdom upon which aspects of the Bills are modelled.
- 1.61 Australia's climate change framework is based upon the international commitments made as part of the global effort to combat climate change. Domestic architecture at a Commonwealth level has been developed to give effect to those commitments. The Commonwealth also seeks to work with Australia's states and territories to fulfil Australia's international commitments.

International obligations and commitments

- 1.62 Australia is a Party to various international climate agreements including the Vienna Convention for the Protection of the Ozone Layer and its

²⁴ Climate Change (National Framework for Adaptation and Mitigation)(Consequential and Transitional Provisions) Bill 2020, Schedule 1, Item 19A(3).

²⁵ Climate Change (National Framework for Adaptation and Mitigation)(Consequential and Transitional Provisions) Bill 2020, Schedule 2, Items 1 to 10.

Montreal Protocol,²⁶ the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol,²⁷ and the Paris Agreement.²⁸

- 1.63 The UNFCCC came into force in 2005 under the terms of the Kyoto Protocol, which committed industrialised countries to limit and reduce greenhouse gas emissions in accordance with agreed individual targets.
- 1.64 The Paris Agreement, which built upon the UNFCCC's objectives, entered into force in 2016. The Paris Agreement is a legally binding international treaty that aims to limit global warming, by the middle of this century, to well below 2 and preferably to 1.5 degrees Celsius, compared to pre-industrial levels.²⁹ It was adopted by 196 Parties³⁰ and requires all Parties to transparently report national emissions, progress towards targets, information on mitigation policies and adaptation actions and support provided to developing countries. Parties are also required to undergo international audit and peer review according to reporting and review rules.³¹ Australia became a Party to the Paris Agreement on 9 December 2016.
- 1.65 According to the Department of Agriculture, Water and the Environment (DAWE):

Under the Paris Agreement, Australia is expected, 'as appropriate,' to:

- engage in adaptation planning and implementation through national adaptation plans, vulnerability assessments, monitoring and evaluation (Article 7).

²⁶ Montreal Protocol on Substances that Deplete the Ozone Layer, [1989] ATS 18 (entered into force generally 1 January 1989, entered into force for Australia 1 August 1989).

²⁷ Kyoto Protocol to the United Nations Framework Convention on Climate Change, [2008] ATS 2 (entered into force generally 16 February 2005, entered into force for Australia 11 March 2008).

²⁸ Paris Agreement to the United Nations Framework Convention on Climate Change, [2016] ATS 24 (entered into force generally 4 November 2016, entered into force for Australia 9 December 2016).

²⁹ United Nations Framework Convention on Climate Change, 'What is the Paris Agreement': <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>, viewed 9 April 2021.

³⁰ United Nations Framework Convention on Climate Change, 'The Paris Agreement': <https://cop23.unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>, viewed 26 March 2021.

³¹ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 1.

- build the resilience of socioeconomic and ecological systems, including through economic diversification and sustainable management of natural resources (Article 7).
- communicate plans, actions, and support needs through an Adaptation Communication (Article 7).
- contribute to the global stocktake to assess progress towards achieving commitments under the Paris Agreement and its long-term goals (Article 14).³²

- 1.66 Under its UNFCCC obligations, Australia submits a National Communication on Climate Change report (every four years) and biennial reports (every two years) to the UNFCCC Secretariat which include details on Australia's climate change policies and measures. These reports are an important aspect of the transparency system under the UNFCCC and undergo technical international review. Australia's most recent National Communication on Climate Change was submitted in December 2017 and the most recent biennial report in December 2019.³³
- 1.67 Australia also prepares national inventory reports annually and produces a range of domestic publications including a quarterly inventory report and annual emissions projections.
- 1.68 Australia has emissions reduction targets for the period to 2020 under the Kyoto Protocol and UNFCCC and for the period to 2030 under the Paris Agreement (the Agreement). The Agreement requires all Parties to communicate a nationally determined contribution (NDC), including an emissions reduction target, every five years (the first to apply from 2020), and to increase the ambition of each successive NDC.³⁴ Australia's current NDC is a commitment to a 26% to 28% reduction in emissions below 2005 levels by 2030.³⁵
- 1.69 Australia meets or exceeds its emissions reduction requirements, as agreed through international treaties. For example, Australia has exceeded its Kyoto Protocol targets and is on track to meet and exceed its 2030 Paris target.
- 1.70 The next major opportunity for Australia to present its long term emissions reduction strategy is at the 26th UNFCCC climate summit in Glasgow in

³² Department of Agriculture, Water and the Environment, *Submission 2010*, pp. 1-2.

³³ Department of Agriculture, Water and the Environment, *Submission 2010*, p. 2.

³⁴ Department of Industry, Science and Resources, *Submission 588*, p. 2.

³⁵ Department of Industry, Science and Resources, *Submission 588*, p. 2.

December 2021 (known as COP 26),³⁶ noting that nations are encouraged but not required to present long term strategies at COP 26.

National emissions reduction and climate change adaptation frameworks

- 1.71 Three Australian Government agencies share responsibility for effecting and assessing the Commonwealth's commitments at a domestic level – the Department of Industry, Science, Energy and Resources (DISER); DAWE; and the Climate Change Authority (CCA).
- 1.72 DISER develops and administers the Australian Government's domestic actions to reduce Australia's greenhouse gas emissions and meet Australia's obligations under the Paris Agreement. This includes:
- developing and coordinating domestic climate change policy;
 - administering climate change programs to help reduce emissions;
 - developing and coordinating renewable energy policy and regulation;
 - engaging with stakeholder groups and the community on climate priorities;
 - supporting business and industry to innovate and adopt smarter practices and technologies; and
 - helping the land and agriculture sector reduce greenhouse gas emissions and adapt to the changing environment.³⁷
- 1.73 DAWE administers Australia's climate change adaptation strategy and climate science activities.³⁸ In particular, Australia's overarching climate adaptation framework is the National Climate Resilience and Adaptation Strategy which was released at the UNFCCC summit in 2015.³⁹ The Strategy:
- brings together key decisions made on climate adaptation;
 - provides a set of principles to guide effective adaptation and resilience building; and

³⁶ Department of Industry, Science and Resources, 'Australia's Climate Change Strategies', <https://www.industry.gov.au/policies-and-initiatives/australias-climate-change-strategies>, viewed 26 March 2021.

³⁷ Department of Industry, Science and Resources, 'Australia's Climate Change Strategies', <https://www.industry.gov.au/policies-and-initiatives/australias-climate-change-strategies>, viewed 26 March 2021.

³⁸ Department of Agriculture, Water and the Environment, 'Climate Change' See: <http://www.environment.gov.au/climate-change>, viewed 26 March 2021.

³⁹ Department of Agriculture, Water and the Environment, *Submission 2010*, p. 2.

- highlights decisions made between the Australian and state and territory governments on adaptation, including government roles and responsibilities for adaptation and the national priority areas for action.⁴⁰

1.74 In early 2021, the Australian Government announced that it would develop a new strategy to be unveiled prior to COP 26 which will ‘provide a roadmap towards a more climate resilient Australia’.⁴¹

1.75 The CCA provides independent, expert advice on climate change policy, undertaking reviews and making recommendations on Australian Government programs which currently include the Emissions Reduction Fund (which is ‘one of [the] largest and most robust offset schemes in the world’⁴²), the National Greenhouse and Energy Reporting System, and other matters as requested by the Minister responsible for climate change or the Australian Parliament.⁴³

1.76 Since its establishment in 2012, the Authority has published a total of 23 reviews and reports. Most recently, in 2020 the CCA issued a report exploring how Australia can reduce greenhouse gas emissions to meet both its Paris Agreement target and subsequent, more ambitious targets, prospering in a world transitioning to net zero emissions.⁴⁴ The CCA’s upcoming work program will include statutory reviews of the National Greenhouse and Energy Reporting legislation and Emissions Reduction Fund (Carbon Credits) legislation. In 2020-21, the CCA’s future work program will also include:

... research examining how Australia can position itself to take advantage of a world transitioning to net zero emissions. The authority intends this work to be complementary with the Government’s Technology Investment Roadmap and Low Emissions Technology Statement, and the development of the Government’s Long-Term Emissions Reduction Strategy in the lead-up to the UNFCCC’s 26th Conference of the Parties (COP) ...⁴⁵

⁴⁰ Department of Agriculture, Water and the Environment, *Submission 2010*, p. 2.

⁴¹ Department of Agriculture, Water and the Environment, *Submission 2010*, p. 3.

⁴² Clean Energy Regulator, ‘Developing an Australian carbon exchange’, *Media Release*, 28 April 2021.

⁴³ Climate Change Authority, ‘About the Authority’, <https://www.climatechangeauthority.gov.au/about-cca>, viewed 26 March 2021.

⁴⁴ Climate Change Authority, *Submission 593*, p. 2.

⁴⁵ Climate Change Authority, *Submission 593*, p. 2.

- 1.77 The passage of the Climate Bills 2020 would have the effect of abolishing the CCA, through the repeal of the *Climate Change Authority Act 2011*, and replacing it with the new CCC.⁴⁶

Domestic emissions reduction architecture

- 1.78 Australia regulates the monitoring, accounting and reporting of national emissions reduction. Australia's system is recognised as world leading: according to DISER, 'Australia's system of national greenhouse accounts has been designed to be one of the most comprehensive, transparent and timely emissions reporting systems in the world',⁴⁷ and its reporting is 'definitely well above or more accurate in the latest information being reported...across the board, it is world class'.⁴⁸
- 1.79 The core legislative elements of this architecture include:
- *National Greenhouse and Energy Reporting Act 2007* (NGER) – establishes the National Greenhouse and Energy Reporting Scheme, which provides the framework for reporting and disseminating company information about greenhouse gas emissions, energy production, energy consumption and other information to support the Government's international treaty obligations and domestic climate program implementation. The Act also establishes the Safeguard Mechanism, which applies emission limits to Australia's highest emitting facilities.⁴⁹
 - *Australian National Registry of Emissions Units Act 2011* (ANREU) – establishes the secure electronic system used to track the location and ownership of Australian carbon credit units issued under the Emissions Reduction Fund (ERF), as well as emission units issued under the Kyoto Protocol.⁵⁰
 - *Carbon Credits (Carbon Farming Initiative) Act 2011* (CFI), now part of the ERF – establishes a framework to credit action to reduce emissions, by issuing Australian carbon credit units (ACCU). Credits are issued to projects across the economy, for reducing emissions or storing carbon. Projects registered in the ERF scheme must meet eligibility criteria,

⁴⁶ Climate Change Authority, *Submission 593*, p. 1.

⁴⁷ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 9.

⁴⁸ Ms Kushla Munro, Acting Deputy Secretary, Department of Industry, Science, Energy and Resources, *Committee Hansard*, 29 January 2021, p. 9.

⁴⁹ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 3.

⁵⁰ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 3.

including additionality tests, and comply with an approved method (technical rules). The CFI Act also provides that the Clean Energy Regulator may conduct lowest cost carbon abatement purchasing on behalf of the Commonwealth through bi-annual reverse auctions.⁵¹

- *Renewable Energy (Electricity) Act 2000* – encourages the additional generation of electricity from renewable sources in an effort to reduce greenhouse gas emissions from the electricity sector and to ensure that renewable energy sources are ecologically sustainable.⁵²
- *Clean Energy Regulator Act 2011* – establishes the Clean Energy Regulator as a non-corporate Commonwealth entity with administrative responsibilities for the NGER, ANREU, CFI and Renewable Energy Acts.⁵³
- *Australian Renewable Energy Agency Act 2011* – establishes the Australian Renewable Energy Agency, to improve the competitiveness of renewable energy technologies and increase the supply of renewable energy in Australia.⁵⁴
- *Clean Energy Finance Corporation Act 2012* – establishes the Clean Energy Finance Corporation as a statutory authority responsible for facilitating increased flows of finance into the clean energy sector.⁵⁵
- *Climate Change Authority Act 2011* – establishes the CCA, an independent statutory body to provide the Government with expert advice on climate change policies, including through regular reviews of the CFI and NGER Acts.⁵⁶

1.80 It should be noted that this Committee has previously engaged with parts of this architecture through its inquiry and report on the *National Greenhouse and Energy Reporting Amendment (Transparency in Carbon Emissions Accounting) Bill 2020*.⁵⁷

⁵¹ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 3.

⁵² Department of Industry, Science, Energy and Resources, *Submission 588*, p. 3.

⁵³ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 3.

⁵⁴ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 3.

⁵⁵ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 3.

⁵⁶ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 3.

⁵⁷ House of Representatives Standing Committee on the Environment and Energy (2020) *Advisory report on the National Greenhouse and Energy Reporting Amendment (Transparency in Carbon Emissions Accounting) Bill 2020*.

State and territory frameworks

- 1.81 Complementing the existing Commonwealth architecture are commitments by each of Australia's states and territories to reduce emissions within those jurisdictions, contributing to the national effort. Each Australian state and territory has made a commitment to achieving a target of net zero emissions either by or before 2050.⁵⁸
- 1.82 DISER advised that:
- The Australian Government collaborates with state and territory governments on emissions reduction through various fora, including the National Greenhouse Gas Inventory Committee, the Energy National Cabinet Reform Committee (ENCRC) and the Energy Ministers' Meeting (EMM).⁵⁹
- 1.83 State and territory governments play a major role in direct adaptation action, primarily through their planning laws and investments in public infrastructure. They also focus on ensuring appropriate regulatory and market frameworks are in place, providing regionally appropriate information and delivering an adaptation response.⁶⁰ Like the Commonwealth, all states and territories have adaptation plans and strategies in place and have also undertaken assessments of climate risks.⁶¹ Through a series of energy and emissions reduction deals, the Commonwealth provides funding to assist states and territories to act on their plans.⁶²
- 1.84 The Committee received submissions to this inquiry from some state and territory agencies, and local government authorities.⁶³ These perspectives will be considered in Chapter 2.

⁵⁸ Department of Agriculture, Water and the Environment, *Submission 2010*, Attachment 1.

⁵⁹ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 7.

⁶⁰ Department of Agriculture, Water and the Environment, *Submission 2010*, p. 4.

⁶¹ Department of Agriculture, Water and the Environment, *Submission 2010*, p. 4.

⁶² See: <https://www.energy.gov.au/government-priorities/Energy-and-emissions-reduction>, accessed 4 June 2021.

⁶³ See for example: Alexandrina Council, *Submission 367*; City of Melbourne, *Submission 374*; Mornington Peninsula Shire; *Submission 387*; ACT Climate Change Council, *Submission 642*; Northern Beaches Council, *Submission 1463*; Local Government NSW, *Submission 1611*, Mosman Council, *Submission 1921*; and City of Sydney Council, *Submission 1933*.

United Kingdom climate change framework

- 1.85 The Bills before the Committee draw heavily from the climate change mitigation framework in the United Kingdom.⁶⁴ The key similarities between these instruments will form part of the focus of Chapter 2.
- 1.86 The *Climate Act 2008* (UK) is the United Kingdom's primary legislative instrument governing its action to address climate change. It provides a comprehensive framework for climate change mitigation and adaptation, underpinned by legally binding emissions targets for 2050 and in the years prior. It assigns clear duties and responsibilities for action based around independent expert advice and monitoring.⁶⁵
- 1.87 The framework enshrined in the *Climate Act 2008* (UK) has four key elements:
- **A long-term goal:** enshrined as a legally binding target within the Act to reduce the UK's greenhouse gas emissions to net zero by the year 2050 achieved via 'an assessment of the risks to the UK from the current and predicted impacts of climate change to take place every five years.'⁶⁶
 - **A pathway to the long-term goal:** legally binding carbon budgets over five-year periods, legislated 12 years in advance towards 2050; and a requirement for 'the Government to set out its objectives for adaptation and a programme to meet them'.⁶⁷
 - **A requirement for policies to deliver the pathways:** an obligation for the government to develop and publish policy programmes to deliver legislated emissions reductions and to address the risks identified in the latest climate change risk assessment.⁶⁸
 - **An independent advisory body:** the Climate Change Committee (CCC) was created under the Act:
 - ... as the independent statutory adviser. It includes two separate Committees (or boards) covering mitigation and adaptation. Members are experts, impartial and supported by a secretariat. Advice is provided on the appropriate level of UK carbon budgets, and on key climate risks facing the UK. The CCC also monitors progress on reducing emissions

⁶⁴ Climate Change Committee, United Kingdom, *Submission 612*.

⁶⁵ Climate Change Committee, United Kingdom, *Submission 612*, Attachment 1, p. 2.

⁶⁶ Climate Change Committee, United Kingdom, *Submission 612*, Attachment 1, pp. 3-4.

⁶⁷ Climate Change Committee, United Kingdom, *Submission 612*, Attachment 1, p. 4.

⁶⁸ Climate Change Committee, United Kingdom, *Submission 612*, Attachment 1, p. 4.

(every year) and adapting to climate change (every two years). The Government is obliged to respond to the CCC's assessments, creating an annual cycle of policy development.⁶⁹

⁶⁹ Climate Change Committee, United Kingdom, *Submission 612*, Attachment 1, p. 4.

2. Key Issues

2.1 This Chapter examines the key issues raised during the Committee’s inquiry and sets out the Committee’s views on the two Bills, concluding with a recommendation.

Objects and guiding principles

2.2 As set out in Chapter 1, Clause 3 of the substantive Bill establishes the objects of the Bill which seek to establish a framework to address the challenge of climate change.

2.3 Inquiry participants proposed amendments to the Clause. In particular:

- that clause 3(1) be amended to recognise Australia’s global prosperity and security;¹ and
- that clause 3(2)(f) relating to ‘aligning government and the private sector in the assessment of climate risks’ be deleted on the basis that governments should not just assess risk but ‘be charged with acting to control and treat identified risks in policy making and program delivery.’²

2.4 Others questioned whether the Bill’s objectives to ensure that emissions remain within the limits agreed under the Paris Agreement may ultimately be superseded. For example, AgZero2030 submitted that the proposed international trajectory may need to be reconsidered:

Global warming of just 1.1°C already has caused decades of increasingly severe economic, health, social and environmental climate change impacts,

¹ Network of Illawarra Consumers of Energy, *Submission 338*, p. 8.

² Responsible Investment Association Australasia, *Submission 528*, p. 3.

including to our industry and rural Australia. ... compounding impacts over future decades and centuries of reaching 1.5°C are severe and the impacts of 2°C warming are unthinkable. Global warming is accelerating, and there is a chance of hitting 1.5°C global warming by 2030 and 2°C before mid-century.³

2.5 Nuclear for Climate Australia submitted that:

Aspirations should not displace credible limits which are needed if the Act [Bill] is to be workable. Unfortunately the 1.5°C limit may have been passed for all credible purposes and if so it should be deleted.⁴

Guiding principles

2.6 Part 1, Division 2 of the substantive Bill outlines the seven guiding principles that decision makers must have regard to in making decisions under the Bill.

2.7 There were several witnesses who supported the guiding principles including Responsible Investment Association Australasia (RIAA):

The guiding principles provided in Division 2 are well founded and when considered together, they provide a sound underpinning for informed and considered decision making. RIAA regards these as being helpful to guide current and future decision making around a transition to net zero emissions by 2050.⁵

2.8 The principles were also supported by ClimateWorks, who suggested that:

The proposed Act would establish clear principles for action. These would ensure that plans would look across environmental, social and economic benefits and costs to optimise Australia's benefit. This is highly important given that climate change has such widespread yet varied impacts that are expected to affect different people, places and industries in different ways.⁶

2.9 Some inquiry stakeholders proposed amendments to strengthen these clauses.

Clause 10: principle of effective, efficient and equitable action

2.10 RIAA was of the view that subclause 10(c), which seeks to ensure equity for households, businesses, workers, communities, and rural and regional

³ AgZero2030, *Submission 1983*, pp. 2-3.

⁴ Nuclear for Climate Australia, *Submission 493*, p. 1.

⁵ Responsible Investment Association Australasia, *Submission 528*, page 4.

⁶ ClimateWorks, *Submission 1957*, page 5.

Australia in decision making under the Bill, could be improved. In particular, RIAA considered that in considering the term ‘equity’, decision-makers should be invited to ‘take a longer-term view of climate risk, their impacts and how decisions are made now.’⁷

- 2.11 The Western Adelaide Coastal Residents' Association (WACRA) considered that the principle should also seek to incorporate ‘new economic models/theories that address climate change, such as sustainable development and ‘green new deal’ models...’.⁸

Clause 11: Principle of informed decision making

- 2.12 Some inquiry contributors considered that subclause 11(2), listing bodies whose research and public reports should take precedence in making decisions under the Bill, should be broadened to include:

- the Climate Council;⁹
- Australian Research Council;¹⁰ and
- the Smart Energy Council, Climate Analytics, National Farmers Federation, Farmers for Climate Action, Beyond Zero Emissions, WWF-Australia, Australian Conservation Foundation, COSBOA [Council of Small Business Organisations Australia], Insurance Council, Investor Group on Climate Change, Australian Industry Group, Business Council of Australia, unions, banks, superannuation funds, and other business groups such as tourism operators.¹¹

- 2.13 Australian Industry Group (AiG) observed that subclause 11(2)(f) requires consideration of the research and public reports of the Energy Security Board. AiG advised that this Board has no direct legislative basis and may cease to exist if its operation is not extended by National Cabinet’s Energy Reform Committee.¹²

- 2.14 There was concern about the omission of the Australian university sector from this list as it is an important source of information for climate policy

⁷ Responsible Investment Association Australasia, *Submission 528*, pp. 4-5.

⁸ Western Adelaide Coastal Residents' Association, *Submission 331*, p. 2.

⁹ Western Adelaide Residents’ Association, *Submission 331*, p. 2; Smart Energy Council, *Submission 1932*, p. 6; Climate Council, *Submission 391*, p. 3.

¹⁰ Royal Society of South Australia, *Submission 1947*, p. 2.

¹¹ Smart Energy Council, *Submission 1932*, p. 6.

¹² Australian Industry Group, *Submission 552*, p. 4.

development. Australian National University Climate Change Institute (ANUCCI) submitted that:

Australian Universities have much greater research capacity in climate adaptation, emission-reduction and climate change policy and publish many times more peer-reviewed studies in these domains than do either BoM or CSIRO. So the exclusion of Australian Universities is highly problematic from the point of view of the Guiding Principles, effectively breaching them in the same section of the legislation.¹³

- 2.15 Nuclear for Climate Australia expressed concerns about the selective list within the subclause, submitting that '[s]elected organisations are nominated as taking precedence over all other sources of information. Such a concept is flawed and assumes a level of infallibility which cannot be contested'.¹⁴

Clause 12: Principle of risk based, integrated decision making

- 2.16 Some inquiry participants stated that Clause 12 could be improved. In particular, it was suggested that subclause 12(a), which requires the assessment of competing long, medium and short-term environmental, economic and community consequences relating to climate change:

- be clarified to mean that universal assets such as 'infrastructure, the healthcare and education systems as well as the workforce' require long-term investment as they benefit all sectors of the economy;¹⁵ and
- be further refined to ensure that regionally differentiated information is provided to local communities to help assess risks and aid better local decisions.¹⁶

Clause 14: Principle of fair employment transition

- 2.17 The concept of a planned, fair and equitable transition to a lower carbon intensive economy in Clause 14 is one of the key tenets of the substantive Bill and was widely supported by inquiry participants.¹⁷ The concept is also

¹³ ANU Climate Change Institute, *Submission 403*, p. 2. See also: Royal Society of South Australia, *Submission 1947*, p. 2.

¹⁴ Nuclear For Climate Australia, *Submission 493*, p. 1.

¹⁵ Responsible Investment Association Australasia, *Submission 528*, p. 5.

¹⁶ Just Transitions South Gippsland, *Submission 423*, p. 3.

¹⁷ See for example: Australian Council of Social Services, *Submission 340*, p. 2; Australian Council of Trade Unions, *Submission 401*, p. 2; Electrical Trades Union, *Submission 220*, p. 5.

defined at subclause 3(1)(a). Subclause 14(c) requires the ‘prioritising [of] employment transition opportunities to new or existing industries within [affected] communities’.¹⁸

2.18 The Business Council of Australia (BCA) submitted:

The proposed legislation recognises the importance of ensuring people and community impacts are considered in the low-carbon energy transition. A fair employment transition will create new jobs, drive economic diversification and encourage investments. It ensures environmental sustainability, but also the need to manage the economic and social impacts. The proposed legislation reinforces the need for a collaborative approach that brings together all impacted stakeholders to enable a planned and coordinated transition to net-zero emissions.¹⁹

2.19 The Australian Council of Trade Unions (ACTU) was of the view that Clause 14 of the Bill could be strengthened through the addition:

- of ‘workforce’ in addition to ‘community engagement’ in subclause 14(a);
- of the words ‘and ensuring those new opportunities provide similar levels of employment security and conditions’ at the end of subclause 14(c); and
- of a reference to ‘avoiding forced redundancies’ in subclause 14(f).²⁰

2.20 In considering the clause, the ACTU expressed the view that ‘skill acquisition, skill transferability and skill enhancement’ for those most impacted by the transition to a lower carbon intensive economy was important.²¹

2.21 The Electrical Trades Union also proposed that a statutory oversight body, such as a ‘Just Transitions Authority’ be embedded within the Bill, a concept also supported by other inquiry participants.²² Citing recent closures of power stations in Australia where limited assistance was provided for

¹⁸ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 14(c).

¹⁹ Business Council of Australia, *Submission 1576*, p. 2.

²⁰ Australian Council of Trade Unions, *Submission 401*, p. 2.

²¹ Australian Services Union, *Submission 199*, p. 2. See also: Global Compact Network, *Submission 1948*, p. 3.

²² Electrical Trades Union, *Submission 220*, p. 5. See also: City of Sydney, *Submission 1933*, p. 2; Australian Council of Trade Unions, *Submission 401*, p. 2; Professor Rosemary Lyster, *Submission 350*, p. 2; Australian Conservation Foundation, *Submission 433*, p. 4.

affected workers, the Union submitted that such a body could avoid circumstances where:

... employers commit to pooled redundancy and worker transfer mechanisms and then simply ignore their obligations or instead [decide] to pick and choose which workers will receive support and which workers will not, with no independent oversight and no transparency.²³

2.22 Professor Rosemary Lyster of the University of Sydney Law School cited the European Union's Just Transition Mechanism:

... which will ensure that the transition towards net zero occurs equitably 'leaving no one behind'. At least €150 billion will be mobilised over the period 2021-2027 in the most affected regions, to alleviate the socio-economic impact of the transition. Australia's pathway towards net zero must be accompanied by a Just Transition Mechanism which is deliberate, targeted and well financed.²⁴

Clause 15: Principle of community engagement and self determination

2.23 Community consultation is an important element of the Bills. Some submissions, like the Australian Industry Group, highlighted that:

Deep expertise, wide consultation and independent standing are thus important characteristics for advice on the status and future of Australian climate policy.²⁵

2.24 Contributors proposed amendments to Clause 15, including that the Clause should:

- make specific reference to Indigenous peoples;²⁶ and
- include the principle of 'free, prior and informed consent' which is already used by business and government decision makers throughout legal, government and community endeavours.²⁷

²³ Electrical Trades Union, *Submission 220*, p. 5.

²⁴ Professor Rosemary Lyster, *Submission 350*, p. 1.

²⁵ Australian Industry Group, *Submission 552*, p. 4.

²⁶ ACT Climate Change Council, *Submission 642*, p. 2.

²⁷ Responsible Investment Association Australasia, *Submission 528*, p. 5.

Risk assessments and adaptation plans

- 2.25 Part 2 of the substantive Bill requires the Climate Change Commission (CCC), as discussed below, to prepare and provide to the Minister a national climate risk assessment. An initial assessment is to be made within one year of the commencement of the Act, and subsequent assessments ‘no later than five years after the day on which the previous assessment was made publicly available.’²⁸
- 2.26 Part 3 of the substantive Bill requires that the Minister prepare a national adaptation plan no later than one year from the publication of the corresponding national climate change risk assessment.²⁹

National climate change risk assessments

- 2.27 The Committee was interested in understanding the work that the Australian Government had undertaken to date to assess risks relating to climate change. While no one single national risk assessment document exists, the Department of Agriculture, Water and the Environment (DAWE) advised that ‘a number of risk assessments have been done over the years and some of those have focused on specific sectors’.³⁰
- 2.28 Many inquiry participants supported the implementation of a national risk assessment.³¹ Some of the outlined benefits of this approach include:
- Allowing for forward planning, enabling identification of technology needs across industries, and helping industries adapt:
 - National risk assessments and national adaptation plans, as proposed in these Climate Change Bills, would lead to greater risk awareness and allow for comprehensive forward planning, to ensure more viable and adaptable future industries. It would also enable the identification of technological needs across industries. ATSE supports the

²⁸ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Part 2.

²⁹ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Part 3.

³⁰ Ms Beth Brunoro, First Assistant Secretary, Climate Adaptation and Resilience Division, Department of Agriculture, Water and the Environment, *Committee Hansard*, 29 January 2021, p. 7.

³¹ See for example: Wingecarribee Net Zero Emissions Inc, *Submission 491*, p. 2; Property Council of Australia, *Submission 538*, p. 4; Mornington Peninsula Shire, *Submission 387*, p. 2; WWF-Australia, *Submission 606*, p. 9; UniSuper, *Submission 1941*, p. 3; Institute for Energy Economics and Financial Analysis, *Submission 346*, p. 6; Australian Academy of Technology and Engineering, *Submission 512*, p. 2.

implementation of routine risk assessment and adaptation plans nationally as well as by sector, to help identify climate change-driven economic challenges across all industries. As an example, most significant agricultural industries already have national adaptation.³²

- Supporting actions that allows Australia to grasp significant opportunities:
 - However, Australia is far from understanding its systemic vulnerability to climate change on a coordinated scale. Such understanding would provide a sound basis for mitigation and adaptation plans, as well as support action that allows Australia to take advantage of the significant opportunities. This in turn reduces investment risk, and therefore increases investment opportunity.³³
- Preparing the country for impacts:
 - The government should support the built environment by establishing a National Climate Change Risk Assessment Framework to help business and communities recognise and manage the risks they face. This will clarify what governments expect the biggest risks to be, the sectors of the economy and environment most impacted and what action is necessary to mitigate and adapt to the risks posed.³⁴
- Facilitating private sector investment flows:
 - Australia is far from understanding its systemic vulnerability to Climate Change, determining adaptation pathways and timing of adaptation pathways and timing of adaptation actions required and the level of investment needed...IGCC believes that a crucial first step, supported by the proposed national Climate Change risk assessment process under the Bill, is an up-to-date national assessment of infrastructure at risk to the effect of Climate Change and an indicative quantification of the investment required into adaption, to facilitate private sector capital flows.³⁵
- National co-ordination:
 - Since 2006, Local Government NSW has surveyed councils every three to five years on their responses to Climate Change. Similar to the approach of the Climate Change Bills, 82 per cent of New South Wales councils have already conducted a Climate Change risk assessment. A national Climate Change risk assessment is needed, as some vulnerabilities are best addressed through Commonwealth

³² Australian Academy of Technology and Engineering, *Submission 512*, p. 2.

³³ Australian Council of Superannuation Investors, *Submission 1971*, p. 3.

³⁴ Property Council of Australia, *Submission 538*, p. 4.

³⁵ Investor Group on Climate Change, *Submission 497*, p. 6.

parliamentary levers, national coordination and assessing interdependencies between infrastructure owners and government systems.³⁶

2.29 The United Kingdom's Climate Change Committee (UKCCC), supported a shorter timeframe for assessments (every three instead of five years), noting that the *Climate Change Act 2008* (UK):

... allowed three years for the first assessment to be completed and our experience has shown that it takes approximately three years to conduct the assessments each time.³⁷

2.30 Clause 18 of the substantive Bill outlines the factors to be taken into account by the CCC in preparing its national climate change risk assessment.

2.31 Two inquiry contributors were of the view that Clause 18 could be strengthened through amending it to require that the CCC consults additional organisations including:

- COSBOA [Council of Small Business Organisations Australia], Insurance Council, Investor Group on Climate Change, Australian Industry Group and BCA;³⁸ and
- Australian universities and collaborators.³⁹

2.32 More generally, some inquiry participants proposed that Clause 18 could be strengthened by:

- including existing Commonwealth strategies, policies and proposals;⁴⁰
- building on previous risk assessments (rather than starting from a blank sheet);⁴¹
- assessing the effectiveness of climate adaptation responses from the prior period so that this can be included in risk assessment;⁴²

³⁶ Councillor Linda Scott, , President, Local Government NSW, *Committee Hansard*, 1 February 2021, p. 2.

³⁷ United Kingdom Climate Change Committee, *Submission 612*, p. 1. See also: Smart Energy Council, *Submission 1932*, p. 7.

³⁸ Smart Energy Council, *Submission 1932*, p. 8.

³⁹ Royal Society of South Australia, *Submission 1947*, p. 2.

⁴⁰ Australian Industry Group, *Submission 552*, p. 5.

⁴¹ ANU Climate Change Institute, *Submission 403*, pp. 3-4.

⁴² ANU Climate Change Institute, *Submission 403*, pp. 3-4.

- considering the parameters in which the risk assessment is expressed (e.g., financial impact, social impact);⁴³
- not being limited to factors associated with the direct consequences of climate change such as extreme weather, heat stress, changed growing conditions, health impacts; but being expanded to include risks such as the risk of export commodities or infrastructure becoming stranded assets, due to the climate commitments of Australia's trading partners;⁴⁴
- considering cumulative impacts such as multiple, overlapping climate events and interdependencies between systems;⁴⁵
- requiring that the cost to Australia of climate-induced disasters, including economic and non-economic losses, be specifically reported on in the risk assessment over the previous year for the first assessment and five years for subsequent assessments;⁴⁶ and
- including an understanding of areas of disruptive risks as a result of a decarbonising economy, as well as an up-to-date national assessment of infrastructure at physical risk from the effects of climate change.⁴⁷

2.33 ANUCCI was supportive of the risk assessment process set out in Clauses 17 and 18, stating:

A climate risk assessment is a sensible thing to do and the 5-yearly frequency is consistent with what other nations have done (e.g. the US).⁴⁸

2.34 However, whilst broadly supporting the risk assessment process ANUCCI believed the risk assessment process:

... focus[ses] on the negative aspects of climate change and does not address the opportunities arising except where it is in relation to mitigation. The usual framing of risks is that it is not limited to negative outcomes ... the IPCC [Intergovernmental Panel on Climate Change] have defined risk in terms of negative impacts and it may be best to run with that. To compensate for this truncated approach, it is important to be straightforward about the possibilities of some opportunities arising (e.g. increasing rainfall in the north-

⁴³ ACT Climate Change Council, *Submission 642*, p. 2.

⁴⁴ WWF-Australia, *Submission 606*, p. 9. See also: Climate Tasmania, *Submission 1954*, p. 3.

⁴⁵ Local Government NSW, *Submission 1611*, p. 2.

⁴⁶ Professor Rosemary Lyster, *Submission 350*, p. 2.

⁴⁷ UniSuper, *Submission 1941*, p. 3.

⁴⁸ ANU Climate Change Institute, *Submission 403*, p. 3.

west with consequent increasing grazing profitability, or warmer temperatures increasing forest growth potential in Tasmania).⁴⁹

Sector-based risk assessments

- 2.35 Whilst a coordinated risk assessment process was supported by a number of submitters, certain inquiry participants considered that the input of various economic sectors should be a paramount consideration for the CCC.⁵⁰ Geelong Sustainability considered that the contribution across economic sectors to Australia's national emissions was not uniform, and it is important for individual sector emissions to be assessed and managed.⁵¹
- 2.36 Specific economic sectors were highlighted to the Committee as making substantial contributions to Australia's emissions. These included transport (estimated at 19% of national emissions),⁵² agriculture (estimated at 13% of national emissions),⁵³ livestock (estimated at 11% of national emissions),⁵⁴ and health (estimated at 7% of national emissions).⁵⁵ According to emissions projections produced by the Department of Industry, Science, Energy and Resources (DISER), the electricity sector accounts for 33% of national emissions.⁵⁶ A broad estimate was also provided that Australia's built environment sector contributes up to 25% of all emissions.⁵⁷
- 2.37 Despite some high emissions sectors, the Committee was told that many sectors were working towards lowering their emissions and contributing to the broader emissions reduction effort, including superannuation, banking

⁴⁹ ANU Climate Change Institute, *Submission 403*, p. 4. See also: WWF-Australia, *Submission 606*, p. 9.

⁵⁰ See for example: Wingecarribee Net Zero Emissions Inc, *Submission 491*, p. 2; and Australian Academy of Technology and Engineering, *Submission 512*, p. 2.

⁵¹ Geelong Sustainability, *Submission 268*, p. 3.

⁵² See for example: Electric Vehicle Council, *Submission 1966*, p. 2; Planners Declare, *Submission 1955*, p. 2.

⁵³ National Farmers Federation, *Submission 567*, Attachment 1. See also: Veterinarians For Climate Action, *Submission 343*, p. 3.

⁵⁴ Veterinarians for Climate Change, *Submission 343*, p. 3.

⁵⁵ Doctors for the Environment, *Submission 517*, p. 7.

⁵⁶ Department of Industry, Science, Energy and Resources, <https://www.industry.gov.au/sites/default/files/2020-12/australias-emissions-projections-2020.pdf>, viewed 15 April 2021.

⁵⁷ Property Council of Australia, *Submission 538*, p. 1.

and financial services;⁵⁸ fashion;⁵⁹; farming, social, health;⁶⁰ property development;⁶¹ mining and energy.⁶²

2.38 The Planning Institute of Australia (PIA) emphasised to the Committee that planning could contribute to improving the emissions of other sectors, such as the built environment sector. The PIA submitted that:

... planners only have a broad appreciation of the contribution of their decisions towards achieving a net-zero target of 2050 for the built environment sector ... [a national framework] could be a vehicle to set out the goals (and carbon budgets) for the built environment sector [providing] consistency around plan- and decision-making ...⁶³

2.39 Doctors for the Environment cited the health sector's work in the United Kingdom to reduce its emissions:

In the UK, the National Health Service (NHS) has committed to reaching net zero emissions for its carbon footprint by 2040, with an ambition for an interim 80% reduction by 2028-2032. The NHS achieved an 11% reduction in GHG emissions between 2007 and 2015 while the level of health care activity rose by 18%. By 2017, the associated financial savings associated with environmental sustainability (mainly energy, waste and water) rose to £90 million annually.⁶⁴

National adaptation plans

2.40 The Bill provides that the Minister must prepare a national adaptation plan in response to each climate change risk assessment, an issue which found broad support among inquiry stakeholders.⁶⁵

⁵⁸ Australian Centre for Corporate Responsibility, *Submission 349*, pp. 2-3.

⁵⁹ Good Day Girl, *Submission 333*, p. 2.

⁶⁰ Australian Council of Social Services, *Submission 340*, p. 9.

⁶¹ See for example: Hansen Partnership Pty Ltd, *Submission 360*, p. 2 and Nightingale Housing, *Submission 389*, p. 1.

⁶² See for example: Enova Energy, *Submission 382*, p. 1; Blackstone Minerals, *Submission 399*, p.1.

⁶³ Planning Institute of Australia, *Submission 453*, pp. 2-3. See also Planners Declare, *Submission 1995*, p. 3.

⁶⁴ Doctors for the Environment, *Submission 517*, p. 7.

⁶⁵ See for example: Wingecarribee Net Zero Emissions Inc, *Submission 491*, p. 2; Australian Academy of Technology and Engineering, *Submission 512*, p. 2; Responsible Investment Association Australasia, *Submission 528*, p. 5; Mornington Peninsula Shire, *Submission 387*, p. 2.

2.41 The Department of Agriculture, Water and the Environment (DAWE) was asked about how the Australian Government currently measures its progress on climate adaptation. The Department advised the Committee that:

... we don't currently have a set of measures or targets that try to roll that up into outcomes, and we are not currently measuring progress towards adaptation outcomes. Now, as you know, we are about to go through a process of developing a new National Climate Adaptation and Resilience Strategy. We will do that in consultation with states and territories and with a range of other stakeholders. It may be that through that process we will develop a set of outcomes as part of that.⁶⁶

2.42 UniSuper expressed one view as to why adaptation plans were required under the Bill:

Australia needs to develop a more comprehensive understanding of its systemic vulnerability to climate change, determining adaptation pathways and timing of adaptation actions required and the level of investment needed.⁶⁷

2.43 The Property Council of Australia also supported the development of national adaptation plans on the basis that the current lack of a national policy framework and actions to mitigate the effects of climate change will have and has already had consequences.⁶⁸

2.44 In considering these clauses, inquiry stakeholders could see the benefits of having a clear national adaptation framework because it would:

- provide clarity and focus across governments;⁶⁹ and
- set national direction, establish priorities and coordinate effective action.⁷⁰

2.45 Some inquiry stakeholders considered amendments to this clause to clarify its intention including that:

⁶⁶ Ms Maya Start-Fox, Acting First Assistant Secretary, Climate Adaptation and Resilience Division, Department of Agriculture, Water and the Environment, *Committee Hansard*, 24 March 2021, p. 2.

⁶⁷ UniSuper, *Submission 1941*, p. 3.

⁶⁸ Property Council of Australia, *Submission 538*, pp. 4-5.

⁶⁹ Local Government NSW, *Submission 1611*, p. 2.

⁷⁰ WWF-Australia, *Submission 606*, p. 5.

- clause 19(3) require the adaptation plan to outline how the guiding principles of the substantive Bill are reflected;⁷¹
- the adaptation plan be evidence-based and derived from the best available science;⁷²
- it should oblige Commonwealth agencies to prepare adaptation plans to reveal potential vulnerabilities and to help inform the national plan;⁷³ and
- the broad and non-specific wording of the clause may not address all sectors of the economy.⁷⁴

2.46 The UKCCC submitted that from its own experience with its similar legislation:

Measuring progress in adapting to climate change is inherently challenging due to the future uncertainty over the amount of climate change we will experience and the effectiveness of different adaptation options in managing these risks. Different parts of the UK will experience different climate impacts and require different adaptation options. The lack of available quantitative data is a real challenge.⁷⁵

2.47 According to the UKCCC, it had sought to address the challenge of assessing the progress of adaptation measures by implementing:

- a framework of scoring the quality of plans and whether actions are being taken that demonstrably reduce either vulnerability or exposure to current and future climate change; and
- measurements for changes in vulnerability, exposure and adaptation action across different sectors, and for which 'new indicators of attributed impacts as context for the overall assessment of progress are being developed.'⁷⁶

2.48 The ACT Climate Change Commission proposed that the Bill could require the establishment of:

... a dedicated National Adaptation Centre ... The Centre could conduct research in its own right, but its primary value would be as an interface

⁷¹ Australian Council of Superannuation Investors, *Submission 1971*, p. 3.

⁷² Royal Society of South Australia, *Submission 1947*, p. 2.

⁷³ Professor Rosemary Lyster, *Submission 350*, p. 2

⁷⁴ Smart Energy Council, *Submission 1932*, p. 8.

⁷⁵ UK Climate Change Committee, *Submission 612*, Attachment 7, p. 6.

⁷⁶ UK Climate Change Committee, *Submission 612*, Attachment 7, p. 6.

between different sectors (research, business, community and policy), both as a repository of knowledge and learning, and to provide capacity building.⁷⁷

- 2.49 In its 2021/22 Budget, the Australian Government established the Australian Climate Service (ACS).⁷⁸ The ACS will connect and leverage the Commonwealth's extensive climate and natural hazard information into a single national view. The service will work with customers to provide data and intelligence to support each phase of the national disaster continuum: Prevention, Preparedness, Response, Recovery, Relief and Resilience.⁷⁹

An emissions reduction target and emissions budgets

- 2.50 The aspect of the substantive Bill on which much of the evidence to the inquiry focussed, was the establishment, under Clause 22, of a target of 31 December 2050 for Australia to reach net zero emissions. The Bill also provides that the Minister may determine an earlier target date, and for the CCC to review and, if required, recommend to the Minister that the target be amended. Part 5, Division 1 of the Bill also requires that the Minister set an emissions budget in advance for the emissions budget periods stipulated in the Bill.
- 2.51 The inquiry's evidence pointed to a desire, by some individuals, community groups and institutional stakeholders for a target to be set and achieved – including a substantial number of submissions generated by advocacy campaigns expressing support for the Bill.⁸⁰ In commenting on the rationale

⁷⁷ ACT Climate Change Council, *Submission 642*, p. 2. See also: ANU Climate Change Institute, *Submission 403*, p. 3.

⁷⁸ Australian Government, Budget 2021-22, *Budget Paper No. 2*, p. 66.

⁷⁹ See Australian Climate Service, *About*, at <https://www.acs.gov.au/pages/8fda939a5144428fbe7c28e57526df91>, viewed 4 June 2021.

⁸⁰ See for example: Mr Anthony Moriarty, *Submission 3*, p. 1; Mrs Joyce Martin, *Submission 105*, p. 1; Miss Kelly Mills, *Submission 319*, p. 1; Mr Terrance le Roux, *Submission 515*, p. 1; Mrs Jane Sultana, *Submission 752*, p. 1; Mr Jim Fraser, *Submission 969*, p. 1; Miss Claire Ogden, *Submission 1153*, p. 1; Mr Robert Hunter, *Submission 1516*, p. 2; Alice Bradshaw, *Submission 1642*, p. 1; Network of Illawarra Consumers of Energy, *Submission 338*, p. 2; Australian Industry Group, *Submission 552*, p. 2; ACT Climate Change Council, *Submission 642*, p. 2; Property Council of Australia, *Submission 538*, p. 3; Business Council of Australia, *Submission 1576*, p. 1; Australian Medical Association, *Submission 572*, p. 3; Law Council of Australia, *Submission 1621.1*, p. 2. It should also be noted that the majority of campaign emails received by the Committee expressed support for the establishment of a net zero by 2050 target. Samples of these contributions may be found at: Sample of the Get Up campaign submission 2,618 received, *Submission 2030*; and

for this interest, participants provided varying views to the Committee. The BCA, for example, submitted:

We believe the central issue now is setting a national target of net-zero emissions by 2050 and, critically, outlining a pathway to achieve this goal. The high-level policy framework outlined in the proposed legislation represents an important starting point for the development of a clearly defined, nationally guided and coordinated climate policy response.⁸¹

2.52 A number of stakeholders expressed concerns about the impacts a legislated target may have on private sector abatement, the duplication of existing efforts, unclear accountability mechanisms, and limitations of abatement ambition.⁸²

2.53 Some key themes emerged from the evidence about the benefits of setting a target. These were that a legislated target for Australia to reach net zero emissions by 2050 would:

- be consistent with the work of the IPCC and broad international scientific consensus;⁸³
- provide policy certainty;⁸⁴
- improve investor confidence and certainty for business;⁸⁵
- align with the same commitment made by many of Australia's international trading partners such as New Zealand, the United Kingdom, Japan and South Korea;⁸⁶

Sample of the Australian Conservation Foundation via DoGooder submission 1,913 received, *Submission 2031*.

⁸¹ Business Council of Australia, *Submission 1576*, p. 1.

⁸² See for example, National Farmers Federation *Submission 567*, p. 2; Law Council of Australia, *Submission 1621*, pp. 3-5; noting that the Law Council of Australia made a further submission (Law Council of Australia, *Submission 1621.1*, p. 2).

⁸³ See for example: Doctors for the Environment, *Submission 517*, p. 4; Royal Society of South Australia, *Submission 1947*, p. 2; WWF-Australia, *Submission 606*, p. 7; Climate Act Now North Sydney, *Submission 1972*, p. 1.

⁸⁴ Local Government NSW, *Submission 1611*, p. 3.

⁸⁵ Institute for Energy Economics and Financial Analysis, *Submission 346*, p. 4. See also: Australian Industry Group, *Submission 552*, p. 2; Australian Council of Superannuation Investors, *Submission 1971*, p. 3; UniSuper, *Submission 1941*, p. 3; Global Compact Network, *Submission 1948*, p. 4; Clean Energy Council, *Submission 414*, p. 2; Australasian Centre for Corporate Responsibility, *Submission 349*, p. 3.

⁸⁶ See for example: Institute for Energy Economics and Financial Analysis, *Submission 346*, p. 4; HealthWISE New England North West, *Submission 334*, p. 1; WWF-Australia, *Submission 606*, p.

- align with the same commitment made by many international and domestic corporations;⁸⁷ and
- result in improved health outcomes for all Australians.⁸⁸

2.54 Some, like the Australian Medical Association, supported the Bills on health grounds:

Climate change is a health issue and one which poses an emergency for the Australian community. Just as Australia has responded well so far to COVID-19 by relying on scientific evidence, it must do the same in responding to the health emergency that climate change poses.⁸⁹

2.55 Renny Bradtke submitted that:

Legislating Net Zero by 2050 is an invaluable way that Australia can become a world leader in combatting climate change. A streamlined approach based on equitable principles will benefit all communities and allow all Australians on a business and individual level to work towards a common goal.⁹⁰

2.56 Citizens' Climate Lobby Australia expressed the view that:

Goals and targets are powerful motivators and help focus and concentrate the efforts of all actors and stakeholders. They enable greater cooperation and an important sense of working together for a national good. And where leaders in government, business and community share the same goal it creates a sense of national purpose. The legislated target in this Bill will give direction for all sectors of the economy and society to invest, create and work towards.⁹¹

2.57 The Australian Conservation Foundation submitted that:

The economic opportunity for Australia to reach net zero emissions for our own economy and to assist other countries through clean exports is substantial. Australia stands to gain jobs, strengthen economic growth and

8; Responsible Investment Association Australasia, *Submission 528*, p. 3; Australian Council of Social Services, *Submission 340*, p. 9.

⁸⁷ See for example: Institute for Energy Economics and Financial Analysis, *Submission 346*, p. 4; Veterinarians for Climate Action, *Submission 343*, p. 3; WWF-Australia, *Submission 606*, p. 9; Origin Energy Limited, *Submission 339*, p. 1; Australasian Centre for Corporate Responsibility, *Submission 349*, p. 3.

⁸⁸ See for example: The Royal Australian College of General Practitioners, *Submission 1943*, p. 1.

⁸⁹ Australian Medical Association, *Submission 572*, p. 2.

⁹⁰ Renny Bradtke, *Submission 1928*, p. 1.

⁹¹ Citizens' Climate Lobby Australia, *Submission 562*, p. 1.

long-term export opportunities if these opportunities are unlocked through a national legislated climate action framework.⁹²

2.58 Some were of the view that the target should be brought forward to 2040 or even earlier.⁹³ The ACT Climate Change Council submitted that:

... it is important to note that it is unlikely that global warming can be held to 1.5°C (with very little to no overshoot) if all nations adopt a net zero target date as late as 2050, particularly if all greenhouse gases are not substantially reduced in the next decade.⁹⁴

2.59 The Climate Council advised that ‘... science already compels a strengthening of this target ...’ and recommended that the date for net zero emissions initially be set for 2040, with an interim target of reducing emissions by 50% by 2030.⁹⁵

2.60 On the other hand, the National Farmers Federation advised the Committee that it did not agree with a net zero by 2050 target being set on the basis that:

... simply legislating a target is not a pathway to meaningful action on climate change. Despite a lack of policy certainty in the past 10 years, significant action has been taken by the private sector and industry. While there is a role for overarching legislation, any legislation (and regulation) must be economically sensible, unobtrusive, equitable and advantageous to deliver on ground programs that benefit agricultural interests and do not provide unnecessary regulatory impediment.⁹⁶

Reviewing and amending the target

2.61 The substantive Bill includes provisions for the target to be reviewed and amended. In particular, the Minister may determine an earlier day than 31 December 2050, and the Commission must review the target when setting an emissions budget at the request of the Minister.⁹⁷

⁹² Australian Conservation Foundation, *Submission 433*, pp. 3-4.

⁹³ See for example: Smart Energy Council, *Submission 1932*, p. 5; Mornington Peninsula Shire, *Submission 387*, p. 2; City of Sydney, *Submission 1933*, p. 2.

⁹⁴ ACT Climate Change Council, *Submission 642*, p. 3.

⁹⁵ Climate Council, *Submission 391*, p. 7.

⁹⁶ National Farmers Federation, *Submission 567*, p. 3.

⁹⁷ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clauses 23 and 24.

2.62 The Law Council of Australia expressed its concern that allowing the Minister to determine a new target date under clause 22(2):

... may have the potential to undermine the value of setting a target day in the first place, resulting in substantial ongoing lobbying to bring it forward. As such, it may reduce certainty and transparency about how when or how this will occur, with business and policymakers being required to factor in the consequential risks into their decision-making. One option may be to amend the Bill to only enable the target day to only be amended by legislation, rather than by legislative instrument.⁹⁸

2.63 The Law Council noted that the provision allows the Executive to:

... retain some level of control over whether the Target of net zero emissions will be met earlier and how, meaning that flexibility is retained in addressing any resulting social, economic and environmental issues and concerns. It is also a matter for Parliament to decide how best to strike the balance between achieving sufficient certainty and affording flexibility.⁹⁹

2.64 The Smart Energy Council was of the view that should a more ambitious target be determined by the Minister, emissions budget periods (see below) should be adjusted, and reviews of the target conducted commensurate with updated emissions budget periods. For example, a target of net zero by 2040 could mandate a review of the target every three years.¹⁰⁰

Adequacy of Australia's current targets

2.65 In considering the work that Australia is currently undertaking to meet its international obligations and domestic commitments, in the absence of a legislated net zero emissions by 2050 target, a number of concerns were raised. First was Australia's emissions reduction ambition from now until 2030, and second, the lack of an Australian emissions reduction target beyond 2030.

⁹⁸ Law Council of Australia, *Submission 1621.1*, p. 2.

⁹⁹ Law Council of Australia, *Submission 1621.1*, p. 2.

¹⁰⁰ Smart Energy Council, *Submission 1932*, p. 5.

Emissions reduction to 2030

2.66 Chapter 1 of this report broadly outlined Australia's international and domestic climate change commitments under the Paris Agreement and cited Australia's current emissions target of a 26% to 28% reduction in emissions below 2005 levels by 2030.¹⁰¹

2.67 DISER submitted that according to its latest Emissions Projections Report produced in 2020:

Australia is on track to overachieve on its 2030 target by 403 Mt CO₂-e, including overachievement from previous commitment periods; and needs to reduce an additional 56 Mt CO₂-e (26% target) to 123 Mt CO₂-e (28% target) by 2030 to meet its Paris target when overachievement from previous commitment periods is excluded.¹⁰²

2.68 Presenting a comparative table to the Committee entitled *Change in emissions and renewable energy comparators for selected countries*, DISER gave evidence that since '... 2005, Australia has seen declines in absolute emissions, emissions per capita, and emissions per unit of GDP.'¹⁰³

2.69 DISER further described the evidence before the Committee advising that:

... the change in per capita emissions from 2005 to 2018, on a per capita basis our emissions actually decreased by minus 29 per cent. That is actually one of the highest in the world ...

The other thing that we reported here was change in emissions per unit of GDP. That is minus 51 per cent from 2005 to 2018—again, one of the highest reductions globally. This goes to both the fact that we have increase in population but also the structure of our economy, the sort of exports that we have as an energy and resource producer. It is actually very significant in terms of the emissions per unit of GDP as well.¹⁰⁴

2.70 Some inquiry submitters held different views. The Institute for Energy Economics and Financial Analysis (IEEFA), while not disputing the statistical accuracy of DISER's evidence, put to the Committee that the Department was:

¹⁰¹ Department of Industry, Science and Resources, *Submission 588*, p. 2.

¹⁰² Department of Industry, Science, Energy and Resources, *Submission 588*, p. 6.

¹⁰³ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 2 and Appendix E.

¹⁰⁴ Ms Kushla Munro, Acting Deputy Secretary, Department of Industry, Science, Energy and Resources, *Committee Hansard*, 29 January 2021, p. 2.

... presenting what we would consider to be a false narrative that Australia as making strong progress on green house gas (GHG) emissions reductions relative to leading countries. The Department choose to cite the per capita reduction from 2005-2018, knowing the 2005 was one of the five highest recordings in Australian recorded history. If the Department had chosen 2000 as the base year, there would be no material improvement in our national GHG emissions in the last two decades ...¹⁰⁵

2.71 It is noted that that this view was not put to the Department for its response in hearings or in questions on notice.

2.72 The Australia Institute further analysed the data in the Department's table, noting it was statistically correct, while advising the Committee that:

The fourth column, titled "New renewable energy capacity installed per person 2019 (watts)", appears to draw exclusively from the International Renewable Energy Agency (IRENA) *Renewable energy [statistics] 2020* report. DISER seems to extract 2018-2019 data of nine countries and three supranational organisations, to calculate the per-capita change in renewable energy capacity over the year. While the statistic itself is calculated correctly, it misrepresents IRENA's data.¹⁰⁶

2.73 It is noted that that this view was not put to the Department for its response in hearings or in questions on notice.

Emissions reduction beyond 2030 and towards 2050

2.74 DISER advised the Committee that it has modelled emissions reduction projections consistent with the Government's reporting obligations under international agreements, and that it regularly advises Ministers on IPCC reports about net zero projections. The Department provided evidence that it is undertaking ongoing work on long term emissions projections and will provide advice to Government on how long term emissions reductions can be met as part of the forthcoming long term emissions reduction strategy.¹⁰⁷

2.75 Although the Paris Agreement does not require a 2050 target and does not require a 2035 target until 2025, submitters to the inquiry expressed concerns about the lack of a Commonwealth emissions reduction target beyond 2030. The Clean Energy Council commented that:

¹⁰⁵ Institute for Energy Economics and Financial Analysis (IEEFA), *Submission 346.1*, p. 2.

¹⁰⁶ The Australia Institute, *Submission 1617.1*, p. 2.

¹⁰⁷ Ms Kushla Munro, Acting Deputy Secretary, Department of Industry, Science, Energy and Resources, *Committee Hansard*, 29 January 2021, pp. 5-6.

The current reluctance of the Australian Government to establish a goal beyond 2030 leaves a lot of guesswork for investors about the likely market dynamics and investment conditions for their assets, increasing the risk premiums applied to Australian projects.¹⁰⁸

2.76 The Centre for Policy Development submitted that:

What has been missing to date is a ‘north star’ to guide these efforts, and a mechanism for coordinating responses across the many institutions with key roles to play. This is widely recognised by leaders and stakeholders across the public and private sectors.¹⁰⁹

2.77 Submitters to the inquiry noted that all Australian states and territories had already made commitments to reach net zero emissions by 2050.¹¹⁰ The Australian Government has also committed to achieving net zero emissions as soon as possible, and preferably by 2050.¹¹¹

2021 United Nations Framework Convention on Climate Change Climate Summit (COP 26)

2.78 As stated in Chapter 1, Australia is due to participate in the 2021 United Nations Framework Convention on Climate Change Climate Summit (COP 26) conference in December 2021. DISER advised that:

... the government has also committed to producing a long-term emissions reduction strategy and to have that out well ahead of COP26, which will be in Glasgow in November this year. The analysis and work is ongoing in the department, and that will absolutely provide advice to the government and therefore support a long-term emissions reduction strategy.¹¹²

2.79 The Centre for Policy Development considered what Australia’s attendance at COP 26 might require in terms of making future emissions reductions commitments, concluding that:

¹⁰⁸ Clean Energy Council, *Submission 414*, p. 2

¹⁰⁹ Centre for Policy Development, *Submission 549*, p. 2.

¹¹⁰ Australian Academy of Technology and Engineering, *Submission 512*, p. 2; WWF-Australia, *Submission 606*, p. 8.

¹¹¹ The Hon Scott Morrison MP, Prime Minister, *Address - National Press Club Barton ACT*, 1 February 2021, <https://www.pm.gov.au/media/address-national-press-club-barton-act>, viewed 4 June 2021.

¹¹² Ms Kushla Munro, Acting Deputy Secretary, Department of Industry, Science, Energy and Resources, *Committee Hansard*, 29 January 2021, pp. 5-6.

Australia will need to take concerted and ambitious action to ensure the competitive position of Australian firms and industry in a greening global economy, embrace opportunities inherent in the transition, and prepare for climate related risks transmitted to Australia through trade and capital markets. ... a successful global response will reduce the physical and economic risks of rising temperatures, but also increase the risk that significant Australian industries are left stranded.¹¹³

Emissions budgets

2.80 In order to meet the proposed 2050 target, Part 5, Division 1 of the Bill requires that the Minister set emissions budgets for a prescribed emissions budget period. Importantly, the Minister must ensure that the net emissions for an emissions budget period do not exceed the emissions budget for the corresponding period.¹¹⁴

2.81 In developing Australia's emissions reduction target to 2030, DISER advised that an emissions budget was calculated for the periods to 2020 and 2030. For the latter period, DISER submitted to the Committee that:

Australia considers its 2030 emissions budget as a ten year commitment from 2021 to 2030. The emissions budget is calculated by taking a straight line from 2020 to 2030, beginning from the 2020 target of 5 per cent below 2000 levels and finishing at 26 per cent and 28 per cent below 2005 levels in 2030.

Australia's progress is assessed as the difference in cumulative emissions between projected emissions and the emissions budget from 2021– 2030.¹¹⁵

2.82 Inquiry contributors were supportive of setting emissions budgets as part of the path to reaching net zero emissions.¹¹⁶ The UKCCC advised that:

The use of emissions budgets ... to provide stepping stones to the long-term target will help to ensure that near-term actions are taken that are consistent with the long-term goal. With decade or longer lifetimes of our vehicles, heating and cooling systems, and multi-decade lifetimes of our infrastructures,

¹¹³ Centre for Policy Development, *Submission 549*, p. 4.

¹¹⁴ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Part 5, Division 1.

¹¹⁵ Department of Industry, Science, Energy and Resources, *Submission 588*, Attachment D.

¹¹⁶ See for example: AgBioEn, *Submission 337*; Business Council for Sustainable Development Australia, *Submission 1953*, p. 3; Australian Academy of Technology and Engineering, *Submission 512*, p. 2; Institute for Energy Economics and Financial Analysis, *Submission 346*, p. 5.

the pathway to Net Zero must lay the groundwork now to enable a cost effective and well-managed transition.¹¹⁷

2.83 WWF-Australia commented on the importance of emissions budgets:

... to drive ambition, innovation and be guided by the best available and current science. The science clearly states that what we do in the next decade will be 'critical' to whether we can keep the worse effects of climate change averted. Setting regular 5 yearly budgets will help to keep us on track, to ensure we are being ambitious enough given the urgency of the climate emergency we are facing.¹¹⁸

2.84 Other participants like RIAA proposed that the five yearly emissions budgets proposed by the Bill are 'functionally in line with how New Zealand and other trading parties [*sic*] are managing their respective Emissions Budgets' and having two consecutive budgets would help with improving 'business planning, valuations and capital allocations'.¹¹⁹

2.85 The Centre for Policy Development also found that the Bills' five yearly budgets, rather than ten yearly, would:

...give the Australian people a regular independent appraisal of the carbon budget. If enacted in 2022, the proposed 5-year cycle of risk assessments and budgets fits well with the 5-year UNFCCC cycle of global ratcheting under the Paris Agreement, and ensures review cycles can take account of key global developments.¹²⁰

2.86 Business Council for Sustainable Development Australia highlighted the benefits of emissions budgets to business which would include:

- providing a strong emissions constraint within which there could be flexibility for policy settings to accommodate other priorities, such as industry growth and cost management;
- helping businesses innovate in products and services that are likely to become increasingly valuable by creating clear indicators of what would be needed; and

¹¹⁷ United Kingdom Climate Change Committee, *Submission 612*, p. 2.

¹¹⁸ WWF-Australia, *Submission 606*, p. 8.

¹¹⁹ Responsible Investment Association Australasia, *Submissions 528*, p. 4.

¹²⁰ Centre for Policy Development, *Submission 549*, p. 3.

- when creating forward visibility of Australia’s decarbonisation implications and needs, improving the opportunity for preparation.¹²¹

2.87 On the other hand, the Australian Industry Greenhouse Network argued that the Australian Government already seeks a large volume of reported data on emissions from the private and public sectors. As such, rather than implementing emissions budgets, it was of the view that:

A greater level of clarity regarding existing policies and measures is preferable to creating additional legislation. The Government produces an expansive data set on emissions, which reflects emissions reductions achieved through existing policies as well as voluntary activity.

These (and other) reporting tools cover what could be called emissions budgets, capturing a significant amount of information. It would be impractical to replace these mechanisms, however there may be value in making this information accessible in an aggregated format.¹²²

Setting emissions budgets

2.88 With the exception of the first budget period after the commencement of the Act, an emissions budget for each five year budget period is to be set five years in advance as per the dates set out in the Bill.¹²³

2.89 The Smart Energy Council considered that a shorter period for each emissions budget was necessary to enable more ambitious action to be considered within each period.¹²⁴ Contrastingly, Origin Energy Limited proposed that ‘a period longer than 5 years be considered, to align with normal financing horizons.’¹²⁵

2.90 AiG submitted that the emissions budget periods specified in the Bill would need to be reconfigured as:

These timelines no longer seem achievable given the Bills are now being considered at the end of 2020. Setup of the Commission and initial advice by February 2021 does not seem possible with adequate time for preparation and

¹²¹ Business Council for Sustainable Development Australia, *Submission 1953*, p. 3.

¹²² Australian Industry Greenhouse Network, *Submission 348*, p. 8.

¹²³ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 26(4).

¹²⁴ Smart Energy Council, *Submission 1932*, p. 9.

¹²⁵ Origin Energy Limited, *Submission 339*, p. 2.

consultation. A solution would be to introduce a relative timeline, for example "within 6 months of the commencement of this Act" or similar.¹²⁶

2.91 Inquiry contributors proposed a number of amendments to strengthen Clauses 26 to 29 dealing with how emissions budgets are set, including:

- a clause addressing the need for transparent and robust mechanisms for reporting on carbon budgets, closely aligned with relevant IPCC guidelines;¹²⁷ and
- a clause specifying that the emissions budgets must be consistent with progressively tracking towards the Target.¹²⁸

2.92 Clause 28 lists fourteen matters to which the CCC and Minister must have regard when determining how the emissions budget and the net zero target may be met. Inquiry contributors submitted amendments to improve the interpretation of this list, including:

- in subclause 28(2)(a)(ii), considering 'opportunities' as well as risks and uncertainties associated with the reduction of emissions and removal of greenhouse gasses;¹²⁹
- deleting subclause 28(2)(b)(iv), to remove the requirement that that budgets be ambitious on the basis that emissions budgets should be based on analysis of effectiveness, efficiency and fairness;¹³⁰
- in subclause 28(2)(b)(x), adding to the subclause requiring consideration of the 'likely impact on employers and workers' by adding the words 'and their communities and the adequacy of transition support measures';¹³¹ and
- in subclause 28(2)(b)(xi), in considering the 'likely impact on taxation', the phrase should also refer to 'get[ing] revenue from big polluters (rather than the general public)' and taxation 'to reduce resource and energy demand'.¹³²

¹²⁶ Australian Industry Greenhouse Network, *Submission 552*, p. 5.

¹²⁷ Royal Society of South Australia, *Submission 1947*, p. 2.

¹²⁸ ANU Climate Change Institute, *Submission 403*, p. 4.

¹²⁹ ANU Climate Change Institute, *Submission 403*, p. 4.

¹³⁰ Responsible Investment Association Australasia, *Submission 528*, p. 4.

¹³¹ Australian Council of Trade Unions, *Submission 401*, p. 2.

¹³² Western Adelaide Coastal Residents' Association, *Submission 331*, p. 3.

Emissions reduction plans

- 2.93 The Bill sets out the requirements for emissions reduction plans that the Minister must prepare, setting out the policies and strategies for meeting each emissions budget.¹³³
- 2.94 Various submissions highlighted the benefits of emissions reduction plans, including the Australasian Centre for Corporate Responsibility (ACCR), who found:
- In order to contribute Australia’s fair share to global carbon pollution reduction, short-term and detailed planning are needed in addition to a long-term, net-zero horizon. This need is addressed in the bills’ inclusion of five-year carbon budgets (in other words, hard limits on carbon pollution) and five-year plans to guide the mandated carbon pollution cuts.¹³⁴
- 2.95 RIAA considered that Clause 30(4)(a), which requires the Minister to obtain and consider the advice of state and territory ministers with responsibility for climate change or emissions reduction, could be strengthened if the Minister (or alternatively, the CCC) were to seek advice from a broader group of stakeholders including regulators and financial services businesses:
- ... that are both large investors in and lenders to the business and household sectors of Australia and whose investments made on behalf of beneficiaries shall be materially impacted by the emissions budgets set.¹³⁵
- 2.96 Clause 30(3)(a) of the Bill stipulates that an emissions reduction plan must include ‘sector-specific policies to reduce emissions and increase removals of greenhouse gases’.¹³⁶ In regard to this clause, the Smart Energy Council submitted that sectorally-based plans are ‘vital in all sectors including energy, transport, agriculture, industry and buildings’.¹³⁷
- 2.97 The Australian Academy of Technology and Engineering (ATSE) noted that:
- A multi-sectoral approach is important to ensure responsibility is shared, rather than focused on, or avoided by, any particular sector. The approach

¹³³ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Part 5, Division 2.

¹³⁴ Australasian Centre for Corporate Responsibility, *Submission 349*, p. 3.

¹³⁵ Responsible Investment Association Australasia, *Submission 528*, p. 5.

¹³⁶ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 30(3)(a).

¹³⁷ Smart Energy Council, *Submission 1932*, p. 9.

proposed in the Bills will also assist in standardising emissions inventory methodologies across sectors, which are variable at present.¹³⁸

A multi-sectoral approach will further enable the development of sub-sectoral targets, which will be helpful in ensuring national engagement. For example, within agriculture, the profile of emissions varies (CH₂, N₂O, CO₂) and a sub-sectoral approach would encourage the development of appropriate technologies for each of these profiles.¹³⁹

Monitoring, reporting and accountability

An independent Climate Change Commission (CCC)

- 2.98 The substantive Bill establishes a CCC which has a range of functions relating to the advice and preparation of emissions budgets, emissions reduction plans, national climate change risk assessments, national adaptation plans and low emissions technology statements. The key object of the Consequential and Transitional Provisions Bill (see below) would be to abolish the Australian Government's CCA, replacing it with the CCC.¹⁴⁰
- 2.99 The concept of an independent CCC found support from a number of inquiry participants,¹⁴¹ and many pointed out that the proposal shares commonalities with a similar model operating in the United Kingdom.¹⁴²
- 2.100 Submitters told the Committee about the benefits they believed that a CCC could bring Australia. The UKCCC, in its submission to the inquiry, advised that:

The creation of an independent Climate Change Commission (Part 6) will help to ensure that the 2050 target, emissions budgets, climate risk assessments as well as the policy to meet and respond to them are evidence-based. The

¹³⁸ Australian Academy of Technology and Engineering, *Submission 512*, p. 2.

¹³⁹ Australian Academy of Technology and Engineering, *Submission 512*, p. 2. See also: WWF-Australia, *Submission 606*, p. 10.

¹⁴⁰ Climate Change Authority, *Submission 593*, p. 1.

¹⁴¹ Wingecarribee Net Zero Emissions Inc, *Submission 491*, p. 3; Royal Society of South Australia, *Submission 1947*, p. 2; Australian Academy of Technology and Engineering, *Submission 512*, p. 4; UniSuper, *Submission 1941*, p. 3; WWF-Australia, *Submission 606*, p. 11; Australian Services Union, *Submission 199*, p. 1; Lord Mayor's Charitable Foundation, *Submission 522*, p. 2; Dr Margot Cunich, *Submission 641*, p. 1; and Dr Adrian Plaskitt, *Submission 1399*, p. 2.

¹⁴² See for example: Centre for Policy Development, *Submission 549*, p. 3; Australian Council of Social Services, *Submission 340*, p. 7.

monitoring requirement on the Commission ensures that the Government can be held to account on delivering progress towards the targets agreed by Parliament and that unforeseen circumstances can be responded to. Our experience is that clear independence, an evidence-led approach, and proper resourcing, sufficient to have internal specialist analytical capability, is key to fulfilling our advisory and monitoring roles effectively.¹⁴³

2.101 Planners Declare was of the view that:

Comprising experts and policy professionals from all sectors, such a body will provide integrity to the uptake of science and further advance the link between environmental and scientific inquiry to planning and construction legislation. The IAC [independent Climate Change Commission] will assist the de-politicisation of climate change, propelling commitment to science-led and evidence-based advancements in industry-specific outputs and ensuring accountability in all sectors.¹⁴⁴

2.102 The Centre for Policy Development was also enthusiastic about the proposal to establish a CCC, submitting to the Committee that:

This is a critically important function for an issue that will play out over decades. If a net zero commitment is the 'north star' upon which action can accelerate, then the regular carbon budgets and risk assessments would provide a clear compass for planning and decision making across government. Despite ambitious targets, it can be difficult for regulators, state governments, businesses, and the courts to know if climate mitigation action is 'enough'. The proposed Commission fills this gap with a quantitative carbon accounting framework.¹⁴⁵

2.103 Other stakeholders suggested that there are alternative approaches to the proposed CCC. For example, AiG suggested the Australian Government could encapsulate long term goals in authoritative policy statements, extending the current cycle of emissions reporting, or alternatively bolster the role of the existing CCA in providing such advice.¹⁴⁶

2.104 Inquiry stakeholders considered the impact of the Bill, particularly on the role and operation of the CCA. The CCA itself confirmed that:

¹⁴³ United Kingdom Climate Change Committee, *Submission 612*, p. 2.

¹⁴⁴ Planners Declare, *Submission 1955*, p. 4.

¹⁴⁵ Centre for Policy Development, *Submission 549*, p. 3.

¹⁴⁶ Australian Industry Group, *Submission 552*, pp. 3-4.

The Bills as presented would have the effect of ceasing the operations of the Climate Change Authority, through repeal of the Climate Change Act, and replacing it with a new Climate Change Commission.¹⁴⁷

2.105 The Committee considered the status of the CCA's current work program and was advised by Mr Brad Archer, Chief Executive Officer of the CCA that in the past two years, the agency had not been requested by the Minister to undertake any statutory reviews under its mandate, but had conducted a review of the ERF and two self-initiated research reports over that time period. In 2021, the agency would undertake a review into 'trade investment opportunities in a low-emissions world'.¹⁴⁸

2.106 Supporting the retention of the CCA, AiG was of the view that:

Independent advice could be provided by the existing Climate Change Authority, potentially with amendments to its legislation along the lines of the Bills. The CCA has produced high quality advice and assessment with consistently wide and deep consultation. On the other hand, recent governments have preferred more internal Departmental processes or temporary special-purpose reviews, rather than drawing on the CCA. Bolstering and re-centring [*sic*] the CCA, potentially with a requirement similar to the Bills' for a Ministerial response, could be an alternative to the new body envisaged in the Bills.¹⁴⁹

2.107 The National Farmers Federation was concerned that the proposed CCC would not be suitable in the Australian context:

While the framework may have worked in the UK, its applicability in the Australian context is questionable, and some elements of the Bill are undesirable and lacking pragmatism. Notably, Australian climate policy has not enjoyed policy bipartisanship which has underpinned success in the UK. Australian industry is also significantly export-exposed, including agriculture, and broader geographic challenges warrant further consideration of the details of the current Bill.¹⁵⁰

¹⁴⁷ Climate Change Commission, *Submission 593*, p. 1.

¹⁴⁸ Mr Brad Archer, Chief Executive Officer, Climate Change Authority, *Committee Hansard*, 24 March 2021, p. 4.

¹⁴⁹ Australian Industry Group, *Submission 552*, p. 3.

¹⁵⁰ National Farmers Federation, *Submission 567*, p. 2

Appointment and membership of CCC

2.108 Clause 37(1) of the Bill provides that the Minister appoints each member of the CCC (except the Chief Scientist) by written instrument.¹⁵¹ Some submitters held concerns about this manner of appointment. For example, Greenpeace Australia Pacific submitted that:

We consider that ministerial discretion in issues such as this, that affect company investment plans, can lead to incentives for undue influence on future Ministers. With that in mind, the selection of members of the Commission needs to be carried out by a panel of judicial officers, or professors with relevant expertise in climatology, law, economics and ecology. There should also be heavy restrictions on the Minister's power to remove members.¹⁵²

2.109 Clause 37(2) stipulates the experience and knowledge that the Minister should consider when appointing members to the CCC. Some submitters, whilst supportive of the CCC established by the Bills, proposed that in addition to the qualifications listed in the Clause, the CCC's membership should be more diverse, inclusive of persons representing or with knowledge of:

- biodiversity and the environment;¹⁵³
- land management;¹⁵⁴
- trade unions;¹⁵⁵
- innovation;¹⁵⁶
- mitigation or emissions reduction science;¹⁵⁷
- planning;¹⁵⁸
- international climate law;¹⁵⁹ and

¹⁵¹ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 37.

¹⁵² Greenpeace Australia Pacific, *Submission 330*, p. 3.

¹⁵³ See for example: Royal Society of South Australia, *Submission 1947*, p. 2; North Coast Environment Council, *Submission 1924*, p. 2.

¹⁵⁴ ACT Climate Change Commission, *Submission 642*, p. 4.

¹⁵⁵ Australian Council of Trade Unions, *Submission 401*, p. 2; Electrical Trades Union, *Submission 220*, p. 6.

¹⁵⁶ WWF-Australia, *Submission 606*, p. 10.

¹⁵⁷ ANU Climate Change Institute, *Submission 403*, p. 4

¹⁵⁸ Planning Institute of Australia, *Submission 453*, p. 1.

¹⁵⁹ Professor Rosemary Lyster, *Submission 350*, p. 3.

- species extinction.¹⁶⁰

2.110 Concerns were expressed by some submitters that steps needed to be taken to ensure that members of the CCC declared potential conflicts of interest, particularly past or present links to or employment in fossil fuels-related industries.¹⁶¹

2.111 ANUCCI also considered that the length of appointments for CCC members of up to ten years may be too long, stating that:

It is normal for such roles to be shorter than 10 years to allow for evolution of the committee and to limit possibilities for stacking and gridlocking. For example, terms of 2 to 3 years with an option for a single extension are regularly seen in such institutions.¹⁶²

Parliamentary Joint Committee on Climate Adaptation and Mitigation (PJCCAM)

2.112 Clause 48 of the Bill appoints a new Parliamentary Joint Committee on Climate Adaptation and Mitigation (PJCCAM), with functions relating to the CCC as set out in Clause 50, including approval of its members.¹⁶³

2.113 Some submissions were supportive of this arrangement. For example ClimateWorks submitted:

The creation of an independent climate change commission, requirements for the skills needed on the commission and a cross-party approach to approval of commissioners would create confidence and trust in the nature of the advice to Government.¹⁶⁴

2.114 WWF-Australia considered the benefits that arose from the establishment of other parliamentary joint committees:

The examples provided by parliamentary committees with oversight of Commonwealth statutory bodies like the Joint Committee of Public Accounts and Audit, the Joint Committee on the Australian Commission for Law Enforcement Integrity and the Parliamentary Joint Committee on Intelligence

¹⁶⁰ Just Transitions South Gippsland, *Submission 423*, p. 4.

¹⁶¹ See for example: Western Adelaide Residents' Association, *Submission 391*, p. 3; Smart Energy Council, *Submission 1932*, p. 9; Geelong Sustainability, *Submission 268*, p. 4; Western Adelaide Coastal Residents' Association, *Submission 331*, p. 3.

¹⁶² ANU Climate Change Institute, *Submission 403*, p. 5.

¹⁶³ Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 48.

¹⁶⁴ ClimateWorks, *Submission 1957*, p. 4.

and Security demonstrate the importance and value of parliamentary oversight to:

- prevent the risks of political interference or insufficient action; and
- achieve better, well integrated and more timely outcomes.¹⁶⁵

2.115 The National Farmers Federation did not support the creation of the new PJCCAM on the basis that:

... the relevant Minister should retain responsibility for ministerial appointments, administrative functioning and expenses, and should not cede responsibility of such functions to a Joint Parliamentary Committee. For example, the Federal Cabinet is responsible for the appointment of High Court judges, and not referred to Parliament itself — there is no rationale for the proposal and there does not appear to be an Australian precedent for this Act. Decision-making should be consistent with policy priorities of elected Governments and appears to be precedential in the Australian parliamentary system. Checks and balances are already in place through existing review mechanisms (Senate estimates) and elections.¹⁶⁶

Climate risk reporting by Commonwealth entities

2.116 In addition to facilitating the replacement of the CCA by the CCC, the Consequential and Transitional Provisions Bill would amend the *Public Governance Performance and Accountability Act 2013* (PGPA Act) to insert a provision (a new subsection 19A) requiring that the accountable authorities of Commonwealth entities must consider and report on climate change risks when performing their duties or exercising their powers.¹⁶⁷

2.117 The Law Council of Australia expressed concern that this amendment may have a disproportionate impact across the Commonwealth:

... a broad range of people and entities is captured by the definitions for ‘accountable authority’ and ‘Commonwealth entity’ under the Accountability Act. This means that the obligation proposed by the new section 19A will be expansive in application. For example, it will extend to the Director of the Australian Institute of Criminology when performing his or her functions relating to the conduct and publication of criminological research in Australia,

¹⁶⁵ WWF-Australia, *Submission 606*, p. 10.

¹⁶⁶ National Farmers Federation, *Submission 567*, p. 2.

¹⁶⁷ Climate Change (National Framework for Adaptation and Mitigation) (Consequential and Transitional Provisions) Bill 2020.

and to the Clerk of the Senate when performing his or her administrative functions for the Department of the Senate.¹⁶⁸

2.118 As an alternative, the Law Council proposed that:

... the Committee may wish to consider narrowing the categories of people and entities to whom the new section 19A applies. Reference may be had to the Climate Change Act 2017 (Vic) (Victorian Act), in which the equivalent obligation to the obligation proposed by section 22 of the Consequential Bill is limited, and applies only to specific decisions or actions made under a list of six Acts. These Acts all provide for functions which have clear relevance to the objects of environmental or land management and/or protection and, by extension, climate change-related risk or impacts.¹⁶⁹

2.119 An alternative proposed by the Law Council, should the Bills pass the Parliament, was that:

... the proposed Climate Change Commission could provide education and training to applicable Commonwealth entities and their accountable authorities. This would promote proper understanding and meaningful application of the duty, noting that it will, however, come with its own administrative burden and cost.¹⁷⁰

Fossil fuel export emissions

2.120 Clause 25 of the substantive Bill requires that the proposed CCC must report to the Minister on the effect of Australia's fossil fuel export emissions in meeting the objects of the Bill before the one year anniversary of the commencement of this Act; and at the end of each two year period after that anniversary.

2.121 The ACTU submitted that this requirement could be problematic, advising that:

Requiring the reporting of end-use emissions in other countries from exports may be problematic for 2 reasons: 1) it is beyond what is required under the Paris Agreement and potentially leads to double counting of emissions in Australia and internationally, and 2) it assumes emissions from combustion

¹⁶⁸ Law Council of Australia, *Submission 1621.1*, p. 3.

¹⁶⁹ Law Council of Australia, *Submission 1621.1*, p. 3.

¹⁷⁰ Law Council of Australia, *Submission 1621.1*, p. 4.

internationally are known and accounted for by Australian regulators, which is unlikely to be the case.¹⁷¹

Low emissions technology statement

2.122 Clause 70 of the substantive Bill requires that the CCC prepare and provide the Minister with an annual report which must include a ‘low emissions technology statement’. That statement is to incorporate a summary of progress towards the Commonwealth’s defined technology goals; an update of global technological developments; and reviews of the investment portfolios and performance of two relevant Australian Government entities, the Clean Energy Finance Corporation and the Australian Renewable Energy Agency.¹⁷²

2.123 Inquiry contributors were supportive of this requirement,¹⁷³ noting that an annual low emissions technology statement is already a subset of the Australian Government’s existing Technology Investment Roadmap policy framework.¹⁷⁴ The Government has committed to table these annual statements in Parliament.¹⁷⁵ Ms Zali Steggall, Federal Member for Warringah and sponsor of the Bills, noted in her submission to the inquiry that the statement:

... will provide feedback to the public on progress towards developing these technologies. These statements will be part of the Commission’s reporting requirements which also includes ... progress targets and adaptation plan implementation.¹⁷⁶

2.124 A number of submitters pointed to the benefits that a low emissions technology statement could deliver. Verdia Pty Ltd submitted to the Committee that:

¹⁷¹ Australian Council of Trade Unions, *Submission 401*, p. 2.

¹⁷² Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, Clause 70(d).

¹⁷³ See for example: Mornington Peninsula Shire, *Submission 387*, p. 2.

¹⁷⁴ See for example, Ms Zali Steggall, *Submission 1964*, p. 6; Australian Conservation Foundation, *Submission 433*, p. 7; Australian Industry Group, *Submission 552*, p. 3.

¹⁷⁵ Department of Industry, Science, Energy and Resources, *Technology Investment Roadmap: First Low Emissions Technology Statement 2020*, Minister’s Foreword, p. 2.

¹⁷⁶ Ms Zali Steggall, *Submission 1964*, p. 6.

The assessment would help publicise existing and potential technologies that can help reduce emissions, as well as demonstrate the economics of substituting low-emission for high emission technologies.¹⁷⁷

2.125 The Smart Energy Council was of the view that assessments via the statement could unlock Australia's:

... enormous potential to generate substantial levels of renewable energy and develop into an energy exporting superpower and any means by which to fast track multi-GW scale renewables plants ... with capacity to export electricity must be considered.¹⁷⁸

2.126 ATSE submitted to the Committee that while it supports the use of routine technology readiness assessments:

... the integration of the measures detailed by the Bill with the Australian Government's National Technology Roadmap for Low Emissions Technologies will not constitute a sufficient technology readiness assessment. Australia is far from technology ready, as our national emissions performance demonstrates, but we have an excellent opportunity to use regular technology assessments to assess the areas of greatest need and opportunity. This should be a co-ordinated, multi-sectoral and national approach, much broader than the five areas nominated by the National Technology Roadmap.¹⁷⁹

Committee comment

Object and guiding principles

2.127 The Committee supports clause 3(1) of the substantive Bill, recognising that a changing climate presents a significant challenge to Australia, and agrees that there is a need for Australia to adapt to meet its international commitments and for the benefit of its people, environment and economy.

2.128 The Committee notes commentary from certain inquiry stakeholders that the international consensus to limit global warming to well below 2°C and pursuing a limit of 1.5°C above pre-industrial levels may already or soon be superseded. In the Committee's view, Australia should continue to support, contribute to and work towards internationally agreed goals and meet its own commitments to limit global greenhouse gases. Only a global solution

¹⁷⁷ Verdia Pty Ltd, *Submission 539*, p. 1.

¹⁷⁸ Smart Energy Council, *Submission 1932*, p. 6.

¹⁷⁹ Australian Academy of Technology and Engineering, *Submissions 512*, p. 3.

will be effective in limiting global warming. All countries have a role to play and Australia should continue to play its part by supporting and working towards internationally agreed goals.

- 2.129 The Committee believes that the guiding principles in the Bill express some key concepts that could usefully be taken into account in future Australian Government climate change policy.
- 2.130 Clause 11(2) lists a number of Australian Government agencies which produce research and reports that are to guide decisions made under the Bill. The Committee considers that the work and efforts of a broad range of experts and stakeholders, including the non-government and academic sectors, should also be considered in framing climate change-related decisions and policy in Australia. This is an important principle that should form part of the basis for any Australian Government climate policy.
- 2.131 Clause 14 outlines the principle of fair employment transition. The Committee notes that many submissions highlighted the importance of considering the impact on industries and workers of transitioning to a less carbon-intensive economy. This is an important principle that should form part of the basis for any Australian Government climate policy.

Risk assessments and adaptation plans

- 2.132 The Committee welcomes the Australian Government's commitment to a new adaptation strategy and the development of a long term emissions reduction strategy. The Committee considers that the Australian Government should develop a clear climate change risk framework that is updated on a regular basis to ensure that stakeholders are informed of, and can mitigate, relevant risks. The framework should be inclusive of the work already being undertaken by the Commonwealth and states and territories. Key principles such as those espoused in the substantive Bill at Clause 18 should form part of the Commonwealth's risk assessment.
- 2.133 The Committee is pleased to note that some sectors are alive to the risks posed by climate change and have planned or are considering mitigation frameworks. The level of climate risk—that is, the degree to which the world emits emissions—impacts sectors of the Australian economy differently. It is important to understand how changes in the globe's climate impact specific sectors of the economy, and it is also important to have a clear understanding of those sectors that produce significant greenhouse gas emissions. If Australia is to successfully meet its international emission reduction commitments while maintaining a strong economy with high

standards of living, risks associated with both the impact of global climate change and the contribution to climate change must be managed and mitigated.

- 2.134 The Committee considers that the Australian Government, through the upcoming refresh of its National Climate Resilience and Adaptation Strategy, should ensure that a robust mechanism to measure Australia's progress against this framework is developed, implemented and reported.

An emissions reduction target

- 2.135 Australia has committed to reducing its carbon emissions to between 26% and 28% on 2005 levels by 2030. Evidence presented to the Committee by DISER suggests that Australia is on track to exceed this ambition. This is an achievement that should be acknowledged.
- 2.136 The Committee acknowledges that many of Australia's key trading partners, including the United Kingdom, United States, Japan and New Zealand have determined to achieve net zero emissions by 2050, and it notes that in the case of New Zealand its net-zero target excludes biogenic methane emissions from agriculture which account for approximately half of New Zealand's net emissions. The Committee also notes that China, Australia's largest trading partner, has undertaken to reach net zero emissions by 2060 and India has recently said that while it supports a global commitment to net zero it will not commit to a national level net zero target due to the costs involved.¹⁸⁰
- 2.137 While (as noted above) Australia has already committed to achieving net zero emissions as soon as possible, and preferably by 2050, the Bill proposes a specific date by which Australia is to achieve net zero emissions—that is, by 2050. The Committee was advised that work to consider Australia's emissions reduction pathway beyond 2030 is ongoing, in line with the Government's net-zero objective.
- 2.138 Any future modelling of emissions reduction targets should consider the impact those targets may have on a range of economic and social scenarios. In particular, consideration should be given to how the economic sectors and workers that will be most impacted by the transition to a low-emissions economy can be accommodated, re-tooled and equipped to thrive.

¹⁸⁰ Matt McGrath, 'Climate change: Net zero targets are "pie in the sky"', *BBC News*, 1 April 2021, <https://www.bbc.com/news/science-environment-56596200>, viewed 24 June 2021.

- 2.139 While it is important that Australia reach the milestone of net zero, it is equally important that the Australian Government determine its own responsible, evidence-based, technology-neutral and equitable pathway to achieve that milestone. The protection of Australian jobs and economic growth should be prerequisites to any emissions reduction target.
- 2.140 The Committee believes that the Australian Government should determine the emissions reduction proposition that it wishes to present at the COP 26 conference in December 2021. The Australian Government should either seek to clarify when it will achieve net zero emissions, or articulate what it can achieve by 2050. In either case, the chosen pathway demonstrating how the target will be achieved should be defined to provide the Australian public, business and workers with greater certainty.

Emissions budgets

- 2.141 In the Committee's view, the setting of emissions budgets and emissions reduction plans is consistent with accepted international best practice. Such mechanisms provide useful emissions reduction progress indicators as well as environmental, business and community certainty.
- 2.142 The Committee understands, from the evidence presented by DISER, that emissions budgets have been calculated and are in place for Australia's existing emissions targets to 2030. The Committee is therefore confident that the Australian Government would similarly institute related emissions budget targets to meet its emissions reduction goals post-2030, once these are finalised.

Monitoring, reporting and accountability

Climate Change Commission

- 2.143 The Committee is of the view that the establishment of a Climate Change Commission as required by the Bill is unnecessary. While the Committee appreciates that the proposal draws from the United Kingdom model and could encompass a variety of functions, it considers that there are risks to steering formal policy decisions away from the Parliament and the Executive. In the Committee's view, it is the domain of elected representatives within the Parliament and the Executive to determine and seek mandates from the Australian public for Australian climate policy. The Committee does not support measures that risk weakening the ability of the Australian public to pass judgement on alternative climate policies at

elections or risk diluting the decision-making responsibility of the Parliament or Executive.

- 2.144 The Bill seeks to ensure that the Australian Government has access to depoliticised, independent and considered scientific and expert advice. In the Committee's view, functions and expertise on matters such as risk assessment, climate adaptation, emissions reduction and emissions budgets, already exist within the bureaucracy through agencies including DISER, DAWE and CCA.
- 2.145 As such, the creation of an independent body to provide advice could duplicate existing roles and resources or at worst, lead to conflicting advice. Moreover, consideration needs to be given to the disruptions and costs of replacing an agency that is currently undertaking significant and valuable work, the CCA, in order to establish a new one with broadly similar functions.
- 2.146 Rather than endorsing establishment of the CCC as proposed in the substantive Bill, the Committee acknowledges that the Australian Government's existing emissions reduction monitoring and reporting processes are world-leading and in line with international and domestic commitments. Further, the Committee considers it important that the Australian Government remains world-leading by embracing opportunities for continuous improvement.
- 2.147 In this respect, the Committee is cognisant of the evidence it received suggesting that the capacity of the CCA to provide expert advice and assessments to government may not be sufficiently utilised at present. Rather than seek to replace the CCA with the CCC, it may be more efficient to consider how the CCA could be better utilised and more fully engaged in monitoring Australia's climate performance and providing advice to support the Government and its responsible agencies in developing and implementing relevant policies.

Transparency and reporting

- 2.148 The Committee recognises best-practice reporting and accountability practiced by the Australian Government, and supports ongoing transparency by way of quarterly reporting on emissions, annual forecasts and annual low emissions technology statements. The Committee also believes any commitment to future targets should be accompanied by an explanation on how such targets would be achieved.

2.149 The Committee further notes that the presentation of the Australian Government's first low emissions technology statement in 2020 represented a significant step in the development of Australia's Technology Investment Roadmap. The Australian Government should ensure that future iterations of the Statement continue to underpin a technology neutral and evidence-based approach within which new and emerging technologies—including emerging nuclear technologies—can be objectively assessed.

Climate risk reporting by Commonwealth entities

2.150 The Committee is concerned that that the consequential Bill would not only abolish the existing CCA, but would also place additional obligations on all Commonwealth entities. In the Committee's view the proposed amendment to the PGPA Act is potentially problematic because it would create an additional burden upon all Commonwealth agencies, and one which may not be appropriate or necessary for all agencies.

Recommendation

2.151 In summary, the Committee recognises that the climate is changing and action is required to decarbonise Australia's economy and meet Australia's international obligations. The Committee is also cognisant of the need for climate action to be achievable, evidence-based, technology neutral and accountable. The Committee regards a credible plan setting out how decarbonisation will be achieved, while protecting Australian jobs and economic growth, as an essential prerequisite to any emissions reduction target.

2.152 The Committee notes that the Australian Government has committed to achieving net zero emissions as soon as possible, and preferably before 2050, and that DISER is undertaking ongoing work on how long term emissions reductions can be met as part of the forthcoming long term emissions reduction strategy.

2.153 The Committee considers that Australia's climate objectives can and should be achieved using existing climate policy architecture, without any weakening of the ability of the Australian public to pass judgement on alternative climate policies at elections or risk diluting the decision-making responsibility of the Parliament or the Executive. Nevertheless, the Committee also believes future climate policy should draw on some of the positive ideas in the Bills, as set out in this report.

Recommendation 1

2.154 The Committee recommends that the Bills not be passed.

Ted O'Brien MP

Chair

23 June 2021

Additional comments by Deputy Chair Mr Josh Wilson MP and Mr Josh Burns MP

- 1.1 The private member's Bills under consideration by the Committee seek to address a damaging policy vacuum that has been created and maintained by the Abbott/Turnbull/Morrison Government, namely the absence of a plan to address climate change by reducing greenhouse gas emissions in line with the science, in step with the international community, and in response to the steepening environmental and economic impacts of inaction.
- 1.2 This vacuum commenced with the election of the Coalition Government in 2013. Australia previously had an effective economy-wide framework for tackling climate change and supporting the necessary energy-sector transition—the Clean Energy Future scheme—but this was irrationally disassembled by the 'slogans not solutions' Abbott Government, making Australia the only jurisdiction in the world to adopt and then abandon a systemic approach to decarbonisation.
- 1.3 While the structure and measures outlined in the Member for Warringah's Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 and Climate Change (National Framework for Adaptation and Mitigation) (Consequential and Transitional Provisions) Bill 2020 are not precisely the way Labor in government would tackle this critical policy challenge, Labor members of the Committee nevertheless recognise that it presents a considered proposal and should be debated in the Australian Parliament.

- 1.4 To some considerable degree the Bills follow the United Kingdom’s approach of legislating an emissions reduction target for 2050 (e.g. net zero emissions), establishing an emissions budget framework to guide progress within five-year periods, and creating an independent Climate Change Commission to advise on science and policy, and to monitor and report on outcomes.
- 1.5 Labor members support the need for the Australian Government to adopt a commitment of achieving net zero emissions by 2050 (NZE50). As made plain at the recent G7+ meeting, Australia is presently marooned as a distant outlier on this question. Indeed, the federal Coalition Government stubbornly represents a singularly out-of-touch and out-of-date position, isolated between international peers on the one hand, and state and territory governments on the other. What’s more, every significant business and industry stakeholder group, from the National Farmers Federation to the Business Council of Australia, supports a commitment to NZE50.
- 1.6 That extraordinarily strong consensus was reflected in submissions to the inquiry.
- 1.7 Not surprisingly, submissions from stakeholders with scientific and economic expertise in the areas of climate and energy policy were virtually unanimous in their call for the Government to make a commitment to NZE50 and to adopt some kind of framework by which that can be staged, even though many submissions suggested ways in which the Bills could be improved.
- 1.8 For example, the Climate Council noted:
- The rest of the World is moving. Australia's major trading partners - China, Japan, South Korea, the UK, and the European Union - have set net zero emission targets, and the United States of America is primed.¹
- 1.9 And that:
- Australia is unprepared for worsening extreme climate events and the Federal Government is unwilling to admit that much more mitigation action is needed. Australia's climate record is woefully inadequate and ranks among the worst of G20 nations (Climate Transparency 2020).²

¹ Climate Council of Australia, *Submission 391*, p. 3.

² Climate Council of Australia, *Submission 391*, p. 4.

- 1.10 In terms of 'peak body' submissions from the business sector, the evidence provided by the Australian Industry Group is instructive:

We regard the importance of enhancing our action on climate change as very high. Climate change is a substantial threat to Australia, to our economy, to the operations of our members, and of course to the wider community. Equally, successful action on climate change can be, if we match it well, a big opportunity, including to re-establish a competitive advantage in energy, which has historically been an important part of Australia's economy.³

- 1.11 This was a consistent theme in evidence to the inquiry. Its elements are: (1) action on climate change is vital and Australia is not doing enough; (2) there are clear economic and trade benefits of being a proactive and cooperative part of decarbonisation through the global energy transition; (3) further inaction puts Australia at serious risk, and the longer we delay the more the costs and risks grow; and (4) there is a huge opportunity for Australia to benefit from our advantages in innovation, energy minerals, synergistic industries, and high-quality renewable energy resources of every kind.
- 1.12 Any consideration of the evidence to this inquiry will drive home the realisation that the Morrison Government's policy paralysis and wilful blindness is consigning Australian households and businesses to harm, costs, and risk.
- 1.13 For all those reasons, Labor members supported six alternative recommendations to the Chair's draft report. It is disappointing that these recommendations, which went to sensible further steps like a full assessment of the costs of climate impacts across sectors and that the Bills be allowed to be debated in Parliament, were voted down by Coalition members of the Committee. Labor members abstained from a seventh alternative recommendation which called for the Bills under consideration to be passed, doing so on the basis that the Bills shouldn't be prejudged en bloc but rather should be debated in Parliament and subject to the usual scrutiny by individual members and party processes.
- 1.14 It is worth noting that in the course of the report consideration the Liberal Member for North Sydney, Mr Trent Zimmerman, was successful in moving the following amendment:

The Committee notes that the Australian Government has committed to achieving net zero emissions as soon as possible, and preferably before 2050,

³ Mr Tennant Reed, Climate, Energy and Environment Policy, Australian Industry Group, *Committee Hansard*, 29 January 2021, p. 36.

and that DISER is undertaking ongoing work on how long term emissions reductions can be met as part of the forthcoming long term emissions reduction strategy.

- 1.15 For the sake of accuracy, the Labor Member for Macnamara, Mr Josh Burns, moved to replace 'Australian Government' with 'Prime Minister', as there has been no decision taken by the Morrison Government in relation to what is described as a 'commitment'. Indeed, we note that since the return of Mr Barnaby Joyce to the leadership of the National Party, the minor Coalition partner, has made it clear that no such agreement of Government on this position has been reached.
- 1.16 The reality is that the Morrison Government's only present commitment is to reach net zero by the second half of the 21st century—in other words, by 2099. The assertion that there is a commitment to achieve net zero 'as soon as possible, and preferably before 2050' is yet another example of hollow, tricky, political wordplay. While the so-called 'Modern' Liberals and the climate-denialist Nationals argue over a meaningless non-commitment, the Morrison Government has squibbed the real task of responding to climate change and taking advantage of Australia's potential to become a renewable energy superpower.
- 1.17 Finally, Labor members note that to a large extent the policies, programs, and supporting agencies referenced during the inquiry as being effective in the twin task of decreasing emissions and increasing renewable energy and energy efficiency were of course established by the previous Federal Labor Government.
- 1.18 These include the Clean Energy Finance Corporation, the Australian Renewable Energy Agency, the Clean Energy Regulator, the Climate Change Authority, the Renewable Energy Target (RET), and so on. All of these programs and agencies have been variously attacked, deformed, or defunded during the course of the Abbott/Turnbull/Morrison Government, and some, like the RET, have been abandoned altogether.
- 1.19 The bottom line is that under this third-term Coalition Government Australia continues to suffer by having neither a national energy policy nor a national commitment to, and framework for, achieving the greenhouse gas emission reductions necessary to protect Australia from the acutely harmful environmental, economic, and social impacts of climate change.
- 1.20 Labor members of the Committee acknowledge the work undertaken by the Member for Warringah and her staff in formulating the Bills which were the subject of the inquiry, and we thank the thousands of Australians who took

the time to make their views known, the vast majority of whom called on Parliament and Government to do better in addressing the most pressing and all-encompassing challenge of our time.

Josh Wilson MP
Deputy Chair

Josh Burns MP
Member for Macnamara

Additional comments by Mr Trent Zimmerman MP and Mrs Bridget Archer MP

- 1.1 Climate change is unquestionably one of the great threats facing the world in the 21st Century. It is a global problem requiring global action from the international community. The consequences of failing to address climate change would be dire for humankind, peaceful international co-operation, our economic and social structures and for the planet's biodiversity.
- 1.2 Australia has an important role to play as part of global efforts to reduce emissions. Action alone by Australia, or any other nation with a similar medium-sized economy, cannot singularly solve the problem of climate change. Nonetheless, Australia can play a leading role as a respected voice in the international community in pressing for science based and technology driven solutions by the global community. While we need the world's largest emitters to act responsibly – particularly nations such as the United States, China and India – global success is also dependent on every other nation reducing their own emissions as part of the common effort.
- 1.3 In Australia there has been growing support within the community for effective climate change policies. This has been mirrored by the policies being developed and implemented by governments at every level, the private sector, communities and by individuals. This reflects the fact that success requires a true partnership across the economy and society.
- 1.4 At the federal level this has seen the Government, through the Paris Agreement, commit to both the medium-term 2030 target of reducing

emissions by 26 to 28 per cent from the baseline year of 2005 and the longer term goal of reaching net zero emissions, preferably by 2050.

- 1.5 These commitments are being implemented through a range of mechanisms including the \$18 billion low emissions technology roadmap and through the work of agencies like the Clean Energy Finance Corporation (CEFC), the Australian Renewable Energy Agency (ARENA) and the CSIRO.
- 1.6 They are being supported by the actions of state governments which control important policy levers in areas like energy, planning and transport.
- 1.7 The transformation of many areas of our economy is well underway. For example, the electricity sector, which is the largest source of domestic emissions, is undergoing profound and positive change through the deployment of renewables across the country – from household solar to the large private and government investments in grid scale wind and solar. These are being supported by low emissions dispatchable power projects such as the expansion of Snowy Hydro, the Tasmanian Battery of the Nation project and the deployment of large-scale batteries.
- 1.8 Australia is also leading the development of new technologies – ranging from hydrogen to the work of CSIRO to reduce livestock emissions.
- 1.9 While there is strong support within the community for action to reduce our emissions, it is also true that Australian politics and the community has, over the last 15 years, been divided at various points on the extent of action required and the best policy approach to achieve emissions reductions.
- 1.10 This has driven the view by some that climate change policy needs to be removed from or lifted above the political field. While the goals of those seeking this outcome are well intentioned, the consequence of this approach would erode the rigour of our democracy and the values it encompasses. As a community, we should never be afraid of the consequences of vigorous policy debate or hope some issues are removed from political debate, particularly on an issue of such importance. Fundamentally, it is the democratic marketplace of ideas and views, tested every three years at elections nationally, that is the foundation of a free and open democracy.
- 1.11 We support the recommendation of the Committee to not support these Bills because they overstep the mark in trying to limit the normal capacity of the elected government of the day to develop and determine policy on how Australia can best reduce its emissions.
- 1.12 It is also important to understand what these Bills entail. The Bills seek to legislate a target of net zero emissions by 2050. They also set up a new

bureaucratic architecture for emissions reductions through the creation of a Climate Change Commission which is entrusted with responsibility for developing emissions reduction plans, emissions budgets, adaptation plans and risk assessments. While the relevant minister retains decision making powers, the Commission supplants the normal policy development process of government and the departments of state. The fundamental limitation of this approach is that it builds in the potential for conflict between governments elected with mandates and accountability to voters for particular approaches to climate change and an unelected Commission which operates separately from these considerations.

- 1.13 There is an important role within the policy development framework of government for independent advice, particularly on scientific, environmental, technological, and economic considerations, policy options and analysis. Under the existing architecture, this includes the advice received by government from multiple sources including the professional public service, the Chief Scientist, the CSIRO, the Bureau of Meteorology, the Climate Change Authority and non-government institutions and organisations.
- 1.14 The Bills do not seek to establish a head of power or a legislative basis for the Commonwealth to deliver the target of net zero emissions in an area of shared Commonwealth-State responsibility.
- 1.15 The Bills also do not, and cannot unless advanced by the Government, guarantee funding for the operations of the Climate Change Commission. In this sense, without the support of Government, the capacity to achieve their legislative goals is seriously hindered.
- 1.16 The Bills are not a plan to reach net zero emissions. This is not a criticism of the intent of the Bills but it is important to recognise that they, of themselves, do not chart a policy agenda for achieving net zero emissions.
- 1.17 The Bills seek to legislate certain reporting and policy development processes. Many of these form part of the existing approach of government. For example, the Australian Government has already adopted: an emissions budget approach to achieving its Paris Agreement target for the 2020-2030 period; the development of adaptation plans; the implementation of a technology road map; and is currently developing a long-term emissions reduction plan in the lead up to COP 26 in November 2021.
- 1.18 The Government also implements what is world best practice in the reporting of Australia's emissions profile, which was recognised by many submitters to this inquiry.

- 1.19 The Bills do however highlight the value of regularising many of these important steps in policy development to reduce emissions and achieve net zero emissions.
- 1.20 These Bills represent one approach, but it is not the only pathway for achieving Australia's climate change targets and goals.
- 1.21 This was highlighted in the submission to this inquiry from the Australian Industry Group:

We emphasise that there are other ways of achieving the same features and objectives of the Bills..... For instance: a national long-term emissions goal could be reflected in authoritative policy statements, rather than legislation. There is a spectrum of certainty that policies and legislation can provide. A policy statement could provide comparable guidance and confidence to agencies and industry, as long as there was sufficient clarity from government and corresponding commitments from the opposition. Australia's Long Term Strategy for emissions reduction, expected in 2021, would be one opportunity to articulate this.¹

Concluding Comments

- 1.22 Australia must continue its path to a net zero economy as part of global action to address climate change. This transformation is not only the right thing to do but will present significant new economic opportunities for Australia through the deployment of new technology which capitalises on the advantages our nation possesses in renewable and other clean energy production; and the potential of low emissions services and manufacturing.
- 1.23 The Australian Government is committed to releasing a long-term emissions reduction strategy in the lead up to COP 26 which is being held in November 2021. This strategy should:
- Include a national commitment to achieving net zero emissions by 2050. The Government should consider the best ways to provide certainty to business and the community in relation to this commitment.
 - Confirm the Government will continue to develop emissions budgets for the Australian economy for the period to 2050. We recommend ten-year emissions budgets with five yearly reviews.
 - Include a commitment to the development of regularised adaptation and resilience plans and risk assessments for the impact of climate change.

¹ Australian Industry Group, Submission 552, p. 3.

- Commit the Government to regularly review and update its low emissions technology plans and emissions reduction plans consistent with delivering the target of net zero emissions by 2050.

1.24 The Government should increase resourcing and enhance the role of the existing Climate Change Authority as a source of advice on emissions reduction strategies for key sectors of the economy.

Trent Zimmerman MP
Member for North Sydney

Bridget Archer MP
Member for Bass

Dissenting report by Ms Zali Steggall OAM MP

Executive Summary

- 1.1 The Standing Committee on the Environment and Energy was tasked with inquiring into the Climate Change (Adaptation and Mitigation) Bill 2020 (the Substantive Bill) and Climate Change (Adaptation and Mitigation) (Consequential and Transitional Provisions) Bill 2020 (the Secondary Bill).
- 1.2 The Committee received over 6500 submissions and had three public hearing days where 49 witnesses appeared. As a part of the process the Committee reports on the inquiry to the Australian Parliament.
- 1.3 It was unfortunately not possible to reach bipartisan agreement on the Chair's Final Report (Main Report) and recommendations flowing from the inquiry. Despite the evidence received being overwhelmingly in support of the Bills, the Government members of the Committee refused to incorporate the full extent of that support in the Main Report or support recommendations to progress the Bills or development of Australian climate policy.
- 1.4 Prime Minister Scott Morrison has on a number of occasions stated that Australia would not be told by the international community what its climate policy should be - that Australian policy would be set in Australia. Yet here was the opportunity to listen to a broad section of Australian civic society, environmental and business groups, industry, unions and health on what is needed by way of policy to address climate change impacts in Australia. But still the Government Members of the Committee were not willing to listen and acknowledge that better policy is needed in Australia.

- 1.5 The Main Report does not accurately reflect the broad support shown in submissions and by witnesses at the public hearings for the Bills and fails to make recommendations to benefit this policy area. It overlooks the many voices, in particular from the business community, calling for a cohesive and co-ordinated national framework and clear legislated commitment to net zero by 2050. Predictably, the Main Report argues that Australia's current approach is adequate, that the Government will 'meet and exceed' its commitment.
- 1.6 As the evidence bore out throughout the inquiry, that is simply not the case. Further, current efforts are insufficient to meet Australia's commitment under the Paris Agreement to pursue efforts to keep warming to 1.5°C. It is clear that these Bills are needed to ensure a fully coordinated response to the many challenges climate change impacts will have across all sectors of Australian society and economy.
- 1.7 Importantly, the evidence clearly demonstrated that climate change impacts are being felt now across many sectors, from business to health, farming to industry and planning. The lack of clear policy and coordination between risk assessment and mitigation action is creating uncertainty and increased costs. This is not a problem for the future but one impacting Australian business and lives now and requires improved policy settings and framework. The overwhelming majority of submissions and witnesses submitted that the Climate Change Bills propose an effective national framework that Australia needs to improve its policy settings and coordinate its disparate climate policies.
- 1.8 The core elements of the Bills, including the objects, guiding principles, a legislated net zero target by 2050, five yearly emissions budgets, National Climate Change Risk Assessments and National Adaptation Plans, to help Australia prepare for and respond to the consequences of global warming, were clearly supported by the evidence, as was the need for a strong independent expert Commission to advise the Government. Much of the evidence presented to the inquiry was in support, however as the Main Report detailed, there was compelling evidence that the Bills could be improved with amendments. Some amendments will be adopted, and the Bills will be re-introduced at a later date.
- 1.9 Finally, a series of recommendations based on evidence provided to the Committee were proposed to progress this policy area in a bipartisan way. Unfortunately, whilst supported by the opposition members of the Committee (other than the final recommendation to which opposition

members abstained), Government Members of the Committee did not support these recommendations. Proposed recommendations were:

1.10 The Committee received overwhelming evidence, particularly from community members, that urged an end to the political impasse on climate change and for all sides to work together. Climate change is an existential threat and as such should be a multi-partisan matter. Therefore, the Government should establish a multi-partisan Joint Select Committee on Climate Change to review matters of climate policy and to offer members of all sides an opportunity to work together to find common solutions to the challenge.

- **Recommendation 1: Establish a Joint Select Committee on Climate Change.**

1.11 Much of the discussion during the inquiry was around the role and operation of the proposed Climate Change Commission that would replace the Climate Change Authority. Noting the evidence received was critical of the operation and utilisation of the Climate Change Authority by the Government, it is recommended that the *Climate Change Authority Act 2011* (Cth) be independently reviewed for efficiency, effectiveness, and ability to give independent advice.

- **Recommendation 2: That the *Climate Change Authority Act 2011* be reviewed to assess its efficiency, effectiveness, and ability to give independent advice.**

1.12 Evidence received by the Committee suggested that Australia's current 2030 target and lack of legislated 2050 target was not sufficient to limit warming to as close to 1.5°C as possible and urged the Government to commit to net zero by 2050 as a bare minimum. The Climate Change Authority can be requested by the Minister to conduct special reviews on climate policy including targets, yet the Minister has not requested such a review at least since the last review in 2014. It is therefore recommended that the Minister request the Climate Change Authority to review Australia's 2030 target and provide advice on the adequate long-term target to limit warming to as close to 1.5°C as possible.

- **Recommendation 3: That the Minister request that the Climate Change Authority review Australia's 2030 target and provide advice on the adequate long-term target to limit warming to as close to 1.5°C as possible.**

- 1.13 Many inquiry participants highlighted the value of a full costing of climate impacts. However, the evidence received from the Department of Agriculture, Water, and the Environment (DAWE) was that no costing of national climate impacts has been undertaken. It is understood that DAWE will update the 2015 'National Climate Resilience and Adaptation Strategy' (the Strategy). It is therefore requested that as part of the works on the update to the Strategy, DAWE undertake a costing of climate impacts across sectors, including but not limited to tourism, agriculture, mining, and health.
- **Recommendation 4: That as part of the update to the National Climate Resilience and Adaptation Strategy DAWE undertake a full assessment of the costs of climate impacts across sectors.**
- 1.14 Much of the discussion in the inquiry was centred on Australia's long-term emissions reduction ambition and what that meant for the setting of emissions reduction targets. As part of that discussion, many submissions and witnesses called on the Government to commit to net zero by 2050. The Prime Minister has also committed to net zero 'as soon as possible' and 'preferably by 2050'. Yet, from the evidence it was not clear on whether work was underway on modelling the implications of that target. Noting that the current position of the Government is to undertake modelling on long term emissions pathways as part of the long-term emissions reduction strategy to be taken to the Conference of the Parties 26 in Glasgow, the Government should request that the Department of Industry, Science, Energy and Resources, as part of that analysis, model pathways to net zero by 2050.
- **Recommendation 5: That the Government instruct the Department of Industry, Science, Energy and Resources to model a pathway to net zero emissions by 2050.**
- 1.15 Substantial evidence was received by the Committee calling for the Bills to be debated in Parliament and allowed a conscience vote. A conscience vote is 'a rare vote in parliament, in which members are not obliged by the parties to follow a party line, but vote according to their own moral, political, religious, or social beliefs'. Previous conscience votes have happened on other contentious issues such as marriage equality, euthanasia, and sex discrimination. Climate change is an issue of such stature that should be debated on the floor of Parliament and be allowed by both parties as a free vote. It is therefore recommended that the Government consider allowing the Bills to be debated and voted on as a matter of conscience.
- **Recommendation 6: That the Bills be allowed to be debated in Parliament.**

1.16 Of the more than 6500 submissions and 49 witnesses that presented to the inquiry, over 99% were in support of the Bills. Given the evidence received in support, there is no doubt that passing the Bills would have substantial positive effect on Australia's policy suite and international standing. It is therefore recommended that the Bills be passed.

- **Recommendation 7: That the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 and Climate Change (National Framework for Adaptation and Mitigation) (Consequential and Transitional Provisions) Bill 2020 be passed.**

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Introduction

- 1.17 Climate change is already impacting every sector in Australia and these impacts are predicted to worsen over time. The evidence received highlighted the many areas where current policy was described to be inadequate, lacking coordination or non-existent.
- 1.18 The evidence highlighted that the Bills' effectiveness lies in their flexible framework design that co-ordinates and directs climate policy at the national level. The core elements are a legislated net zero target, emissions budgets, risk assessments and national adaptation plans, all underpinned by an independent Climate Change Commission (CCC). Taken together these allow for comprehensive coordinated action above and beyond what is currently being pursued at the national level.
- 1.19 The Committee received a large number of submissions totalling more than 6500 and heard from 49 witnesses over three public hearings days. Approximately 99% of submissions and witnesses were in support of debating and passing the Bills. Several dozen submissions were also broadly in support of the legislated approach but also provided detailed feedback on improvements that could be made to the Bills.
- 1.20 The evidence received by the Committee also suggested that many in the community hoped that the Bills could break many years of policy deadlock on climate change and be a bipartisan way forward.
- 1.21 Of the few submissions not in support, the issues raised could be categorised as concerns about the duplication of existing policies, additional bureaucracy, the role of the proposed CCC and its independence, and disputes about the science of climate change and the need to address global warming.

The impacts of climate change are undisputed, and Australia is exposed to its worst effects

- 1.22 The Main Report, although accepting climate change is happening, did not reflect the evidence of the urgency and scale of the challenge. Numerous witnesses presented evidence that climate change is happening now, and that Australia is uniquely susceptible to its impacts. The Environmental Defenders Office, citing the Bureau of Meteorology, stated:

Australia is already experiencing the impacts of climate change, which include increasing temperatures, the warming and acidification of oceans, sea level rise, decreased rainfall in southern parts of the country and increased and

more extreme rainfall in the north, longer dry spells, greater number of extreme heat days and the long-term increase in extreme fire weather.¹

1.23 The World Wildlife Fund (WWF) highlighted the dire effects these changes would have on Australia's natural environment:

Australia is already the world leader in mammal extinction. In the last 200 years we've lost over a hundred species, and recent studies have found that up to half of all plant and animal species in biodiversity hotspots like south-west Australia could face local extinction by the turn of the century due to climate change, if carbon emissions continue to rise unchecked.²

1.24 Various submissions outlined that impacts will not only affect Australia's natural environment but also economic growth, productivity, infrastructure, international trade, and diplomacy as well. Pollination Group noted:

From an economic perspective, based on our current trajectory, a recent report published by Deloitte Access Economics concluded that failure to take decisive action on climate change in Australia will cost the economy \$3.4 trillion and 880,000 jobs in the next 50 years. By contrast, adopting a policy of green growth would see an additional \$680 billion pumped into the economy and create 250,000 jobs over the same period of time.³

1.25 Local governments outlined the potential risks to Australia's infrastructure:

In Australia, between 26,000 and 33,000 kilometres of roads and between 157,000 and 247,000 residential buildings are potentially at risk from the combined impact of inundation and erosion due to projected sea level rise. Local government-owned public assets that are at risk from climate change have been valued at \$212 billion.⁴

1.26 Out of all local governments that participated, the City of Melbourne was distinctively exposed and found that if there is no change to the current level of ambition on Australian climate change policy, it would cost the Melbourne economy around \$12.6 billion by 2050.⁵ Aware Super noted that

¹ Environmental Defenders Office, *Submission 551*, p. 3.

² Dr Kita Ashman, Threatened Species and Climate Adaptation Ecologist, WWF-Australia, *Committee Hansard*, 29 January 2021, p. 20.

³ Pollination Group, *Submission 363*, p. 2.

⁴ Alexandrina Council, *Submission 367*, p. 1.

⁵ City of Melbourne, *Submission 374*, p. 3.

the overall combined affects to all Australia's physical infrastructure could number up to \$5 trillion in cumulative losses.⁶

- 1.27 Further, the Impact Investment Group drew the Committee's attention to the potential downstream effects on Australia's diplomatic relationships and international trade with delayed action:

If Australia further delays taking strong legislative action on climate change, our national reputation will be further damaged. This, in turn, damages our companies' reputations and their professional relationships. It also exposes our exporters to explicit and implicit trade barriers, as more of our main trading partners are expected to reflect their climate policy in their trade treaties, thereby protecting the competitiveness of their local constituents. This could hit our already-vulnerable regional communities particularly hard.⁷

- 1.28 Given these impacts and despite the prevailing pandemic, several submissions stressed the urgent need for action. Science & Technology Australia furthered that:

Even amidst a global pandemic, the challenge of climate change is a pressing concern. The projected disruptions to the planet's climate - and the resulting risks to food and water security, the economy, and human health - would be substantially more challenging to navigate than even the COVID-19 pandemic ... The most recent State of the Climate report by the Bureau of Meteorology and the CSIRO presents a grim picture for Australia's climate. The hopes of limiting climate change to 1 degree have faded, but this does not mean efforts to limit climate change should be abandoned.⁸

- 1.29 Equally many submissions found that despite the risks, there were substantial opportunities if a transition to a low carbon economy was embraced. In his opening remarks to the public hearings, Mr. Buckley of the Institute for Energy Economics and Financial Analysis (IEEFA) stated before the Committee:

The costs of inaction are huge, but we also need to figure in that the opportunities for Australia are equally huge and that Australia will be a world superpower in renewable energy, and that opportunity shouldn't be

⁶ Aware Super, *Submission 422*, p. 3.

⁷ Impact Investment Group, *Submission 523*, p. 2.

⁸ Science & Technology Australia, *Submission 362*, p. 3.

overlooked. To me, Australia should be a leader, not a laggard as we currently are.⁹

- 1.30 This sentiment was shared by many of the inquiry participants. Dr. Nicky Ison of WWF-Australia went into further detail about the kinds of opportunities available to Australia if a transition was embraced, outlining:

We have some of the best renewable resources in the world, we have abundant land and we have strong trading relationships with countries like Japan and South Korea, who are going to need our help and our renewable resources in order to achieve their net zero by 2050 targets. We also have the expertise. Australians invented the modern solar cell. We also have the mineral resources essential to decarbonising the world. We are, for example, the world's leading exporter of lithium, a mineral essential to the production of batteries and electric vehicles. However, last year we captured just 0.5 per cent of the value of that commodity. We are also the world's leading exporter of iron ore. If we were to create an onshore green steel industry, the Grattan Institute projects we could create 25,000 new jobs, though Andrew Forrest, just last week, put that number closer to 40,000.

Our abundant renewable resources mean that we will have some of the cheapest renewable electricity in the world. This can power our manufacturing in existing industrial centres, such as Gladstone, the Hunter Valley and Bell Bay. Indeed, Bell Bay is arguably already being powered by renewable energy, as Tasmania achieved 100 per cent renewable status last year.

These are just a few of the many opportunities that Australia is presented with as the world acts on climate change. However, we risk being left behind in the global race to renewables.¹⁰

- 1.31 Given the risks and opportunities before Australia, we need to elevate our policy ambition because we are currently not doing enough.

Australia is currently not doing enough to act

- 1.32 Notwithstanding the urgency of the crisis, the extensive potential impacts and opportunities in transitioning to a low carbon economy, and despite the Main Report insisting that Australia is 'meeting and exceeding' its current targets, several submissions, including from the Australasian Centre for

⁹ Mr. Tim Buckley, Director, Energy Finance Studies, Institute for Energy Economics and Financial Analysis, *Committee Hansard*, 29 January 2021, p. 27.

¹⁰ Dr. Nicky Ison, Energy Transitions Manager, World Wildlife Fund, *Committee Hansard*, *Committee Hansard*, p. 21.

Corporate Responsibility (ACCR), stated that the Commonwealth Government was currently not doing enough on climate change:

Despite being a signatory to the Paris Agreement, Australia's carbon pollution trajectory is far from where it needs to be. Analysts from various quarters including the International Monetary Fund, Climate Action Tracker and NDEV Environmental Auditing have drawn attention to the stubbornly high rate of Australian carbon pollution, which must fall sharply to meet commitments government representatives made in Paris in 2015.¹¹

1.33 Seemingly in response to critical comments about Australia's performance and ongoing policy uncertainty, throughout the inquiry's public hearings, the Government members of the Committee defended the Government's current policy and emissions reduction targets and drew participants' attention to the Department of Industry, Science, Energy and Resources' (DISER) submission, which purported to show Australia performing well in investment in renewable energy per capita and per capita emissions reductions.¹² This contention also featured in the Main Report at paragraph 2.68.

1.34 For example, on 29 January 2021, the Chair quizzed the Clean Energy Council's (CEC) Ms Anna Freeman:

CHAIR: Thank you all very much. My first question might go to the Clean Energy Council and, Ms Freeman, some of the comments you were making on a high degree of uncertainty holding back investment. The submission from the Clean Energy Council goes to the same point—that a lack of certainty is restricting investment. I certainly don't challenge the tie between certainty and investment. I understand that link. But I just go back to data we were presented this morning from the department showing that Australia is investing more money in renewables on a per capita basis than probably any other country in the world. The Clean Energy Regulator confirmed last year that the deployment of new renewable energy in Australia on a per capita basis is happening 10 times the global average. So my question to you, then, is: do you reject those statistics on performance or are you talking more about things from a prospective point of view—that, as we move forward, even more can be done?

Ms. Freeman: Thanks for the question. You're absolutely right. We've seen outstanding investment in the last three years. I think we've had something like 200 projects since the start of 2017 be commissioned, be financially

¹¹ Australasian Centre for Corporate Responsibility, *Submission 349*, p. 2.

¹² Department of Industry, Science, Energy and Resources, *Submission 588*, p. 17.

committed or are under construction at the present time. A lot of that was driven by the Renewable Energy Target, which no longer provides that same incentive, so there has been a bit of chilling in some of the investor interest. There have been strong incentives for the states, but certainly in the last 18 months or so we've seen a reduction in projects...¹³

1.35 The DISER evidence referred to by the Chair can be seen in Figure 1 below:

	Change in emissions 2005–2018 ²⁰	Change in per capita emissions 2005–2018 ²¹	Change in emissions per unit of GDP 2005– 2018 ²²	New renewable energy capacity installed per person 2019 (watts)	2019 per capita investment in renewables (\$A)
Australia	-13% ²³	-29%	-51%	240.3	324.7
Canada	-0.1%	-13%	-37%	22.8	32.9
China	+69% (WRI 2016)	+60% (WRI 2016)	-41% (WRI 2016)	45.2	87.8
EU	-20%	-22%	-50%	66.0	Not available
G20	+15% (WRI 2016)	+5% (WRI 2016)	-33% (WRI 2016)	32.2	Not available
Germany	-15%	-16%	-49%	74.3	95.8
Japan	-8%	-7%	-30%	54.5	191.3
New Zealand	-1%	-16%	-45%	6.7	83.8
OECD	-9% (WRI 2016)	-16% (WRI 2016)	-38% (WRI 2016)	53.9	Not available
South Korea	+29% (UNFCCC 2016)	+21% (UNFCCC 2016)	-28% (UNFCCC 2016)	69.7	58.4
United Kingdom	-34%	-40%	-58%	44.9	115
United States	-10%	-19%	-43%	54.6	255.9

Figure 1: Attachment E: Change in emissions and renewable energy comparators for selected countries (Source: Department of Industry Science Energy and Resources, Submission 588, p. 17.)

1.37 In supplementary evidence provided to the Committee by The Australia Institute (TAI), TAI argued that the evidence provided by DISER was misleading, stating:

Recently, the Department of Industry, Science, Industry and Resources (DISER) produced a submission to the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 with a table titled *Attachment E*:

¹³ Committee Hansard, 29 January 2021, pp. 29-30.

Change in emissions and renewable energy comparators for selected countries that again suggested Australia is leading in per capita renewable energy uptake.

The fourth column, titled “New renewable energy capacity installed per person 2019 (watts)”, appears to draw exclusively from the International Renewable Energy Agency (IRENA) Renewable energy statics 2020 report. DISER seems to extract 2018-2019 data of nine countries and three supranational organisations, to calculate the per-capita change in renewable energy capacity over the year. While the statistic itself is calculated correctly, it misrepresents IRENA’s data.

The Australia Institute analysis of the IRENA report, with per-capita calculations, found:

- the 2018-2019 data extracted for Australia corresponded with a surge in capacity ... which, as described in BNEF [Bloomberg New Energy Finance] 2020, is not indicative of future trends; and
- Sweden and Norway outperformed Australia both in terms of per capita capacity and total renewable energy capacity despite being smaller countries, for every year on record.¹⁴

1.38 In an exchange with the Chair on the same point, energy financial analyst Mr. Tim Buckley from IEEFA disputed Australia’s performance both in renewable investment and more broadly. He stated:

Is Australia a world leader, 10 times better than every other country in the world on average, as you cited? To me that's cherry-picking the data. At the end of the day, per capita, we're a very small country. I will go back to the guiding principle of the Paris Agreement: common but differentiated responsibilities. Australia is an OECD country. We should be doing more than our fair share because India, Africa and China didn't cause the problem; Indonesia is wearing the problem. So, when we talk per capita, it's a great way of redefining the data to try and make Australia look good, when the opportunities for Australia are huge. As Professor Hughes cited, the UN is ranking Australia as a global laggard. That's the independent referee, not the data for any particular day, week, month, year. To me, if we want to divide numbers by per capita, that's missing the big picture. The opportunities for Australia to be a world leader are very clear.

Australia is not doing our fair share. If we want to look at other stats—EVs—we're a global laggard; vehicle emissions standards, we're a global laggard;

¹⁴ The Australia Institute, *Submission 1617.1*, pp. 1-2.

power plant emission standards, we're a global laggard; and if we look at value-adding of our resource exports, we're a global laggard.¹⁵

1.39 Mr. Buckley also provided a supplementary graph showing declining renewable investment in 2019 and 2020. See Figure 2:

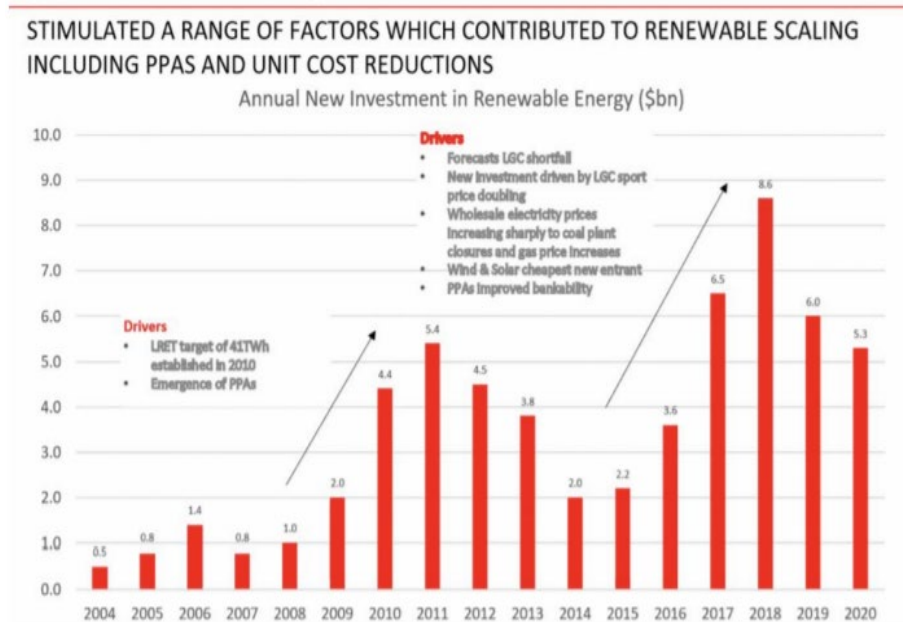


Figure 2: Renewable Energy Investment has Declined in 2019 and 2020 (source: Institute for Energy Economics and Financial Analysis (IEEFA), Submission 346.1, p. 5.

1.41 He believed the causes for this decline were related to the Renewable Energy Target and lack of clear federal climate policy:

The downgrading and subsequent expiry of the Renewable Energy Target (RET), absent any follow-on energy or climate policy of any credibility, has undermined investor confidence dramatically, despite the fact that renewable energy in Australia is now the least cost source of new generation.¹⁶

1.42 Regarding Australia's per capita emissions reductions performance in the second column of Attachment E, Mr. Buckley believed the data was cherry picked and presenting a 'false narrative that Australia was making strong

¹⁵ Mr. Tim Buckley, Institute for Energy Economics and Financial Analysis, *Committee Hansard*, 29 January 2021.

¹⁶ Institute for Energy Economics and Financial Analysis, *Submission 346.1*, p. 5.

progress on green house gas (GHG) emissions reductions relative to leading countries'.¹⁷

- 1.43 To that point the Australian Academy of Technology and Engineering (ATSE) simply stated 'per capita emissions are irrelevant to our targets and their inclusion seems to be aimed at obfuscation,' and "'clever" reporting of emissions is no substitute for meaningful, consistent policies that are well informed by the science.'¹⁸
- 1.44 Mr. Buckley provided supplementary evidence suggesting that DISER had chosen the base year of emissions from 2005-2018, 'knowing [that] 2005 was one of the five highest recordings in Australian recorded history'. And further stated that 'if the Department had chosen 2000 as the base year, there would be no material improvement in our national GHG emissions in the last two decades...'. For Figure 3 please see below.

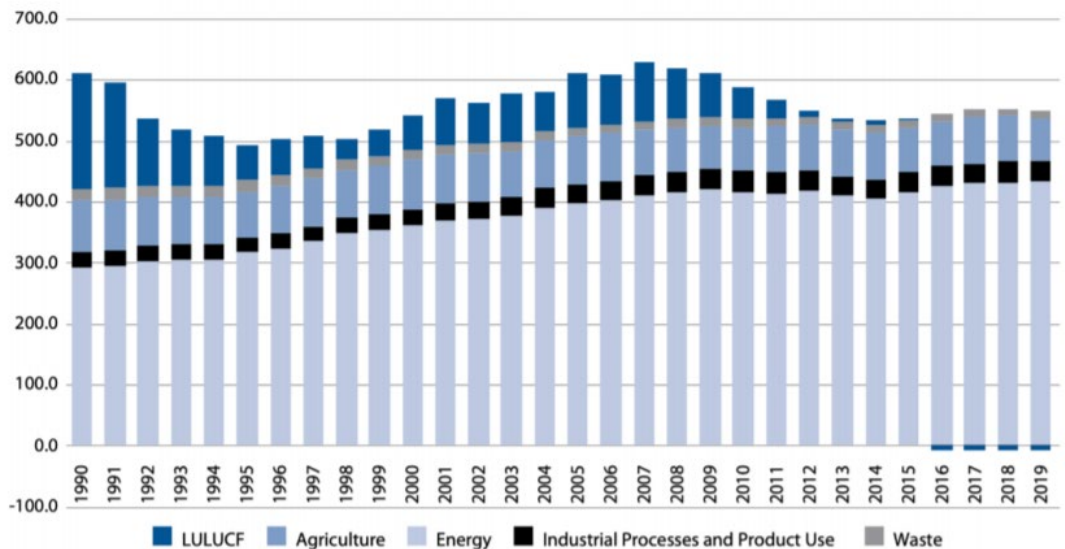


Figure 3: Net greenhouse gas emissions under the UNFCCC, by sector, Australia, 1990-2019 (Mt CO₂-e) (Source: IEEFA, Submission 346.1, p. 2.

- 1.46 Putting aside the dispute on the renewable energy investment and emissions reductions figures, the Committee also heard that there is strong community opinion that Australia needs to act beyond current commitments. In a submission to the inquiry, TearFund stated:

¹⁷ Institute for Energy Economics and Financial Analysis, *Submission 346.1*, p. 2.

¹⁸ Australian Academy of Technology and Engineering, *Submission 512.1*, p. 1.

There is clear support amongst the Australian constituency to act. In a recent poll, more than 80% of Australians wanted the government to enhance their climate action, and more than 90% wanted to see more renewable energy.¹⁹

- 1.47 Community opinion on the need for stronger action was also reflected in the many submissions received by the Committee from members of the public. For example, Mr. John Waterhouse stated:

I'd have liked the Government to acknowledge and address these issues years ago and think it's a gross failure of leadership and governance that this has not happened ... We desperately need action from Government to drive and regulate climate change action, not least to provide a policy framework to encourage long term investment. Concern about coal-fired power stations closing (at the end of their effective lives) shows the lack of investment that has resulted precisely from a lack of Federal Government leadership.²⁰

- 1.48 Dr. James McArdle felt similarly:

I'm writing to ask that Parliament cease its equivocation on climate action. Global heating is a real threat to our safety, and increasingly so for our children, and a moral issue over which Australians and their Government must take steps to plan and prepare, instead of retreating into denial. It is a global issue in which we all have a stake and which should accordingly transcend party politics.²¹

- 1.49 Christine O'Grady, a former teacher from New South Wales, submitted Australia is simply not doing enough and needs to 'raise the bar!' ...and 'get off the treadmill and move at a rapid pace towards a feasible net zero goal'.²²
- 1.50 There is no time to waste. In the words of Osher Günsberg, 'We must act with enormous volition, we must show leadership in our region, and we must enrol the full might of our economy in this direction.'²³

¹⁹ Tearfund, *Submission 553*, p. 4.

²⁰ John Waterhouse, *Submission 1043*, p. 1.

²¹ Dr James McArdle, *Submission 1114*, p. 1.

²² Christine O'Grady, *Submission 797*, p. 1.

²³ Osher Günsberg, *Submission 765*, p. 2.

Australia's policy settings can be improved

- 1.51 It is no surprise that people felt this way. Despite the Main Report insisting Australia's climate policy framework is adequate, the Committee heard from several witnesses that Australia's current climate policy landscape is insufficient to drive emissions reductions, including the Technology Investment Roadmap, and would be improved by an integrated and coordinated response, as provided by the Bills. The CEC asserted:

The opportunity for Australia to prosper in a carbon-constrained world is clear. Yet our ambition and our pathway are not. Australia's climate change and energy policy framework is a patchwork of Federal, state and territory government policies, targets and interventions fundamentally working to fill the void created by the absence of an integrated climate change and energy policy framework.²⁴

- 1.52 The Australian Industry Group, representing heavy industrial emitters and workers, also suggested a more comprehensive approach is needed, above the response detailed in the Main Report:

While Australia has undertaken valuable and important climate policies, we would be better off with a more integrated and systematic approach to mitigation, adaptation and the assessment of progress. The iterative Technology Roadmap process is a step in this direction, but is limited in scope.²⁵ ...

In short, while the Commonwealth has taken significant steps on climate over the years, it would be positive for industry and the rest of the community if Australia adopted clearer long term national goals around climate and pursued these in a more strategic and systematic manner.²⁶

- 1.53 The Technology Investment Roadmap²⁷ (the Roadmap) was announced in May 2020 and is one of the Government's signature policies for climate action alongside the Climate Solutions Package.²⁸ The Roadmap 'is a

²⁴ Clean Energy Council, *Submission 414*, p. 2.

²⁵ Australian Industry Group, *Submission 552*, p. 3.

²⁶ Australian Industry Group, *Submission 552*, p. 2.

²⁷ Department of Industry, Science, Energy and Resources, Technology Investment Roadmap, <https://www.industry.gov.au/data-and-publications/technology-investment-roadmap-first-low-emissions-technology-statement-2020>, viewed 23 June 2021.

²⁸ Australian Government, Climate Solutions Package, <https://www.environment.gov.au/system/files/resources/bb29bc9f-8b96-4b10-84a0-46b7d36d5b8e/files/climate-solutions-package.pdf>, viewed 23 June 2021

strategy to accelerate development and commercialisation of low emissions technologies'.²⁹ It sets out a process to assess low emissions technologies and selects which technologies will be the focus of Government, sets aspirational targets only, and a governance structure to provide advice to the Minister on technologies and is supported by funding streams from the Clean Energy Finance Corporation and the Australian Renewable Energy Agency.

- 1.54 ATSE found that Australia's current approach, including the Roadmap, was 'unambitious' and 'in some cases it is seemingly designed to protect incumbents and slow the uptake of new technologies that can help us reduce our emissions'.³⁰
- 1.55 It is no surprise that other witnesses like the City of Melbourne argued for a comprehensive policy response to climate change including a national framework on climate change:

A national framework for climate change action is needed to address these challenges and support local governments to respond to the climate challenge in ways which protect the health and livelihoods of communities, and create economic growth ... The City of Melbourne believes a national response to the challenges of climate change would create opportunities for the most efficient and effective deployment of solutions across Australia to the benefit of all communities.³¹

The Climate Change Bills are an effective framework to guide climate action

- 1.56 In light of the inadequacies with current Government policies, various witnesses felt that the Bills could be an effective addition to Australia's climate policy suite.
- 1.57 The Business Council on Sustainable Development Australia (BCSD) was one organisation that believed the Bills complemented a range of different existing climate policies including:

The National Greenhouse and Energy Reporting System, the Safeguard Mechanism, corporate obligations under the 4th edition of the Corporate

²⁹ Department of Industry, Science, Energy and Resources, Technology Investment Roadmap, at <https://www.industry.gov.au/data-and-publications/technology-investment-roadmap-first-low-emissions-technology-statement-2020>, viewed 2 July 2021.

³⁰ Australian Academy of Technology and Engineering, *Submission 512.1*, p. 1.

³¹ City of Melbourne, *Submission 374*, p. 1.

Governance Principles; the recommendations of the Task Force on Climate-related Financial Disclosures; the Sustainable Investment Movement (supporting the recently released Australian Sustainable Finance Investment Roadmap); and the Technology Investment Roadmap.³²

- 1.58 The Business Council of Australia (BCA) also suggested the Bills both complement existing policies and provide:

... an architecture which will be critical to mapping out a planned and predictable approach to emissions reduction across the economy as we work towards the net-zero target in 2050 — noting that many of the individual policy measures required for such a response are already a part of the national and jurisdictional governments' suite of climate-related policies. Importantly, the proposed legislation provides a much needed overarching framework for streamlining and consolidating these existing measures.³³

- 1.59 Not just a complementary policy, the NSW Council of Civil Liberties thought that this kind of national framework law was also vital to coordinate action:

A comprehensive framework law is an essential tool to coordinate and advance climate action with respect to both reducing greenhouse gas emissions and climate resilience... A good climate law contains statutory targets, assigns clear duties and responsibilities and provides clarity about the long-term direction of travel.³⁴

- 1.60 Picking up on the same coordination theme as the NSW Council of Civil Liberties, some witnesses like the Centre for Policy Development believed the Bills could be a 'North Star', a framework to guide all climate action efforts:

We think these bills provide that much-needed north star for our collective response, a national net zero commitment, and provide an independent framework to monitor long-term process, regular carbon budgets and risk assessments to guide the responses...it's based on the best precedence internationally and it's a platform for safeguarding Australia's economic and strategic interests at a moment when they're being fundamentally reshaped by climate impacts and the carbon transition.³⁵

³² Business Council for Sustainable Development, *Submission 1953*, p. 5.

³³ Business Council of Australia, *Submission 1576*, p. 3.

³⁴ NSW Council for Civil Liberties, *Submission 407*, p. 9.

³⁵ Mr Travers McLeod, Chief Executive Officer, Centre for Policy Development, *Committee Hansard*, 1 February 2021, pp. 19-20.

1.61 Others like the Pollination Group drew the Committee's attention to examples in other jurisdictions where similar framework legislation had been effective at the state and national level at coordinating and driving action:

We note that the Climate Bill has been modelled on the UK Climate Change Act which has driven meaningful emissions reductions, while growing the UK's economy by 72%. In the domestic context, the Climate Bill would build on the success of the Victorian Climate Change Act 2017, which was the first piece of legislation to enshrine a net-zero emissions target into law in Australia, and has seen Victoria emerge as a leader at the State level in relation to renewable energy reform and climate action.³⁶

1.62 ClimateWorks also considered the similarities between the Victorian Climate Act and the Climate Change Bills and how these kind of framework laws assist with driving culture change and behaviour:

In their law journal article, Calabro et al (2018) highlighted the importance of 'emphasis on embedding a strong policy process, rather than prescribing specific policy measures; changing culture and behaviour across government to mainstream climate change in decision-making' in the Victorian Climate Change Act. ClimateWorks considers that the Climate Change 2020 Bill would create these aspects at the federal level.³⁷

1.63 ClimateWorks also pointed to several other nations who have embraced a similar approach including:

Finland (since 2015), France (since 2019), Germany (since 2019), Ireland (since 2015), Mexico (since 2012), New Zealand (since 2019) Philippines (since 2009) and Sweden (since 2017).³⁸

1.64 In addition, the Committee received evidence from the United Kingdom's Climate Change Committee (UK CCC), the independent adviser to the United Kingdom Government on Climate Change and established by the UK *Climate Change Act 2008*. The UK CCC posited that the United Kingdom's framework climate law had significant benefits and that the Climate Change Bill shares the same qualities:

Over-arching climate legislation such as the proposed Climate Change Bill and the UK's Climate Change Act can provide the frameworks for meeting those

³⁶ Pollination Group, *Submission 363*, p. 3.

³⁷ ClimateWorks, *Submission 1957*, p. 3.

³⁸ ClimateWorks, *Submission 1957*, p. 6.

targets at least cost while adapting to the further climate impacts that cannot be avoided. They provide clear signals to investors, help build political consensus and navigate political challenges, and encourage an evidence-based approach to climate policy.³⁹

1.65 The Grantham Research Institute on Climate Change and the Environment, based in the United Kingdom, has published various studies on the performance of the UK Climate Change Act. They submitted a review which found the UK Climate Change Act had several core benefits including:

- Established a firm long-term framework with a clear direction of travel.
- Changed the institutional context and strengthened the processes through which climate change is addressed.
- Helped UK climate policy to become better informed, more forward looking and better guided by statutory routines.
- Contributed to reducing emissions, particularly in the power sector, while the economy has continued to grow.⁴⁰

1.66 A national framework climate change law, like those in the United Kingdom, and Victoria, has been beneficial to those jurisdictions' climate responses. It is not a step too far to therefore suggest that the Bills, based on overseas experience, would not only be complementary to existing policies but would bring benefits above and beyond the current approach. The Bills also have the advantage of being in line with the latest science of climate change.

The Climate Change Bills are in line with the science

1.67 Climate change action must be based on the best available science; only then can we be ensured that we are acting in the right areas, with the right speed and with the right technology. But to date, climate science has been treated with disinterest by Australian politicians. In response, several witnesses, including Ms. Julie Beagley, asked that the Government follow the science on climate change like the Government followed the science on COVID-19:

Climate change has somehow become a political issue and it is time to listen to the scientists and take action. The Government has followed the advice of the

³⁹ Climate Change Committee, United Kingdom, *Submission 612*, p. 1.

⁴⁰ Grantham Research Institute on Climate Change and the Environment, *Submission 1420*, p. 3.

medical professionals in determining how to manage COVID-19 so why can it not do the same for climate change?⁴¹

- 1.68 Science & Technology Australia (STA), representing over 80,000 scientists, concurred with Ms. Beagley and stated:

The approach that has protected Australia during the COVID-19 pandemic needs to be applied to climate change. The best available evidence is not only integral in climate change modelling, but in mitigating the effects of climate change already being felt.⁴²

- 1.69 The Bills are in line with that science and best research. STA went on to note that the 'Bill highlights the importance of evidence-informed decision making. Clause 11 "...provides that any decision or action under this Bill must have regards [sic] to the best available peer reviewed research..." among other resources.'⁴³

- 1.70 Scientist and Intergovernmental Panel on Climate Change (IPCC) report contributor, Professor Mark Howden, like STA, believed that the Bills were aligned with the science:

...the draft bill is very well aligned with our current understanding of climate science, of the current and future impacts of climate change and the adaption [sic] responses needed and also in relation to the emission reductions needed to achieve the Paris Agreement goals and broader achievement of sustainability across the globe. In particular, the science community synthesises information understood by science and policymakers into the IPCC reports and they are released on a seven-year cycle but also with special reports at intermittent periods. The draft bill very closely aligns with the findings of the IPCC in terms of the science but also, importantly, in terms of ...understanding of best practice in the institutional and policy responses required to deal with climate change.⁴⁴

- 1.71 The Academy of Social Sciences in Australia, another prominent organisation in academia, also supported the Bills, submitting that the

⁴¹ Julie Beagley, *Submission 1297*, p. 1.

⁴² Science and Technology Australia, *Submission 362*, p. 5.

⁴³ Science and Technology Australia, *Submission 362*, p. 5.

⁴⁴ Professor Mark Howden, Director, Australian National University Climate Change Institute, *Committee Hansard*, 1 February 2021, p. 46.

objects were 'consistent with international scientific consensus regarding the causes, risks and impacts of anthropogenic climate change'.⁴⁵

- 1.72 Australia's climate policies must be aligned with the science. The Bills are evidence-based, best practice, policies that leverage our understanding of the science including climate risks and impacts. Furthermore, the Bills' core elements including a net zero target is based on the latest understanding of the science in line with the IPCC.⁴⁶

The Objects of the Bill and Guiding Principles assist decision makers and guide action

- 1.73 Section 3 of the Substantive Bill establishes the Objects of the Bill. Objects set out the broad objectives of the legislation. Objects are useful for the interpretation of the legislation and any future review of the performance of the Act is judged against them.
- 1.74 Regrettably, the Main Report provided an uneven analysis of the importance of the Objects. The Main Report only highlighted amendments to alter the Objects without showing the broad support they enjoyed.
- 1.75 Inquiry participants were supportive of the Objects of the Bill. The BCA submitted that:

The proposed legislation adopts a science-based, risk management approach to addressing climate change (in its objects and other sections) which is aligned with how business and their shareholders, increasingly, are responding to climate-related risk.⁴⁷

- 1.76 The Responsible Investment Association of Australasia (RIAA) also submitted that:

RIAA can support the Objects of the Act because they are aligned with the global Paris Agreement, as ratified by Australian in October 2016 (3.1b); and adequately focused on the key aspects of an orderly but rapid transition to net zero, being prosperity and security, as well as measures to protect livelihoods, business, and the environment.⁴⁸

⁴⁵ Academy of the Social Sciences in Australia, *Submission 430*, p. 1.

⁴⁶ ANU Climate Change Institute, *Submission 403*, p. 2.

⁴⁷ Business Council of Australia, *Submission 1576*, p. 2.

⁴⁸ Responsible Investment Association of Australasia, *Submission 528*, p. 4.

- 1.77 Assisting decision makers to make optimal decisions regarding plans, policies and proposals under the Bills are seven guiding principles found in sections 9-16 of the Substantive Bill.
- 1.78 The Main Report touched on the guiding principles, mainly to highlight amendments that would potentially improve them without canvassing the support they had. For example, the Centre for Policy Development stated in support:
- The legislation also codifies clear principles for evidence-based and balanced carbon budget creation. These may seem unduly restrictive, but they are an important feature.⁴⁹
- 1.79 RIAA too submitted that the guiding principles were ‘well founded’ and provided a ‘sound underpinning for informed and considered decision making’. RIAA ultimately found them ‘helpful to guide current and future decision making around a transition to net zero...’.⁵⁰
- 1.80 The principles were also supported by ClimateWorks, who submitted:
- The proposed Act would establish clear principles for action. These would ensure that plans would look across environmental, social and economic benefits and costs to optimise Australia’s benefit. This is highly important given that climate change has such widespread yet varied impacts that are expected to affect different people, places and industries in different ways.⁵¹
- 1.81 Objects and guiding principles are essential to guide action. Importantly, they are augmented by other crucial elements in the framework canvassed during the inquiry. In particular, the net zero by 2050 target in the Substantive Bill.

Australia needs a legislated net zero target, five yearly emissions budgeting and emissions reduction plans

Net zero by 2050 in law

- 1.82 The framework proposed by the Bills contains several important elements including legislating a net z target. The inquiry spent significant time and attention on the issue of a net zero target by mid-century and the means to get there.

⁴⁹ Centre for Policy Development, *Submission 549*, p. 3.

⁵⁰ Responsible Investment Association of Australasia, *Submission 528*, p. 4.

⁵¹ ClimateWorks, *Submission 1957*, p. 4.

- 1.83 The target of net zero by 2050 arises out of the IPCC's Special Report on 1.5°C. The report finds:

In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO₂ emissions decline by about 45% from 2010 levels by 2030 (40–60% interquartile range), reaching net zero around 2050 (2045–2055 interquartile range).⁵² [Emphasis added]

- 1.84 Following the IPCC report, international consensus has quickly grown around the need to meet net zero by 2050. The NSW Council of Civil Liberties discussed the trend in its submission:

There are now legislated emissions targets of net-zero emissions by 2050 in New Zealand, Sweden, Denmark, France and Hungary, among other states. Canada has recently introduced a net zero by 2050 Bill to its Federal Parliament. Australia is increasingly lagging behind other developed states in this regard.⁵³

- 1.85 The trend is such that the BCA believed that the 'central issue now is setting a national target of net-zero emissions by 2050 and, critically, outlining a pathway to achieve this goal'.⁵⁴

- 1.86 To address the issue of a long-term target, the Climate Change Bills propose to legislate a net zero target. The Bills' Explanatory Memorandum explains that:

The proposed legislation would require ... a long-term national emissions target that aligns with scientific imperatives, State government policies and global commitments... Currently, that target is net zero emissions by 2050. The target is reviewed every five years by the independent Climate Change Commission taking into account a range of factors and may only increase in ambition.⁵⁵

- 1.87 Implementing a federal net zero target has several downstream positive effects. The Australian Industry Group felt that setting a long-term goal would benefit co-ordination and investment:

A clear long-term national goal has obvious value in organising the disparate efforts of Commonwealth agencies; coordinating among the States; and

⁵² See Intergovernmental Panel on Climate Change, *Special Report: Global Warming of 1.5 °C, Summary for Policymakers*, <https://www.ipcc.ch/sr15/chapter/spm/>, viewed 23 June 2021

⁵³ NSW Council of Civil Liberties, *Submission 407*, p. 9.

⁵⁴ Business Council of Australia, *Submission 1576*, p. 1.

⁵⁵ Explanatory Memorandum, Climate Change (Adaptation and Mitigation) Bill 2020, p. 4.

providing guidance to industry and other stakeholders to assist long term investment decisions. Achieving net zero emissions by 2050 is the most obvious and widely discussed goal, and is appropriate.⁵⁶

- 1.88 On investment, the Investor Group on Climate Change (IGCC), representing some of Australia's largest financial institutions including banks and super funds, believed that the net zero goal would facilitate decision making and the management of risk. IGCC stated:

A clear and robust long-term strategy to manage the systemic economic risks of climate change and achieve net zero emissions would support economic growth, avoid unnecessary disruption, unlock investment opportunities and support a just transition in communities impacted by shifting global and domestic markets...⁵⁷

...Economic modelling commissioned by IGCC and undertaken by consultancy Energetics estimates that Australia would create \$63 billion in fresh investment opportunities over the next five years by strengthening climate targets and policies in line with reaching net zero emissions by mid-century.⁵⁸

- 1.89 Since the Bills were tabled, there had been some debate as to whether the net zero target need be legislated, as the Bills propose alongside what our peers in other jurisdiction are doing.⁵⁹ Reporting suggested that while the Prime Minister was considering adopting net zero by 2050 he would neutralize any threat from his recalcitrant backbench by avoiding a vote in Parliament on it. While potentially politically astute, Australia will miss out on many benefits by not legislating a clear target and providing policy certainty.
- 1.90 The question of the importance of legislating a target was put to some witnesses. For example, the Law Council of Australia (LCA) provided a detailed supplementary submission on that question. The LCA summarised some benefits of a legislated net zero goal:

...a legislated target would provide certainty to policy makers about the guiding policy goal and timing. This will be essential when developing emissions reduction and adaptation plans and assessing the relative merits of

⁵⁶ Australian Industry Group, *Submission 552*, p. 2.

⁵⁷ Investor Group on climate Change, *Submission 497*, p. 6.

⁵⁸ Investor Group on climate Change, *Submission 497*, p. 2.

⁵⁹ *Sydney Morning Herald*, 'No law to set target: Ministers stare down Nats' complaint on carbon,' <https://www.smh.com.au/politics/federal/no-law-to-set-target-ministers-stare-down-nats-complaint-on-carbon-20210209-p570zm.html> viewed 23 June 2021.

different policy options. This assessment is an essential part of the law-making process. For the business and community sectors, a legislated target would provide certainty about the long-term policy framework and reduce legal and regulatory risks.⁶⁰

1.91 And further:

...For all stakeholders, a legislated target will enhance transparency about current policies and the possibility of change. Where policies remain in place only as long as the prevailing government, and have less public visibility, there is ongoing uncertainty amongst the business and community sectors. Legislation which has a unifying objective, and is backed by strong support across multiple sectors, may help to overcome such uncertainty.⁶¹

1.92 The UK Climate Change Committee (UK CCC) also commented on a statutory net zero target in law. The UK CCC believed that:

The adoption of a statutory 2050 Net-Zero emissions target ... will contribute to the delivery of the Paris Agreement. Our experience in the UK has been that setting a legal net zero target for 2050 has greatly clarified what is needed and mobilised greater engagement and ambition across businesses, local government and civil society. It has been widely welcomed and supported by the UK business community.⁶²

1.93 It was clear from the evidence that substantial work will have to go into navigating the challenge of net zero and the pathway there. It will take orienting the private and public sectors on a common goal and having an integrated and coordinated response.

1.94 Whilst the Bills propose to legislate the net zero target, the Government needs to prepare each sector to reach that target and assess the impact and opportunities that the transition will occasion.

1.95 However, on the evidence before the inquiry, it is far from clear whether the Government is even planning or requesting DISER to undertake work to plan the best way to net zero emissions, as soon as possible or by a definite target of 2050.⁶³

⁶⁰ Law Council of Australia, *Submission 1621.1*, p. 2.

⁶¹ Law Council of Australia, *Submission 1621.1*, p. 2.

⁶² United Kingdom Climate Change Commission, *Submission 612*, p. 2.

⁶³ Ms Kushla Munro, Acting Deputy Secretary, Department of Industry, Science, Energy and Resources, *Committee Hansard*, 29 Jan 2021, p. 5.

- 1.96 The Main Report states work is ongoing on a ‘long term emissions reduction strategy’ but no further detail or clearer commitment was forthcoming from DISER. This is far from satisfactory on such an important policy area. Recommendation 5 of this dissent report, that the ‘Government instruct DISER to model a pathway to net zero emissions by 2050,’ was proposed to clarify the situation and ensure this important work is being done. All Government members of the Committee again opposed this.
- 1.97 It is essential for Australia’s long-term safety and economic prosperity that this work be done without delay.

Five yearly emissions budgets

- 1.98 Another core element canvassed by the inquiry was the proposed five yearly Emissions Budgets which establish sequential five yearly caps on emissions, with two budget periods set at a time by the Minister, upon receiving and considering the advice of the Climate Change Commission also established by the Bills. This is distinct from current Government policy of having only an emissions reduction target to 2030 and much uncertainty and speculation around further targets.
- 1.99 According to the Bills’ Explanatory Memorandum, these emissions budgets must work towards achieving the overall goal of net zero by 2050. As the UK CCC put it in their submission:
- The use of emissions budgets (Part 5, Division 1) to provide stepping-stones to the long-term target will help to ensure that near-term actions are taken that are consistent with the long-term goal. With decade or longer lifetimes of our vehicles, heating and cooling systems, and multi-decade lifetimes of our infrastructures, the pathway to net zero must lay the groundwork now to enable a cost effective and well-managed transition.⁶⁴
- 1.100 This approach is best practice around the world with many nations undertaking it. In fact RIAA drew the Committee’s attention to what our trading partners including New Zealand were doing:
- The proposed emissions budget making processes is functionally in line with how New Zealand and other trading parties [sic] are managing their respective emissions budgets. The provision of having two consecutive

⁶⁴ Climate Change Committee, United Kingdom, *Submission 612*, p. 2.

budgets in place at any one time is also helpful for improving business planning, valuations and capital allocation.⁶⁵

1.101 Importantly, the emissions budgeting process outlined was also noted by some as consistent with processes under the Paris Agreement and that the regular ratcheting and reviewing component is a beneficial feature. The Centre for Policy Development found that:

... this proposed legislation would give the Australian people a regular independent appraisal of the carbon budget. If enacted in 2022, the proposed 5-year cycle of risk assessments and Budgets fits well with the 5-year UNFCCC cycle of global ratcheting under the Paris Agreement, and ensures review cycles can take account of key global developments.⁶⁶

1.102 The benefits of this approach were suggested by various participants including ATSE, which asserted that the emissions budgets would 'better position' Australia to meet its 2030 Paris Agreement targets as well as net zero emissions by 2050.⁶⁷

1.103 ATSE expanded on this by also suggesting that 'setting milestones will help to make these challenging targets achievable, as well as allowing an opportunity to evaluate the impact of technology'.⁶⁸

Emissions reduction plans

1.104 Working in parallel with the emissions budgeting are a series of sequential five yearly sector wide emissions reduction plans to deliver and meet the budgets. These emissions reduction plans would detail specific challenges and opportunities in each individual sector, and require developing policies and programs to reduce emissions. In contrast, the Government's Technology Investment Roadmap only details technologies but does not focus on sector specific policies. BCSD outlined the synchronous relationship of the two functions:

Setting carbon budgets for consecutive five-year terms would provide a robust framework against which to check the efficacy of national emissions reductions plans. The impacts of individual policies could then be aggregated

⁶⁵ Responsible Investment Association Australasia, *Submission 528*, p. 4.

⁶⁶ Centre for Policy Development, *Submission 549*, p. 3.

⁶⁷ Australian Academy of Technology and Engineering, *Submission 512*, p. 2.

⁶⁸ Australian Academy of Technology and Engineering, *Submission 512*, p. 2.

and measured against the required carbon budgets, and adjustments could be made accordingly to ensure the carbon budgets are met.⁶⁹

1.105 Several witnesses endorsed the idea of having emissions reduction plans. ACCR forwarded that:

In order to contribute Australia's fair share to global carbon pollution reduction, short-term and detailed planning are needed in addition to a long-term, net-zero horizon. This need is addressed in the bills' inclusion of five-year carbon budgets (in other words, hard limits on carbon pollution) and five-year plans to guide the mandated carbon pollution cuts.⁷⁰

1.106 Some, like Science and Technology Australia (STA), found the benefits of emissions reduction plans extended to industry planning and this planning approach would address key concerns:

A 5-year plan, as outlined in Part 3 of the legislation, is important to help industry to plan for the future. This has been a key concern for industry groups who need to be able to ensure their long-term energy needs, and opportunities to invest in new, low emissions technologies. In 2018, the International Monetary Fund said Australia needed policy certainty on emissions reduction to reduce uncertainty for investment decisions.⁷¹

1.107 Whilst others like ATSE suggested that detailed emissions reduction plans would improve Australia's technical emissions accounting:

A multi-sectoral approach is important to ensure responsibility is shared, rather than focused on, or avoided by, any particular sector. The approach proposed in the Bills will also assist in standardising emissions inventory methodologies across sectors, which are variable at present.

A multi-sectoral approach will further enable the development of sub-sectoral targets, which will be helpful in ensuring national engagement. For example, within agriculture, the profile of emissions varies (CH₂, N₂O, CO₂) and a sub-sectoral approach would encourage the development of appropriate technologies for each of these profiles.⁷²

1.108 Emissions reduction plans alongside a net zero goal and emissions budgets work synchronously to lower emissions. By structuring the response in this

⁶⁹ Business Council for Sustainable Development, *Submission 1953*, p. 3.

⁷⁰ Australasian Centre for Corporate Responsibility, *Submission 349*, p. 3.

⁷¹ Science and Technology Australia, *Submission 362*, p. 3.

⁷² Australian Academy of Technology and Engineering, *Submission 512*, p. 2.

fashion there are various downstream benefits. As the inquiry has shown however, all efforts must be underpinned by rigorous, evidence-based advice and review as would be provided by a Climate Change Commission.

An independent Commission is needed to advise Government

1.109 The Bills seek to establish an independent Climate Change Commission (CCC). The explanatory memorandum of the Bills sets out that the CCC:

will advise the Government on the adaptation plans, long-term target, emissions budgets and emission reduction plans (the Bills' "elements") in a transparent and accountable way.⁷³

1.110 The CCC is based upon similar advisory bodies in other jurisdictions, including the United Kingdom. The UK CCC was created as an independent statutory adviser and:

Includes two Committees (effectively boards) covering mitigation and adaptation. Members are expert and politically impartial and supported by an analytical secretariat. The CCC advises on the appropriate level of UK carbon budgets, and on key climate risks facing the UK. The CCC also monitors progress on reducing emissions (every year) and adapting to climate change (every two years). The Government is obliged to respond to the CCC's assessments, creating an annual cycle of policy development.⁷⁴

1.111 The UK CCC cites several benefits of having an independent advisory body, including that:

The presence of an independent adviser has helped resolved political differences. When politicians disagreed on the appropriate level for the 2050 target before the Act was finalised in 2008, it was set on the CCC's advice. When new coalition partners disagreed in 2010 on the role of renewables and nuclear in the energy sector, the CCC [was] asked within the coalition's program for Government to advise on renewables.⁷⁵

1.112 And further stated:

The creation of an independent Climate Change Commission (Part 6) will help to ensure that the 2050 target, emissions budgets, climate risk assessments as well as the policy to meet and respond to them are evidence-based. The monitoring requirement on the Commission ensures that the Government can

⁷³ Explanatory Memorandum, Climate Change (Adaptation and Mitigation) Bill 2020, p. 4.

⁷⁴ Climate Change Committee, United Kingdom, *Submission 612*, Attachment 1, p. 4.

⁷⁵ Climate Change Committee, United Kingdom, *Submission 612*, Attachment 1, p. 7.

be held to account on delivering progress towards the targets agreed by Parliament and that unforeseen circumstances can be responded to. Our experience is that clear independence, an evidence-led approach, and proper resourcing, sufficient to have internal specialist analytical capability, is key to fulfilling our advisory and monitoring roles effectively.⁷⁶

1.113 Notwithstanding the clear benefits, much of the opposition against the Bills in the Main Report and by a small number of inquiry participants focused on the CCC including its role, the membership, interaction with existing bodies like the Climate Change Authority (CCA) and the CCC's relationship with the Executive.

1.114 The CCA was established under the *Climate Change Authority Act 2007*. According to the CCA's website it 'provides independent, expert advice on climate change policy'.⁷⁷

1.115 The CCA is therefore very similar in structure and mandate to the CCC proposed in the Bills. Due to this similarity some, like the Australian Industry Greenhouse Network, felt that the existing CCA was enough:

AIGN believes that in reflecting on the main bill, the case needs to be made why the current suite of institutions that advise, enact and report on government policy needs replacing and/or rescinding as would be the case for the Climate Change Authority.⁷⁸

1.116 In contrast, several witnesses presented evidence to the contrary. TAI pointed to the fact that the CCA is consistently ignored as one reason for a fresh approach:

The Climate Change Authority, a further independent public agency charged with advising the Government on emission reduction targets, has been largely ignored (and reduced to a fraction of its original staffing profile). According to the Authority, 'the reduction in emissions embodied in the government's [2030] target is substantially weaker than that recommended by the Authority'.⁷⁹

1.117 Professor Clive Hamilton, an ex-CCA member, stated that the relationship between the CCA and the Government was problematic:

⁷⁶ Climate Change Committee, United Kingdom, *Submission 612*, p. 2.

⁷⁷ Climate Change Authority, About, <https://www.climatechangeauthority.gov.au/about-cca>, viewed on 23 June 2023.

⁷⁸ Australian Industry Greenhouse Network, *Submission 348*, p. 5.

⁷⁹ The Australia Institute, *Submission 1617*, p. 10.

Although the government could not act on its wish to abolish the Authority, it made it clear that it would not listen to its advice (although it does seem to have been influenced by its recommendations on vehicle emissions standards and international permits). In this situation, four members of the Authority last year notified environment minister Greg Hunt of their resignations.⁸⁰

- 1.118 Evidence to support this sentiment was also presented to Senate Estimates in July last year. In one session, the Chair of the CCA, Dr. Wendy Craik, was asked whether the Government had read or responded to the 'Economic Recovery, Resilience and Prosperity after the Coronavirus' report the Authority published at the time. She responded 'no'.⁸¹
- 1.119 Dr. Craik also stated that the Government had not consulted with the Authority on its 'Gas-Led Recovery' proposal which aims to expand gas extraction and usage in Australia.⁸² A proposal many critics have suggested would impede Australia committing to or achieving net zero emissions.
- 1.120 During the inquiry, it was further confirmed that the Government is not consulting with the CCA and has not requested the CCA to advise and model a pathway to net zero, or requested advice on updated emissions reduction target since 2015.⁸³
- 1.121 This is in direct contrast to the approach taken by the UK Government with its CCC. According to the UK CCC:

The Government has generally followed independent advice from the CCC. Successive UK Governments have accepted the CCC's advised level of the carbon budget for all five of the legislated budgets thus far. The 2050 target was also legislated and then updated in line with the CCC's advice. Many policy developments have also followed from CCC advice.⁸⁴

⁸⁰ 'Ignored by the government, shrunk by resignations – where now for Australia's Climate Change Authority? The Conversation, <https://theconversation.com/ignored-by-the-government-shrunk-by-resignations-where-now-for-australias-climate-change-authority-47366> viewed on 23 June 2023.

⁸¹ Dr. Wendy Craik, former Chair, Climate Change Authority, Senate Environment and Communications Legislation Committee, *Committee Hansard*, 20 October 2020, p. 159.

⁸² Dr. Wendy Craik, former Chair, Climate Change Authority, Senate Environment and Communications Legislation Committee, *Committee Hansard*, 20 October 2020, p. 163.

⁸³ Mr. Brad Archer, Chief Executive Officer, Climate Change Authority, *Committee Hansard*, 24 March 2021, p. 4.

⁸⁴ Climate Change Committee, United Kingdom, *Submission 612*, Attachment 1, p. 7.

1.122 Not listening to the CCA's advice or requesting any reviews is contrary to best practice and indeed the Government's own position during other crises, like the COVID-19 pandemic.

1.123 Added to the fact that the CCA is being ignored, during the inquiry the Government Member for North Sydney, Mr. Trent Zimmerman, believed that a government could and should tell an independent body, like the proposed CCC, what policies and/or technologies the expert body should investigate and recommend to Government, noting:

Mr ZIMMERMAN: ...I would've thought it was not an unreasonable proposition to say that a government could indicate to the commission the parameters that it was prepared to consider, so it didn't go down the path of providing advice that would actually have no functional reality in policy. So, for example, in the current environment, where both major parties have said that they will not go down the path of carbon pricing, I would have thought it would be reasonable for a government to say to its bureaucracy: 'We want you to prepare options for getting us to net zero, but the carve-out from that is that we're not prepared to consider options with carbon pricing.'⁸⁵

1.124 When this scenario was put to Professor Penny Sackett, the Chair of the ACT Climate Council and former Chief Scientist of Australia, it was rejected. Talking about the provision of independent advice, Professor Sackett stated:

... I think it's actually vital. There are roles in public service where we do hope frank and fearless advice of course is given, but that is not always transparently seen by the taxpayer. I think that any government, recognising the importance of climate change as an issue and how quickly things are changing on the ground, would want to have all advice available to it and not to fetter those who are giving it in any way.

It is the onus of those who are giving the advice to follow their expertise and to present the best case, whether it be firefighters talking about fighting fires, climate scientists talking about climate science, or epidemiologists talking about COVID-19. We recognise that at the end of the day the government and the opposition will decide what goes forward, but I think that the country deserves to hear independent advice on these matters.⁸⁶

1.125 This exchange shows the unwillingness of Government members to embrace genuinely independent expert advice being in the public domain to address this policy area. It is the Government's prerogative to accept or disagree

⁸⁵ *Committee Hansard*, 29 January 2021, p. 18.

⁸⁶ Professor Penny Sackett, Chair, ACT Climate Council, *Committee Hansard*, 1 February 2021, p. 7.

with expert advice and select which policy option is preferred but it is in the public interest that Government should also be accountable and have to explain its choices or departure from expert advice. Having all 'options' in the public arena for discussion will significantly increase accountability.

1.126 Unfortunately, the CCA's ability to give independent expert advice to Government has been further compromised by the appointment of members with apparent bias and conflict of interest.⁸⁷

1.127 These appointments to the CCA have further put in doubt its ability to operate independently of Government influence and provide independent expert-based advice. As stated previously the UK CCC has been successful in resolving political differences. It is only because the appointees are independent and trusted that it has been successful. The UK CCC has found that:

Appointing members for their expertise rather than their interests has allowed [the] Committee to be a credible arbiter and be seen to take judgements based on the best evidence without partisanship or vested interest.⁸⁸

1.128 The Community Environment Network stressed the importance of an independent process of selection of members to avoid loss of independence:

It is critical that the members of the Commission be selected through an independent and bipartisan process in order that the Commission may continue to hold a position of integrity across the wider community.⁸⁹

1.129 The Bills propose a Parliamentary Joint Committee on Climate Adaptation and Mitigation (see Division 4) that will vet appointees to ensure they have the requisite expertise and are sufficiently independent. According to

⁸⁷ For example, on 9th April 2021 Grant King, Susie Smith and John McGee were appointed to the board of the Climate Change Authority. Grant King, appointed chair, had previously led a review of Australia's emissions reduction policies in 2019 called the 'King Review'. The Government should have requested the Climate Change Authority do such a review. Mr. King is a former oil and gas executive that oversaw a significant expansion of the liquid natural gas industry in Queensland when he was Managing Director at Origin. He has publicly opposed stronger emissions reduction targets. Susie Smith is an executive at the Australian Industry Greenhouse Network (AIGN), which is a collective of some of Australia's largest emitters, sometimes described as the 'Greenhouse Mafia.' The AIGN has opposed stronger emissions reduction targets.

⁸⁸ Climate Change Committee, United Kingdom, *Submission 612*, Attachment 2, p. 10.

⁸⁹ Community Environment Network, *Submission 336*, p. 3.

ClimateWorks this ‘would create confidence and trust in the nature of the advice to Government’.⁹⁰

- 1.130 The Main Report at paragraph 2.143 and a small handful of inquiry participants mischaracterised the CCC’s powers as impinging on the Executive in setting of targets or policy. The National Farmers Federation suggested:

Should there be any consideration of an independent Authority being established, it should be led by Government as the elected Government of the day. The NFF does not believe the current Bill should do anything more than encourage debate on the issue.⁹¹

- 1.131 As confirmed in the UK CCC’s evidence, the proposed CCC is only advisory and does not in any way impede the power of the Executive to set policy:

The CCC is only advisory – the final decisions on the legislated targets and on all policies to meet them rests with the Government. However, the Government must take account of the CCC advice, and were it to diverge from the CCC proposed targets the Government must set out the reasons why.⁹²

- 1.132 The majority of inquiry participants agreed with the proposed CCC and refuted the allegation that the proposed CCC impeded on the power of the Executive. Mr. Tennant Reed of the Australian Industry Group for example stated that the CCC is an independent advisory body for climate policy and does not seek to usurp the role of Government. Mr. Reed commented:

As we read the bills, the process that they would establish would leave the federal government and the minister with exactly the discretion and responsibility that they currently have to formulate policy and take decisions on policy, but it would require them to work to a time line around decision-making and review, and to at least consider advice that is provided to them.⁹³

- 1.133 As did the NSW Council of Civil Liberties which said:

The Bill does not dictate any climate policy to the government. As framework legislation, it recognises that the executive may require flexibility and choice in formulating and implementing climate policy. Yet, the Bill represents the

⁹⁰ ClimateWorks, *Submission 1957*, p. 4.

⁹¹ National Farmers Federation, *Submission 567*, p. 3.

⁹² Climate Change Committee, United Kingdom, *Submission 612*, Attachment 1, p. 5.

⁹³ Mr Tennant Reed, Energy and Environment Policy, Australian Industry Group, *Committee Hansard*, 29 January 2021, p. 27.

elected Parliament's intention to only permit the development of reasonable, science-based climate policy and decision-making.⁹⁴

- 1.134 Evidence presented to this inquiry as well as recent negative developments have clearly demonstrated a need for a new approach to the Government's climate change advisor. The Bills provide a sensible approach, with the establishment of a CCC and repeal of the Climate Change Authority, that is backed up by international experience and best practice.
- 1.135 One role, explored below, of the new CCC is to undertake National Climate Change Risk Assessments and provide advice to Government on how to respond to risks identified.

National Climate Change Risk Assessments and National Adaptation Plans will help Australia deal with the consequences of climate change

- 1.136 Climate change impacts will have far reaching ramifications for Australia's society, trade, environment, and economy. It is therefore essential that Australia fully assess and understand the risks and adapts to the impacts. As the ATSE astutely puts it:

The progressive warming of the atmosphere and oceans is producing changes in rainfall patterns and in the frequency and magnitude of severe weather events such as extreme heat and cold, droughts, floods and storms. Effective adaptation strategies are necessary to manage these risks and proactively identify new opportunities that may emerge from these climatic changes.⁹⁵

- 1.137 To understand and prepare for climate change, risk assessments and adaptation are key policy pillars under various climate change agreements. As a signatory to the Paris Agreement, Australia is currently required under Article 7(9) to engage in adaptation planning processes.⁹⁶
- 1.138 Climate change risk assessment and adaptation commitments under the Paris Agreement are given effect, co-ordinated and responsibilities assigned through the '2015 National Climate Resilience and Adaptation Strategy' (The Strategy). Noting that DAWE is responsible for implementing the various Commonwealth policies and programs arising from the Strategy.⁹⁷

⁹⁴ NSW Council for Civil Liberties, *Submission 407*, p. 8.

⁹⁵ Australian Academy of Technology and Engineering, *Submission 512*, p. 2.

⁹⁶ United Nations Framework Convention on Climate Change, The Paris Agreement, https://unfccc.int/sites/default/files/english_paris_agreement.pdf, viewed 23 June 2021.

⁹⁷ Department of Industry, Science, Energy and Resources, *Submission 588*, p. 7.

1.139 According to DAWE, the Strategy 'set out how Australia is managing the risks of a variable and changing climate, identified a set of principles to guide effective adaptation practice and resilience building and outlined the government's vision for a climate-resilient future'.⁹⁸ The Department further indicated that it is working with the states and territories to update the Strategy this year.⁹⁹

1.140 The current approach, including the Strategy, was not considered sufficient by many during the inquiry. For example, the Alexandrina Council stated:

In 2015, the Australian Government launched its National Climate Resilience and Adaptation Strategy in which is recognised the need for governments to consider both mitigation and adaptation to a changing climate to be able [to] establish priorities. However, five years on very little has changed and the impacts of climate change are felt more than ever in Australia.¹⁰⁰

1.141 Others like TAI pointed to the flaws of the Strategy and suggested that it 'does not include analysis of known and potential climate risks' and suggested:

Climate risk assessments should investigate a broad range of warming scenarios, including giving particular consideration to higher risk warming scenarios to understand regional and sectoral impacts, and investigate which impacts can and cannot be adapted to.¹⁰¹

1.142 The BCSD also pointed towards fragmented climate information and how this detracted from planning, and preparing for climate change risks:

However, in addition to being complex, climate adaptation information is fragmented. This applies to core physical data, research into potential impacts, and efforts by individual companies and governments to build resilience to climate impacts. This fragmentation makes it very difficult and costly for companies to develop detailed and accurate pictures of their own exposure and vulnerability to climate change-related risks, particularly with regard to climate impacts that may not directly affect their assets but that could have

⁹⁸ Department of Industry, Science, Energy and Resources, 'National Climate Resilience and Adaptation Strategy', <https://www.environment.gov.au/climate-change/adaptation/strategy>, viewed 28 June 2021.

⁹⁹ Ms. Kaya Stuart Fox, Acting First Assistant Secretary, Climate Adaptation and Resilience Division, Department of Agriculture, Water and the Environment, *Committee Hansard*, 24 March 2021, p. 2.

¹⁰⁰ Alexandrina Council, *Submission 367*, p. 2.

¹⁰¹ The Australia Institute, *Submission 1617*, p. 7.

significant implications up or down the value chain. The result is likely to be inadequate, inefficient planning and preparation.¹⁰²

1.143 To fill gaps in current knowledge and bring the information into a consolidated and easily accessible form, the Climate Change Bills propose a National Climate Change Risk Assessment (NCCRA) process. Subsection 17(2) of the Climate Change (Adaptation and Mitigation) Bill 2020 outlines the core requirements of the national risk assessment:

(2) A national climate change risk assessment must:

(a) assess, along multiple global emissions pathway scenarios, the risks to Australia's economy, workers, society, agriculture, environment, and biodiversity from the current and future effects of climate change; and

(b) identify the most significant risks to Australia, based on the nature of the risks, their severity, probability and cost; and

(c) assess the need for coordinated responses to those risks in the next 5 years.¹⁰³

1.144 During the hearings DAWE acknowledged that the federal Government was not undertaking an equivalent NCCRA¹⁰⁴ and was not currently costing impacts:

Mr JOSH WILSON: To the Department of Agriculture, in terms of the approach to adaptation, is it right that under different temperature rise scenarios you're able, perhaps by sector, to have some aggregate sense of the cost impact, whether it's grain production or fisheries or whatever it happens to be? And then you look at adaptation measures in terms of how they deal with that anticipated cost. Would that be a fair way to describe the methodology?

Ms Stuart-Fox : No, we don't do an assessment of cost. What we look at is risks to current systems and how we might adapt or prepare for those risks.¹⁰⁵

¹⁰² Business Council for Sustainable Development, *Submission 1953*, p. 2.

¹⁰³ Climate Change (Adaptation and Mitigation) Bill 2020, Section 17(2).

¹⁰⁴ Ms. Beth Brunoro, First Assistant Secretary, Climate Adaptation and Resilience Division, Department of Agriculture, Water and the Environment, *Committee Hansard*, 29 January 2021, p. 7.

¹⁰⁵ *Committee Hansard*, 24 March 2021, p. 6.

- 1.145 Various witnesses believed that the NCCRA envisaged in the Bill filled gaps in the current approach. IGCC for example said that a NCCRA would be particularly necessary for investors managing infrastructure risks:

Australia is far from understanding its systemic vulnerability to Climate Change, determining adaptation pathways and timing of adaptation pathways and timing of adaptation actions required and the level of investment needed...IGCC believes that a crucial first step, supported by the proposed National climate change risk assessment process under the Bill, is an up-to-date national assessment of infrastructure at risk to the effect of climate change and an indicative quantification of the investment required into adaptation, to facilitate private sector capital flows.¹⁰⁶

- 1.146 ATSE broadly agreed and furthered that the approach proposed by the Bills would raise awareness and assist with future viability of industries. It submitted:

National risk assessments and national adaptation plans, as proposed in these Climate Change Bills, would lead to greater risk awareness and allow for comprehensive forward planning, to ensure more viable and adaptable future industries. It would also enable the identification of technological needs across industries. ATSE supports the implementation of routine risk assessment and adaptation plans nationally as well as by sector, to help identify climate change-driven economic challenges across all industries. As an example, most significant agricultural industries already have national adaptation.¹⁰⁷

- 1.147 Local Government NSW, the peak body for local governments in New South Wales, believed such a NCCRA to be essential to prepare for risks as some measures can only be enacted at the federal level. It posited:

Since 2006, Local Government NSW has surveyed councils every three to five years on their responses to climate change. Similar to the approach of the Climate Change Bills, 82 per cent of New South Wales councils have already conducted a climate change risk assessment. A national climate change risk assessment is needed, as some vulnerabilities are best addressed through Commonwealth parliamentary levers, national coordination and assessing interdependencies between infrastructure owners and government systems.¹⁰⁸

¹⁰⁶ Investor Group on Climate Change, *Submission 497*, p. 6.

¹⁰⁷ Academy of Technology Sciences and Engineering, *Submission 512*, p. 2.

¹⁰⁸ Ms. Linda Scott, Chief Executive Officer, Local Government NSW, *Committee Hansard*, 1 February 2021, p. 2.

1.148 The Property Council of Australia warned that if appropriate adaptation, risk assessment and planning was not undertaken, governments would be further called upon to cover the cost of repairs and reconstructions currently met by insurers as certain assets will become uninsurable.¹⁰⁹

1.149 To respond to the risks identified in the NCCRA, the Bills propose National Adaptation Plans. The Explanatory Memorandum of the Substantive Bill states:

The Bill will require the Government to set five-year national adaptation plans (see Part 3) considering a range of economic and social issues, the distribution of the effects of climate change across society, international obligations and other relevant advice.¹¹⁰

1.150 The Australian Council of Superannuation Investors (ACSI) welcomed the adaptation plans provided by the Bills:

We would welcome a coherent and coordinated national adaptation plan that is underpinned by a commitment to net zero emissions by 2050 (and supported by aligned 2030 targets).

While adaptation is a risk minimisation response, when combined with a net zero by 2050 target, this would present opportunities, given that policy and regulatory uncertainty is currently a significant barrier to investment.¹¹¹

1.151 Private companies like AgBioEn Pty Ltd agreed and believed adaptation planning would assist with their business performance. Finding that a national adaptation plan will help to ensure a reliable supply of their feedstock and will ensure the resilience of Australia's regional communities.¹¹²

1.152 An important accountability element of the Bills is their focus on monitoring and reporting. It became evident during the inquiry that DAWE whilst preparing a strategy to deal with adaptation and climate risk was not measuring progress towards any targets:

Ms STEGGALL: One of the questions that was put to you was: how are you measuring your progress against adaptation goals? Your response was that you do not measure progress. So how are we to assess that we are in fact

¹⁰⁹ Property Council of Australia, *Submission 538*, p. 5.

¹¹⁰ Explanatory Memorandum, Climate Change (Adaptation and Mitigation) Bill 2020, p. 4.

¹¹¹ Australian Council of Superannuation Investors, *Submission 1971*, p. 3.

¹¹² AgBioEn Pty Ltd, *Submission 337*, p. 2.

adapting and improving our preparedness for climate risk if you are not measuring your progress?

Ms Stuart-Fox : I understand, and of course the nature of adaptation is that it is something that is undertaken by all levels of government and by private actors for a range of different assets, services and policies and programs. As you know, we don't currently have a set of measures or targets that try to roll that up into outcomes, and we are not currently measuring progress towards adaptation outcomes.¹¹³

- 1.153 Consequently, witnesses like the Law Council of Australia suggested that the Bills' emphasis on public reporting 'facilitates transparency and accountability in government decision making'.¹¹⁴
- 1.154 With the current lack of adaptation planning, risk assessment and monitoring of progress towards targets, the Bills are crucial to addressing these glaring gaps.

The Climate Change Bills - a way forward

- 1.155 Acknowledging the impacts and risks to Australia from global warming continues to be a much debated and fractious area of policy, unlike other areas of policy also dealing with Australia's long term security and prosperity, such as defence and national security. Policy to address climate change impacts and emissions reductions have continued to be delayed by misinformation and political opportunism by a minority in Australia. Overcoming the policy paralysis is essential for the future safety and prosperity of Australia. Several submissions argued that the Climate Change Bills could overcome this longstanding political deadlock.
- 1.156 Some like the BCA suggested that the design of the Bills would mean they could be agreeable to both sides of politics:

The workability of the proposed legislation lies in its specification of a policy framework for defining a policy pathway, rather than attempting to specify the policy mechanism(s) to be implemented. As a set of guiding principles and decision-making processes, the proposed legislation is more [amenable] to consideration by all sides of the political debate, with the possibility of greater alignment going forward. The framework itself is capable of determining the appropriate policy mechanism(s) as required.¹¹⁵

¹¹³ *Committee Hansard*, 24 March 2021, pp. 1-2.

¹¹⁴ Law Council of Australia, *Submission 1621*, p. 2.

¹¹⁵ Business Council of Australia, *Submission 1576*, p. 2.

1.157 The CEC believed the Bills could end the ‘policy impasse’ of the last decade and that the Bills carried a spirit of bipartisanship which it believed was:

...a critical ingredient for addressing the most serious challenge that humanity has ever faced, and for providing the stable policy and investment environment that is sorely needed to plan for the necessary and inevitable structural adjustments in our economy and infrastructure.¹¹⁶

1.158 The Law Council of Australia also submitted that the Bills would:

...“rule a line” under decades of national policy uncertainty and politics associated with responding to the changing climate and its associated impacts.¹¹⁷

1.159 Emeritus Professor Andrew Hopkins also submitted that the Bills could be a circuit breaker to overcome ideological barriers. Like the BCA, he commented on the flexible design, saying the Bill ‘provides a framework, but not specific solutions that might create divisions.’¹¹⁸

1.160 The call was also strong for politicians to put aside political and ideological beliefs, for example the Josephite Justice Office said:

It is our conviction that political Parties should put aside their political and ideological beliefs and work together to determine a direction that is, in reality, in the best interests of the affected communities, and indeed of our whole country and planet.¹¹⁹

1.161 Several hundred submissions felt that a conscience vote or a free vote by Members of Parliament would be an appropriate means to push forward through the political impasse. A conscience vote is when all parties allow Members of Parliament to vote on an issue independently of party lines. Prior conscience votes have been on issues like marriage equality.

1.162 The Australian Institute of Landscape Architects was one organisation that suggested the policy issue be elevated out of the party room and Members of Parliament be allowed a ‘free vote,’ or a conscience vote:

We ask that MP’s be allowed to fully represent their electorate by allowing a conscience vote on this Bill. The issue of climate change is not Liberal, Labor,

¹¹⁶ Clean Energy Council, *Submission 414*, p. 1.

¹¹⁷ Law Council of Australia, *Submission 1621*, p. 2.

¹¹⁸ Emeritus Professor Andrew Hopkins, *Submission 1178*, p. 1.

¹¹⁹ Josephite Justice Office, *Submission 352*, p. 4.

Green, or Independent - but Australian. We are concerned about our collective future.¹²⁰

- 1.163 The Pitt Street Uniting Church also believed that a conscience vote would ‘maximise parliamentary and community support’.¹²¹ Whilst the Mosman Parklands and Bushland Association called for a conscience vote for the ‘sake of our children and grandchildren’.¹²²
- 1.164 Whilst it is not in the power of the Committee to recommend a free vote be permitted, the broad support for this approach should be noted.

The Bills can be improved

- 1.165 In the many submissions the Committee received, several dozen outlined proposed amendments to improve the Bills. The Main Report went into extensive detail on amendments proposed and there were various small technical changes people wanted. Improvements to the Bills are welcome and some of the recommended amendments will be included prior to the Bills being re-tabled in Parliament.
- 1.166 There were also several more ambitious amendments like requesting an earlier net zero target, setting a 2030 target in the legislation, and removing the reference to the Technology Investment Roadmap, including mandatory climate risk disclosure, and various calls to broaden the factors to be considered in making emissions reduction plans, adaptation plans as well as the guiding principles. Further discussion of those proposals is below.

Do we need to set a 2030 target in law?

- 1.167 The Law Council, the Environmental Defenders Office and some members of the public who made submissions, called for a 2030 target in the Bills. The Law Council in its submission believed:

...that the NSW Bar has raised that in its view, a target of net zero emissions by 2050, while better than nothing, is not sufficiently ambitious. It considers that an interim target of a 50 per cent reduction in emissions by 2030 merits endorsement on the ground that action over the next decade is critical to Australia’s long-term future.¹²³

¹²⁰ Australian Institute of Landscape Architects, *Submission 379*, p. 6.

¹²¹ Pitt Street Uniting Church, *Submission 386*, p. 4.

¹²² Mosman Parks & Bushland Association Inc, *Submission 425*, p. 2.

¹²³ Law Council of Australia, *Submission 1621*, p. 3.

- 1.168 Australia's current nationally determined contribution (NDC) under the Paris Agreement is a 26-28% reduction on 2005 levels by 2030.¹²⁴ This target has been widely criticised as being insufficient.
- 1.169 The CCA in 2014, prior to the Paris Agreement being formalised, recommended setting a target of between 40 and 60% on 2000 levels by 2030, finding that was Australia's fair share.¹²⁵
- 1.170 Because that advice is outdated various bodies have come up with their own targets. The Climate Targets Panel, a panel of scientists and policy makers employing the methodology used by the CCA, suggested a minimum reduction of between 50 and 74% on 2005 levels by 2030 to stay consistent with 2 and 1.5°C respectively.¹²⁶
- 1.171 There is no doubt that Australia must have a stronger 2030 target to give us a chance of limiting warming.
- 1.172 To be effective, the Government must listen to the advice of the experts on climate policy. That is why the Bills establish an independent and expert based Climate Change Commission (CCC) to provide advice on areas of policy like targets.
- 1.173 As soon as the Bills commence, the first two emissions budgets to 2030 are required to be set under the legislation. These two emissions budgets, when combined, effectively set a 2030 goal. Under the Bills, the Government is required to consider the advice of the CCC when setting those budgets. It is reasonably likely that the new CCC would advise on more ambition in the first two budgets.
- 1.174 The 2030 target is a politically contested area and a circuit breaker is needed. A key advantage of an independent expert based CCC as shown by the experience in the UK is that it can resolve political and policy arguments. The UK CCC has resolved political disagreements on the right level of

¹²⁴ Australian Government, 'Australia's Nationally Determined Contribution', <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Australia%20First/Australia%20NDC%20recommunication%20FINAL.PDF>, viewed 28 June 2021.

¹²⁵ Climate Change Authority, 'Reducing Australia's Greenhouse Gas Emissions – Targets and Progress Review final Report', <https://www.climatechangeauthority.gov.au/sites/default/files/2020-06/Target-Progress-Review/Targets%20and%20Progress%20Review%20Final%20Report.pdf>, viewed 28 June 2021.

¹²⁶ Climate Targets Panel, 'SHIFTING THE BURDEN: Australia's emissions reduction tasks over coming decades Climate Targets Panel, March 2021', <https://www.climatecollege.unimelb.edu.au/australias-paris-agreement-pathways>, viewed 28 June 2021.

nuclear in the UK grid. The UK CCC has also consistently advised on ambitious targets which the UK Government has accepted. Similarly, the proposed Australian CCC is key to assessing and setting the right 2030 target.

Should the net zero target be moved earlier?

- 1.175 Just like increasing ambition regarding a 2030 target, various submissions presented evidence suggesting the net zero target be moved forward to an earlier date.
- 1.176 Pollination Group in particular suggested the target be moved earlier in line with the science:

Pollination submits that further consideration should be given to revising the net-zero target date in the Climate Bill to 2040 in light of the findings of the IPCC 1.5°C Report and emerging scientific evidence, in order to ensure the legislation is consistent with this provision from the outset.¹²⁷

- 1.177 It is not disputed that there is growing scientific evidence of needing to reduce emissions faster to avoid catastrophic global warming. The inclusion in the Bills of a ‘ratchet and review’ mechanism in sections 22 and 23 of the Substantive Bill allows for increasing the ambition of targets in line with the latest science and the advice of the CCC.

- 1.178 Some submissions like Greenpeace’s accepted this compromise:

While we broadly support the aims of the bill, and echo the views of other organisations who note that 2050 is too late, we recognise this can be brought forward at a later date and have some improvements to offer to the Parliament.¹²⁸

Do we need to legislate mandatory climate risk disclosure into the Bills?

- 1.179 The Investor Group on Climate Change, citing the Reserve Bank of Australia, put to the Committee that:

‘...climate change is exposing financial institutions and the financial system more broadly, to risk that will rise over time and, if not addressed, could become considerable’. Risks to financial stability arise from both physical and transition risks.¹²⁹

¹²⁷ Pollination Group, *Submission 363*, p. 4.

¹²⁸ Greenpeace, *Submission 330*, p.2.

¹²⁹ Investor Group on Climate Change, *Submission 497*, p. 2.

- 1.180 Hence there is now a trend in corporate Australia for companies to disclose climate risks under a framework called the Task Force on Climate-Related Financial Disclosures (TCFD).
- 1.181 With the TCFD, the Financial Security Board ‘developed a framework to help public companies and other organizations more effectively disclose climate-related risks and opportunities through their existing reporting processes’.¹³⁰
- 1.182 Climate risk disclosure under the TCFD framework requires demonstrating the material climate risks to a company. Whether they be physical risks, for example, risks to infrastructure assets from flooding or bushfires, as well as transition risks, for example, a fossil fuel generator being at risk of stranding because of the transition to net zero. These are all required to be disclosed through a report by companies.
- 1.183 Noting that the Secondary Bill that deals with consequential and transitional measures already provides for climate risk disclosure and management by Commonwealth entities (public bodies/agencies), several witnesses called for the Bills to incorporate amendments that would in effect legislate the TCFD framework, making climate risk disclosure mandatory for companies.
- 1.184 Mandatory climate risk disclosure would compel listed companies of any size to report on their material climate change risks. It is an approach that has been recently adopted in New Zealand¹³¹ and is increasingly being called for by organisations.¹³²
- 1.185 The Environmental Defenders Office, as one example, called for the Secondary Bill to incorporate risk disclosure by companies:

...we recommend that the Consequential and Transitional Provisions Bill should also address the need to impose mandatory disclosure requirements regarding climate change risks on Australian companies. We recommend that

¹³⁰ Financial Security Board, ‘ask Force on Climate-related Financial Disclosures’, <https://www.fsb-tcfid.org/>, viewed 28 June 2021.

¹³¹ New Zealand Government, ‘New Zealand first in the world to require climate risk reporting,’ <https://www.beehive.govt.nz/release/new-zealand-first-world-require-climate-risk-reporting#:~:text=%20New%20Zealand%20will%20be%20the%20first%20country,mandatory%20across%20the%20financial%20system%2C%E2%80%9D%20James%20Shaw%20said.,> viewed 28 June 2021.

¹³² Investor Group on Climate Change, ‘Investors release plan to establish mandatory financial disclosure on climate risk in Australia – Investor Group on Climate Change,’ <https://igcc.org.au/mandatory-financial-disclosure-on-climate-risk/>, viewed 29 June 2021.

this take place by way of amendment of the Corporations Act 2001 (Cth) (and regulations) and the ASX Listing Rules.¹³³

1.186 Similarly, Pollination Group highlighted the importance of this kind of framework extending to companies:

...mandatory climate risk disclosure by Australian companies is not proposed by the Climate Bill, meaning that Australian investors will be placed at a disadvantage globally when it comes to understanding and managing climate risk, this is also likely to be detrimental to the ability to attract global private investment into Australia.¹³⁴

1.187 It is evident that climate risk disclosure is needed for companies. But climate risk and reporting are already a key focus of Australia's financial regulators, the Australian Prudential Regulation Authority (APRA) and the Australian Securities and Investments Commission (ASIC).

1.188 APRA expects financial institutions to report on climate risks under existing prudential rules and has endorsed the use of the TCFD framework. Because of momentum in the business sector on climate as well as pushes from regulators like APRA, KPMG has reported that '58 percent of the ASX100 report using the Task Force for Climate-related Financial Disclosures (TCFD) framework. Up from 16 percent in 2017.'¹³⁵

1.189 More work needs to be done but progress is already being made with the majority of ASX100 companies reporting. It is expected that the number of companies reporting, and the quality of that reporting, will continue to increase over time.

1.190 Therefore, because of the existing momentum and high uptake, the Bills leave future legislators to incorporate climate risk disclosure in primary legislation.

Emissions reduction plans should be disallowable instruments

1.191 The Climate Change Bills were referred to the Senate Standing Committee for the Scrutiny of Bills (Scrutiny Committee) on 2 December 2020. The

¹³³ Environmental Defenders Office, *Submission 551*, p.9.

¹³⁴ Pollination, *Submission 363*, p. 5.

¹³⁵ KPMG, 'Towards Net Zero: International and Australian climate risk reporting,' <https://home.kpmg/au/en/home/insights/2020/11/climate-risk-reporting-towards-net-zero.html>, viewed 29 June 2021.

Scrutiny Committee reported on the Bills in Scrutiny Digest 17 of 2020 (the Digest).

- 1.192 In the Digest, the Scrutiny Committee pointed to emissions reductions plans made under section 30 of the Bill not being disallowable instruments. Disallowable instruments are instruments that can be disallowed (cancelled) by a vote in either the Senate or the House of Representatives.
- 1.193 Currently the Minister is required to simply table the emissions reduction plans. The Government's Technology Investment Roadmap is also not a disallowable instrument.
- 1.194 By not providing for the emissions reduction plan to be a legislative instrument, the Scrutiny Committee believed that there 'would be little opportunity for Parliament to effectively scrutinise and have ultimate control over the plan'.¹³⁶
- 1.195 Parliamentary oversight is extremely important for good governance. In most cases, there should be more parliamentary oversight. The Bills will therefore be amended to incorporate the Scrutiny Committee's findings and ensure that emissions reductions plans are disallowable instruments.

Should the Minister and the Climate Change Commission consider more factors and guiding principles when making decisions?

- 1.196 The Bills provide a set of guiding principles for decision makers (sections 9-16) to consider when exercising duties under the Act. The intent of these sections is for the Minister when making plans or policies to address climate change to have regard to the various circumstances and scenarios that may arise.
- 1.197 The Minister may for example consider the 'Principle of informed decision making' (section 11) to guide them on which sources of information to prioritise when researching and designing climate policy. The Principles are designed to be flexible and adaptable. The Minister can have regard to other factors when making decisions, but the idea is that the Principles have primacy.
- 1.198 Concerns about including additional factors when undertaking the national risk assessment and adaptation planning (section 18), and emissions reductions planning (section 30) were also raised. Whilst not specifically prescribed, additional principles and factors can already be taken into account.

¹³⁶ Senate Standing Committee for the Scrutiny of Bills, *Scrutiny Digest 17 of 2020*, p. 1.

1.199 Similarly, additional areas of skill and expertise were proposed for inclusion in the CCC. The Bills will be amended so that the CCC can establish sub-committees for specific issues which may call upon other skillsets when required. This has been used to great effect by the UK CCC and would allow a tailored approach whilst preserving the governance of the CCC.

Should the Technology Investment Roadmap be kept?

1.200 The Technology Investment Roadmap (the Roadmap) is the Government's primary climate change policy. As mentioned previously, the Roadmap sets out a process for assessing low emissions technology development.

1.201 The business community in the consultation phase of these Bills suggested that a form of 'technology readiness assessment' was integral to climate action. Thus, the Bills incorporate the Roadmap to form a technology readiness assessment. Importantly the CCC will develop and publish Low Emissions Technology Statements (section 70) which are part of the Roadmap process.

1.202 However, the inclusion of the Roadmap was not supported by several witnesses to the inquiry. The Law Council of Australia stated '...there is a view that the current Technology Investment Roadmap, with its reference to fossil fuels, is inconsistent with peer reviewed research'.¹³⁷

1.203 The Australian Conservation Foundation stated that the Government's Technology Roadmap 'prioritises harmful technologies such as Carbon Capture and Storage, fossil fuels and nuclear and fails to support key zero emissions technologies such as renewable energy.'¹³⁸

1.204 The Roadmap is simply a tool to assess the field of technologies available. At times it will canvass technologies that are less useful than others. These assessments provide useful benchmarks and can be used to inform decision making, such as assessing the cost competitiveness of small modular reactors and cost barriers.

Conclusion

1.205 Although the Main Report suggests Australia's current climate framework is adequate, it is not. On the evidence received, the Bills provide a much-needed comprehensive framework to deal with climate change policy, the issue of our times. Witnesses found that the Bills also build on existing

¹³⁷ Law Council of Australia, *Submission 1621*, p. 3.

¹³⁸ Australian Conservation Foundation, *Submission 433*, p. 6.

policy gaps and would provide copious downstream benefits including for investment, planning, risk mitigation and co-ordination.

- 1.206 The Bills contain core elements that many regarded as necessary, objects and guiding principles to help guide action, a net zero target by 2050 which the Commonwealth is yet to full commit to, and would provide certainty for many organisation; five yearly emissions budgets which provide a different and beneficial approach than the Government's ten year budget; five year emissions reduction plans which provide for detailed sectoral plans that will help us reduce emissions across sectors; an independent CCC that is respected and listened to with members who are vetted and non-partisan; and finally national risk assessments and adaptation plans that will help the nation mitigate risk and adapt to climate change impacts already locked in.
- 1.207 Many inquiry participants believed the Bills could be improved. Amendments will be considered, and the Bills will be re-tabled with any improvements at a future date. There is no doubt that our approach to climate change will evolve over time and so must our legislative and regulatory framework.
- 1.208 Finally, so many people and organisations agreed that the Bills could finally break the political deadlock on climate change policy which has vexed Australian politics for so many years. The Bills can be a way forward.
- 1.209 Accordingly, the following recommendations were put to the Committee to reflect the overwhelming support for the Bills and for this policy area to progress. Disappointingly, all Government members of the Committee elected to continue the impasse on this policy area and did not support any of the following notations and recommendations:
- 1.210 The Committee received overwhelming evidence, particularly from community members, that urged an end to the political impasse on climate change and for all sides to work together. Climate Change is an existential threat and as such should be a multi-partisan matter. Therefore, the Government should establish a multi-partisan Joint Select Committee on Climate Change to review matters of climate policy and to offer members of all sides an opportunity to work together to find common solutions to the challenge.
- **Recommendation 1: Establish a Joint Select Committee on Climate Change.**
- 1.211 Much of the discussion during the inquiry was around the role and operation of the proposed Climate Change Commission that would replace

the Climate Change Authority. Noting the evidence received was critical of the operation and utilisation of the Climate Change Authority by the Government, it is recommended that the *Climate Change Authority Act 2011* (Cth) be independently reviewed for efficiency, effectiveness, and ability to give independent advice.

- **Recommendation 2: That the *Climate Change Authority Act 2011* be reviewed to assess its efficiency, effectiveness, and ability to give independent advice.**

1.212 Evidence received by the Committee suggested that Australia's current 2030 target and lack of legislated 2050 target was not sufficient to limit warming to as close to 1.5°C as possible and urged the Government to commit to net zero by 2050 as a bare minimum. The Climate Change Authority can be requested by the Minister to conduct special reviews on climate policy including targets, yet the Minister has not requested such a review at least since the last review in 2014. It is therefore recommended that the Minister request the Climate Change Authority to review Australia's 2030 target and provide advice on the adequate long-term target to limit warming to as close to 1.5°C as possible.

- **Recommendation 3: That the Minister request that the Climate Change Authority review Australia's 2030 target and provide advice on the adequate long-term target to limit warming to as close to 1.5°C as possible.**

1.213 Many inquiry participants highlighted the value of a full costing of climate impacts. However, the evidence received from the Department of Agriculture, Water and the Environment (DAWE) was that no costing of national climate impacts has been undertaken. It is understood that DAWE will update the 2015 National Climate Resilience and Adaptation Strategy. It is therefore requested as part of the works on the update to the Strategy, DAWE undertake a costing of climate impacts across sectors, including but not limited to tourism, agriculture, mining and, health.

- **Recommendation 4: That as part of the update to the National Climate Resilience and Adaptation Strategy DAWE undertake a full assessment of the costs of climate impacts across sectors.**

1.214 Much of the discussion in the inquiry was centred on Australia's long-term emissions reduction ambition and what that meant for the setting of emissions reduction targets. As part of that discussion, many submissions and witnesses called on the Government to commit to net zero by 2050. The Prime Minister has also committed to net zero 'as soon as possible' and

‘preferably by 2050’. Yet, from the evidence it was not clear on whether work was underway on modelling the implications of that target. Noting that the current position of the Government is to undertake modelling on long term emissions pathways as part of the Long-term Emissions Reduction Strategy to be taken to the Conference of the Parties 26 in Glasgow, the Government should request that the Department of Industry, Science, Energy and Resources, as part of that analysis, model pathways to net zero by 2050.

- **Recommendation 5: That the Government instruct the Department of Industry, Science, Energy and Resources to model a pathway to net zero emissions by 2050.**

1.215 Substantial evidence was received by the Committee calling for the Bills to be debated in Parliament and allowed a conscience vote. A conscience vote is 'a rare vote in parliament, in which members are not obliged by the parties to follow a party line, but vote according to their own moral, political, religious, or social beliefs'. Previous conscience votes have happened on other contentious issues such as marriage equality, euthanasia, and sex discrimination. Climate change is an issue of such stature that should be debated on the floor of parliament and be allowed by both parties as a free vote. It is therefore recommended that the Government consider allowing the Bills to be debated and voted on as a matter of conscience.

- **Recommendation 6: That the Bills be allowed to be debated in Parliament.**

1.216 Of the more than 6500 submissions and 49 witnesses that presented to the inquiry, over 99% were in support of the Bills. Given the evidence received in support, there is no doubt that passing the Bills would have a substantial positive effect on Australia's policy suite and international standing. It is therefore recommended that the Bills be passed.

- **Recommendation 7: That the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 and Climate Change (National Framework for Adaptation and Mitigation) (Consequential and Transitional Provisions) Bill 2020 be passed.**

A. Submissions

1	Mr Darren Burrowes	21	Mr Peter Birrell
2	Ms Maddison Kennedy	22	Dr Richard Wood
3	Mr Anthony Moriarty	23	Mr Nick Hopkins
4	Ms Ruth Roxburgh	24	Mr Michael Zealley
5	Mr Philip Irvine	25	Mr Paul Grattan
6	Mr Justin Murphy	26	Mr Paul Doyle
7	<i>Name Withheld</i>	27	Mr Sean Beavis
8	Mr Mitchell Ralston	28	Dr Marianne Hanson
9	Ms Carly Dober	29	<i>Confidential</i>
10	Mr Roger Kennett	30	Mr Graeme Martin
11	<i>Name Withheld</i>	31	Ms Romye Surtees
12	Ms Linda Groom	32	Dr David Everett
13	Mr Mitchell Webster	33	Ms Kathryn Brown
14	Mr Gary Williams	34	Dr Ying Zhi Gu
15	Dr Darryl Johnson	35	Mr Jeff Felice
16	Mr Glen Garner	36	Miss Maddison McLennan
17	Mr Michael Warrilow	37	Miss Laura Tennant
18	Ms Ruth Spence-Stone	38	Mr Simon Heeringa
19	Ms Robyn Swanson	39	Mr Ralph Evans
20	Mr Jesse Mallen	40	Mrs Helen Rowe

41	Mrs Mariana Heeringa	70	Ms Hilary Denholm
42	Mrs Chantelle Bowles	71	Ms Rebecca Richardson
43	Miss Alexa Dennett	72	Ms Julie Muir
44	Dr Charles Berry	73	Dr Gayle Savige
45	Ms Julie Regalado	74	Mr Hugh Durey
46	Mr Oliver Howes	75	Ms Nicole Heesh
47	Mr Krishna Rajaratnam	76	Mr Alex Patison
48	Ms Joan Sauers	77	Miss Clare Frost
49	Ms Keri James	78	Ms Judy Hungerford
50	Dr Robert Brown	79	Dr Desiree Leone
51	Mr Max Collett	80	Ms Susan Strong
52	Ms Tania Tan	81	Ms Leonie Stubbs
53	Mr Daniel Lee	82	Ms Sue Robertson
54	Dr Ross Wylie	83	Dr Felix Rauch Valenti
55	Mrs Nikki Retallick	84	Mr Rod Simpson
56	Ms Lindsay Fordham	85	Ms Nicola Kaldor
57	Mr Michael Holmes	86	Mr Terry Duke
58	Mr Chris Yates	87	<i>Name Withheld</i>
59	Mr Kieran Hack	88	Mr Simon Cavendish
60	Mr Robin Blackmore	89	Mr Lindsay Watters
61	Mrs Anita Gleeson	90	Ms Carina Griffin
62	Ms Rejane Belanger	91	Friends of Narrabeen Lagoon Catchment
63	<i>Name Withheld</i>	92	Miss Tina Lang
64	Ms Janet Thompson	93	Mr Torquil Canning
65	Mrs Anne Coutts	94	Mr Simon Darmody
66	Ms Kayla Neich-Wilson	95	Mr Vince Giglio
67	Ms Barbara Bell	96	Mrs Deborah Friedlander
68	Ms H Blackwood	97	Ms Adele O'Hare
69	Mrs Jennifer Watkins AM		

98	Mr John Hancox	127	Mr Adrian Ingleby
99	Ms Edwina Mullany	128	Mr Justin Laffey
100	Ms Frances Warren	129	Mrs Leanne Sibly
101	Mrs Nancy Oosterhoff	130	Sean
102	Dr Amy Hope	131	Ms Janet Scott
103	Mr Edward Dennett	132	Ms Monica Brown
104	Mr David Archibald	133	Mr Shane Ellis
105	Mrs Joyce Martin	134	Dr Kate Charlesworth
106	Mr Dougal Nivison	135	Mrs Joanna Jankaus
107	Mr John Bushell	136	Mr Timothy Clifford
108	Mr Ingolf Eide	137	Mr Ben Landsberg
109	Dr Robert McKenzie	138	Mr John Paterson
110	Miss Melissa Hamilton	139	Mr John Hughes
111	Dr David Harmer	140	Mr Chris Beal
112	Mrs Michelle Carsen	141	<i>Name Withheld</i>
113	Ms Annie Damelet	142	Mrs Vicki Simpson
114	Mr Ian Wieland	143	Mrs Sally Woodhead
115	Ms Elizabeth Doig	144	Ms Madeleine Curmi
116	Mr Michael Quigley	145	Mr David Pratten
117	Dr Brian Wall	146	Dr Russell Ayres
118	Dr Anthony Morphet	147	Mr David Nash
119	Mr Michael Salvatico	148	Mr Robert Hunt
120	Dr Jillian King	149	Mr Gerard Zammit
121	Mrs Jean John	150	Mr Roger Freney
122	Mx Xavier Calluaud	151	Mrs Kristina Rivers
123	Mr Martyn Brogan	152	Ms Eva Bet
124	Ms Katherine Jankaus	153	Mr Tony Rinaudo
125	Mr Les Whittle	154	Mr John Sullivan
126	Mr Ofir Davidovich	155	Dr Richard Thwaites

156	Mrs Cindy Manassen	185	Ms Linda Seymour
157	Ms Louise Corteen	186	Ms Sharon Griffiths
158	Mr Andrew Zylinski	187	Ms Susan Inglis
159	Mr Ross Fairburn	188	Mrs Melissa Howes
160	Mr Lesley Jakes	189	Ms Lesley Mosbey
161	<i>Name Withheld</i>	190	Mr Chris Barltrop
162	Mr John Morrison	191	Mrs Megan Skewes
163	Mr Tim Eden	192	Mr Duncan Hedditch
164	Mr Remy Pilot	193	Mr Barry Parsons
165	Mrs Janet Dawson	194	Mr Henry Braude
166	Mrs Ann-Charlott Paduch	195	<i>Name Withheld</i>
167	Sydney Peace Foundation	196	Mr John Hanks
168	Mrs Beatrice Naylor	197	Future Super
169	Mr Cameron Puyol	198	Mr Brian Phillips
170	Mr David Hillman	199	Australian Services Union (ASU)
171	Mr Anthony Gilchrist	200	Mrs Anneliese Alexander
172	Mr Glen Philpott	201	Dr Cheryl Choong
173	Mr Andrew Brooks	202	Ms Fleur Hoogenhout
174	Dr Simone Belli	203	Ms Madeleine Thesseling
175	<i>Name Withheld</i>	204	Prof David Blair
176	Ms Kristyn Glanville	205	Mrs Michael Williamson
177	Mr Jed Major	206	Ms Imogen Jubb
178	Mr Ralph Carlisle	207	Dr Ben Ewald
179	Mr Bruce Harris	208	Mrs Helen Elliott
180	Ms Rachel Feiner	210	Karit (Australia) Pty Ltd
181	Mrs Joanna van Kool	211	Mr Chris Kaczan
182	Mr Daniel Hockin	212	Mr Roger Grice
183	Ms Sandiellen Black	213	Mr Colin Jacobson
184	Ms Christel Leyendecker		

214	Ms Wendy Coombes	242	Jane Stevenson
215	Mr Leigh Hancock	243	Mr Arne Borg
216	Mr Chris Lee	244	Mr Kenneth Ritson
217	Mrs Janet Sabet	245	Mr Stafford Watts
218	Ms Carol Dowling	246	Ms Suzanne Sheridan and Peter McVay
219	Mr Hugh Chalmers	247	Mr Tim Bateman
220	Electrical Trades Union of Australia	248	Ms Julie Brand
221	Mr Steve Bradley	249	<i>Name Withheld</i>
222	Ms Victoria Heaton	250	Mr Peter Lindenmayer
223	Mr James Cannon	251	Mr Jonathan Michael
224	Dr Lola Hill	252	Ms Patricia Rose
225	Ms Saidie Mir	253	Ms Kylie Smith
226	Brenton White	254	Mr Ben Gray
227	Mrs Anne Lenert	255	Mrs Mary Baldwin
228	Ms Elaine Rowbotham	256	Mrs Kate Hutchison
229	Ms Rosalind Bradley	257	Shaun Kay
230	Christos Tsobanos	258	Professor Tim Flannery
231	Ms Christiane Moloney	259	Ted Irvine
232	Joy Nason	260	Mr Peter Wilkinson
233	Dr Elizabeth Chong	261	Climate Action North West
234	Tony Hepworth	262	Ms Heather McCabe
235	Ms Simone Osullivan	263	Mr Robert Patterson
236	Ms Nicole Humphreys	264	Dr Harriet Cunningham
237	Steve Charles	265	Mr Simon Lederer
238	St Vincent's Ashfield Social Justice Group	266	Ms Katharine Telfer
239	Mr Steven Hoy	267	<i>Name Withheld</i>
240	David Stark	268	Geelong Sustainability
241	Mrs Sarah Brenan	269	Clea Eykelkamp

270	Ms Anne Pender	298	Mr Wesley Baker
271	Mrs Vaike Neeme	299	Ms Christine Wheeler
272	Miss Tara McCabe	300	Ms Helen Clemens
273	Mrs Judi Summers	301	Dr John Chapman
274	Mr Brian Mollan	302	Metung Science Forum
275	Mr Laurent de Schoutheete	303	Altis Consulting
276	Dr Andrew Turner	304	Mr Geoffrey Saxby
277	Dr Susan Steggall	305	Mr Vivikth Narayanan
278	Mr Rodney Stanford	306	Professor Christine Catling
279	Mr Seymour Maddison	307	Ms Abigail Thomas
280	Lesley Strickland	308	Mr Peter Hallams
281	Dr Paul Attfield	309	<i>Name Withheld</i>
282	Dr Eric van Beurden	310	Mr Reuben Robinson
283	Mr Edward Marynowicz	311	Mr Neil Harper
284	National Council of Women, ACT	312	Ms Jennifer O'Neill
285	Ms Lian Tanner	313	Mr Andy Lanskis
286	Ms Kirsten Pollard	314	Mr Eric Hatfield
287	Ms Nicole Petzierides	315	Mr Evan Predavec
288	Mr Bart Thomas	316	Dr Johanna Centra
289	<i>Name Withheld</i>	317	Mr Michael Mathieson
290	Caroline Hoisington	318	Mr Bob Penfold
291	Prof Neil Gunningham	319	Miss Kelly Mills
292	Mr Noel Thompson	320	Ms Kathleen Winchester
293	Mr George Miltenyi	321	Mrs Catherine Willis
294	Ms Anne Marett	322	Ms Dharshini Rodrigo
295	Prof Tim Karl	323	Dr John Shiel
296	Ms Yael Leibovitch	324	Mr Leonard Cordiner
297	Mr James Thom	325	Mr Stephen Green
		326	Dr Gordon Stanger

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|-----|---|-----|--|
| 327 | <i>Name Withheld</i> | 348 | Australian Industry Greenhouse Network |
| 328 | Dr Ingo Weber | 349 | Australasian Centre for Corporate Responsibility |
| 329 | Miss Erica Jolly | 350 | Professor Rosemary Lyster |
| 330 | Greenpeace Australia Pacific | 351 | Wilderness Society |
| 331 | Western Adelaide Coastal Residents' Association | 352 | Josephite Justice Office |
| 332 | 350 Eurobodalla | 353 | Australian Ethical |
| 333 | Good Day Girl | 354 | Whitsunday Conservation Council |
| 334 | HealthWISE New England North West | 355 | Reservoir Neighbours for Climate Action |
| 335 | Open Cities | 356 | ClearSky Solar Investments |
| 336 | Community Environment Network | 357 | Tasmanian Council of Social Service |
| 337 | AgBioEn | 358 | Digital Storytellers |
| 338 | Network of Illawarra Consumers of Energy | 359 | Arid Lands Environment Centre |
| 339 | Origin | 360 | Hansen Partnership Pty Ltd |
| 340 | Australian Council of Social Service (ACOSS) | 361 | Green Building Council of Australia |
| 341 | Kilara Capital | 362 | Science & Technology Australia |
| 342 | Farmers for Climate Action | 363 | Pollination |
| 343 | Veterinarians for Climate Action | 364 | Lawyers for Climate Justice Australia |
| 344 | Save the Children Australia | 365 | Bushfire Survivors for Climate Action |
| 345 | Mothers for a Sustainable South Australia (MOSSA) | 366 | Carbon Market Institute |
| 346 | Institute for Energy Economics and Financial Analysis (IEEFA) | 367 | Alexandrina Council |
| | ▪ 346.1 Supplementary to submission 346 | 368 | <i>Confidential</i> |
| 347 | Q Solar Pty Ltd | 369 | Common Grace |

- 370 Kilter Rural
- 371 Women's Climate Congress
- 372 Wellington Climate Action Network
- 373 Sutherland Shire Environment Centre
- 374 City of Melbourne
- 375 The South East Climate Action Network
- 376 Christians Together for Climate - Western Sydney Group
- 377 TKD Architects
- 378 Climate Wise Agriculture
- 379 Australian Institute of Landscape Architects
- 380 Environment House Incorporated
- 381 Women in Nuclear (WiN) Australia Inc.
- 382 Enova Community Energy
- 383 Wentworth Group of Concerned Scientists
- 384 Northern Alliance for Greenhouse Action
- 385 Climate Emergency Australia
- 386 Pitt Street Uniting Church
- 387 Mornington Peninsula Shire
- 388 Australian Marine Conservation Society
- 389 Nightingale Housing
- 390 Energy Transition Advisers
- 391 Climate Council of Australia
- 392 CLOUSTON Associates
- 393 Green Energy Trading/
National Carbon Bank of Australia
- 394 Wavelength Consulting
- 395 Freerange Future Pty Ltd
- 396 Council for the Human Future
- 397 Uniting Church in Australia - Assembly
- 398 Outdoors People for Climate Action
- 399 Blackstone Minerals
- 400 Lighter Footprints Inc
- 401 Australian Council of Trade Unions
- 402 Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)
- 403 The ANU Climate Change Institute
- 403.1 Supplementary to submission 403
- 404 Amber Electric
- 405 Monash Emergency Climate Action Network
- 406 Australian Museum
- 407 NSW Council for Civil Liberties
- 408 Micah Australia

409	Australian Conservation Foundation Macnamara Community	428	NSW Early Childhood Environmental Education Network (ECEEN)
410	Field Naturalists' Club of Ballarat	429	LegalVision ILP Pty Ltd
411	CLEANaS	430	Academy of the Social Sciences in Australia
412	Bayside Climate Crisis Action Group	431	SGS Economics & Planning
413	Tamworth Parents and Friends for Climate Action	432	Edge Environment Pty Ltd
414	Clean Energy Council <ul style="list-style-type: none">▪ 414.1 Supplementary to submission 414	433	Australian Conservation Foundation
415	NSW Circular	434	Marlin Communications
416	Australian Democrats	435	Beyond Zero Emissions
417	Atlassian	436	BWD Strategic
418	Council Alliance for a Sustainable Built Environment (CASBE)	437	Queenscliff Climate Action Committee
419	Hoogland Consult Pty Ltd	438	Marque Lawyers
420	Tesla Motors Australia Pty Ltd	439	The a2 Milk Company
421	Spowers	440	Detail Green Pty Ltd
422	Aware Super	441	The Salvation Army and the St. Vincent de Paul Society
423	Just Transitions South Gippsland	442	Melior Investment Management
424	Australian Conservation Foundation Community Albury Wodonga Region	443	Our Blue Dot
425	Mosman Parks & Bushland Association Inc	444	Transition Town Guildford
426	Neighbours United for Climate Action	445	Ande Bunbury Architects
427	Baenziger Coles Pty Ltd	446	Australian Parents for Climate Action
		447	Fridays for the Future Alice Springs
		448	Renew Toowoomba Branch
		449	Tidetech Pty Ltd
		450	Fahimah Designs

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| 451 | Hornsby Shire Climate Action | 475 | NSW Irrigators' Council |
| 452 | Your Move Health | 476 | Seated Massage |
| 453 | Planning Institute of Australia (PIA) | 477 | Ms Deborah Abela |
| 454 | Smap Consulting | 478 | Blueblood Solutions |
| 455 | Prof Will Steffen | 479 | Ryde Gladesville Climate Change Action Group |
| 456 | Green Music Australia | 480 | Mrs Pamela Reeves |
| 457 | Verdecon Pty Ltd | 481 | Clean Energy For Eternity |
| 458 | Ballarat Diocesan Social Justice Commission and Catholic Earthcare Ballarat | 482 | Climate Action North-West Tasmania |
| 459 | Green Moves Aust Pty Ltd | 483 | Jane Goodall Institute Australia |
| 460 | Enosi Australia | 484 | Green Wallet |
| 461 | Dr Philip Laird | 485 | Sun Mountain Zen Association Inc |
| 462 | Benedictus Media | 486 | Bush Heritage Australia |
| 463 | RAW Travel | 487 | Randwick Sydney Alliance Team |
| 464 | Climate Change Balmain-Rozelle | 488 | Ecology Group Our Lady of the Way Catholic Parish North Sydney |
| 465 | Save Little Manly Beach Foreshore Inc | 489 | Zeromow Pty Ltd |
| 466 | Sample Coffee Roasters Pty Ltd | 490 | The University of Queensland |
| 467 | Australian Wildlife Society | 491 | Wingecarribee Net Zero Emissions Inc |
| 468 | The Council of Small Business Organisations | 492 | Comms Declare |
| 469 | Purves Environmental Fund | 493 | Nuclear For Climate Australia |
| 470 | Urban Creative Studio | 494 | Evergen Pty Ltd |
| 471 | Koskela Pty Ltd | 495 | POC+P architects |
| 472 | Mundaring in Transition | 496 | BioPak |
| 473 | Harvey | 497 | Investor Group Climate Change |
| 474 | Prof John Quiggin | | |

498	Sea Shepherd Australia	521	Darebin Climate Action Now (DCAN)
499	ClarkeHopkinsClarke	522	Lord Mayor's Charitable Foundation
500	Licella Holdings	523	Impact Investment Group
501	Australian Environmental Grantmakers Network	524	Gecko Environment Council Assoc Inc (Gecko)
502	Avigrain	525	Oxfam Australia
503	Nature Conservation Council	526	Australian Manufacturing Workers' Union
504	Ballarat Renewable Energy and Zero Emissions (BREAZE)	527	Climate Action Monaro
505	iQ Renew Pty Ltd	528	Responsible Investment Association Australasia (RIAA)
506	2030Yea Inc	529	Australian Sustainable Built Environment Council (ASBEC)
507	WorkForClimate	530	South Hobart Sustainable Community Inc
508	Quiip (Holdings) Pty Ltd	531	Island Biologicals
509	Pangolin Associates	532	Peel Preservation Group Inc
510	<i>Confidential</i>	533	Australian Association of Social Workers (AASW)
511	Victorian Women's Trust	534	Friends of the Earth
512	Australian Academy of Technology and Engineering	535	Climate Action Now Signs Incorporated (CANSign)
▪	512.1 Supplementary to submission 512	536	Great Barrier Reef Foundation
513	T3 Partners	537	Anglicare Australia
514	Mr Andrew Watson	538	Property Council of Australia
515	Mr Terrance le Roux	539	Verdia
516	North Harbour Community Group	540	Bioenergy Australia
517	Doctors for the Environment	541	Diveplanit Travel Pty Ltd
518	Missionary Sisters of the Society of Mary		
519	Glen Eira Environment Group Inc		
520	SOS Central West NSW		

- 542 New South Wales Nurses and Midwives' Association
- 543 Unilever Australia and New Zealand
- 544 BEAM Mitchell Environment Group
- 545 ADAC - A Different Approach Community
- 546 Australian Institute of Architects
- 547 Queensland Law Society
- 548 Australian Association for Environmental Education NSW (AAEE)
- 549 Centre for Policy Development
- 550 Public Health Association of Australia
- 551 Environmental Defenders Office
- 552 Australian Industry Group
- 553 Tearfund Australia
- 554 Dr Luke Bannon
- 555 Mr Doug Parbery
- 556 Mr Guy Hallowes
- 557 Dr Andrew Davidson
- 558 Mr Angus King
- 559 Mrs Sarah Lawson
- 560 The Soft Build
- 561 Mr Rod Mitchell
- 562 Citizen's Climate Lobby Australia
- 563 Dr Judy Lambert
- 564 Mosman Environment Group
- 565 Dr Kenneth Seidenman
- 566 Mrs Harriet Gibson
- 567 National Farmers Federation
- 568 *Name Withheld*
- 569 Ms Kay Barton
- 570 Australasian College for Emergency Medicine (ACEM)
- 571 Dr Roy Tasker
- 572 Australian Medical Association
- 573 Ms Penelope Milson
- 574 Dr George Korosy
- 575 CHEN Cattai Hills Environment Network
- 576 Ms Anda Banikos
- 577 Mr Philip Hocking
- 578 Mrs Caroline Payton
- 579 Sustainable Agriculture & Communities Alliance
- 580 Ms Lynette Kalms
- 581 Mr David Ballantine
- 582 Australian Education Union
- 583 Mr Nicolas Pascal
- 584 The Manly Greens
- 585 Ethical Partners
- 586 Habitacity
- 587 Coalition for Community Energy

588	Department of Industry, Science, Energy and Resources	610	Conservation Council of South Australia (CCSA)
	▪ 588.1 Supplementary to submission 588	611	Climate Action Network Australia (CANA)
	▪ 588.2 Supplementary to submission 588	612	Climate Change Committee, United Kingdom
589	Mr John Rogerson	613	Mr Phil Bryant
590	Dr Bill Cowley	614	Dr Sharon Moloney
591	Mrs Anne Bardell	615	Mr Michael Mangold
592	Mrs Jeanette Hack	616	Mr Thomas Knowles
593	Climate Change Authority	617	Mr John Dennett
	▪ 593.1 Supplementary to submission 593	618	Ms Anna Huband
594	Mrs Felicity Briggs	619	Ms Natalie Lauritsen
595	<i>Confidential</i>	620	Mr Tony Smith
596	Mr Robert Tunn	621	Make Your Mark Investments
597	Ms Elizabeth Anne (Annie) Wicks	622	<i>Name Withheld</i>
598	Ms Susan Bennett	623	Mr Ronan O'Hagan
599	Prof Philip Siddall	624	Mrs Luciana Paroli
600	Southern Cross Kayaking	625	Mr Paul Thompson
601	Mrs Rosemary Adams	626	Mrs Estelle Dollfus-Gates
602	Dr Josh Townley	627	Ms Janet Martin
603	350 Australia	628	Mrs Abigail Heywood
604	Mr Ben Mullin	629	Professor Markus J Seibel AM FAHMS FRACP
605	Amnesty International Australia	630	Ms Laurel Heisman
606	WWF-Australia	631	Dr Emer O'Gara
607	Cumberland Ecology	632	Dr Hui Ang
608	Climate and Health Alliance	633	Mr Alan King
609	Alliance17	634	BRAINS
		635	Ms Emily Paddon-Brown

636	Mr Marcus Hassall	664	Mr Greg Smith
637	<i>Name Withheld</i>	665	Mr Kevin Gillam
638	Mrs Diane Franken	666	Mr Benjamin Cronshaw
639	Ms Megan Tennant	667	Miss Helen Yesberg
640	Mr Rod Cunich	668	Mr Dimitri Kozlinski
641	Dr Margot Cunich	669	Dr John Yesberg
642	ACT Climate Change Council	670	Ms Margaret Toll
643	Dr Liora Ballin	671	Mr John Boyle
644	Ms Julia Weisz	672	Dr Alicia Sutton
645	Mr Felix Taaffe	673	Mr Tristen Tan
646	Mr John Steggall	674	Mr Alan Benn
647	Dr David Lonie	675	Dr Sean Lawrence
648	Ms Stephanie Keane	676	<i>Name Withheld</i>
649	Naomi Roseth	677	Ms Michelle Marrinon
650	Mrs Karen Gullotto	678	Ms Julie Marlow
651	Ms Claudia Perry-Beltrame	679	Mr Peter Hogg
652	Anne Layton-Bennett & John Donnachy	680	Ms Suzy Bessell
653	Ray Peck	681	Dr John Burman
654	Mr Reginald Parker	682	Ms Bronwyn Muir
655	Ms Emma Hawkins	683	Ms Emorita Butler
656	Catherine Hollywell	684	<i>Confidential</i>
657	Tejinder Gill	685	Mr Steven Ellwood
658	Ms Rayna Bland	686	Ms Emily Dickson
659	Russell Sully	687	Ms Susan Kitchener
660	Moonee Valley Sustainability	688	<i>Confidential</i>
661	Dr David Cole	689	Ms Bethany Killicoat
662	Reon Bavinton	690	Northern Beaches Climate Action Network
663	Barbara Fraser	691	Jennifer Hole

692	Mr Sam Coggins	721	Mr David Smith
693	Mrs Kate Patterson	722	Ms Catherine Rossiter
694	Mrs Juliet Mason	723	<i>Name Withheld</i>
695	Ms Raya Stanton	724	Dr Tony Lewis
696	Ms Joanna Osborn	725	Mr David Clarke
697	Mr Fraser Cargill	726	Mr Andrew Lloyd
698	Mr Darryl Nelson	727	Ms Rebecca McLean
699	Mr Aaron Gullotto	728	Mr Oscar Delaney
700	Mrs Margaret Lown	729	Mr Aidan Rowley
701	Mr. Julian Richman	730	Mr Stephen Young
702	Mrs Gillian Lee	731	Ms Angela Michaelis
703	Anne Corbett	732	Ms Sue Todd
704	Ms Jane Fisher	733	Mr Oliver Shute
705	Mrs Veronique Chitterer	734	Dr Adrienne Hunt
706	Thais Hardman	735	Ms Fiona Moclair
707	Ms Annette Taylor	736	Mr John Mobbs
708	Mr Peter Todd	737	Mr Stuart Kelly
709	<i>Name Withheld</i>	738	Ms Olivia Webster
710	Ms Johanna Geddes	739	Ms Megan Benson
711	Mr Bill Shute	740	Ms Sallie Moffatt
712	Mrs Julie Ryland	741	Ms Jillian Blackall
713	Mr Mark Delaney	742	Mr Barrie Seppings
714	Mrs Helen Cameron	743	Mr Frank Hack
715	Mrs Nicole Stanmore	744	Miss Sharon Coley
716	Mr Steven Hare	745	Joy Sutton
717	Dr Bruce Buckley	746	<i>Name Withheld</i>
718	Dr Catherine Pye	747	Mr Clayton Hairs
719	Mr Iain Dall	748	Mr Adam Farrow-Palmer
720	Mr Mark Bergamo	749	Mr Greg Hardisty

750	Mr Graham Plumb	778	Ms Lesley Walker
751	Ms Deborah Thornton	779	Ms Kylie Jones
752	Mrs Jane Sultana	780	Ms Elaine Hopper
753	Mr James Stuteley	781	Mrs Angela Burrows
754	Dr Richard Ruffin	782	Warwick Cathro
755	Mr Michael Fogarty	783	Mrs Marka Selmes
756	Mrs Michelle Rawson	784	Mr Julian Peterson
757	Mr Des Cleary	785	Ms Sarah Ferber
758	Dr Kate Smolders	786	Dr Lucy Grant
759	Mr Peter Lamb	787	Mr Robert Ellison
760	Mr Ian Mackintosh	788	Mr Jack-Henry Bresa
761	Mr Adam Logan	789	Mrs Anna Brogan
762	<i>Name Withheld</i>	790	Mr Christopher Hall-Jordan
763	Mr Victor von der Heyde	791	<i>Name Withheld</i>
764	Mr Dean Pratley	792	Mr Scott Smith
765	Mr Osher Günsberg	793	Mrs Vanessa Mettam
766	Mr Matthew Clark	794	<i>Name Withheld</i>
767	Ms Felicity Jefferson	795	Miss Kristel Sootarsing
768	<i>Name Withheld</i>	796	Mrs Catriona Patrick
769	Professor Anthony and Mrs Loretta Hassall	797	Mrs Christine O'Grady
770	Mrs Georgia Beer	798	Mr David Young
771	Genevieve Welsh	799	Mr Les Johnston
772	Mr David Cliff	800	Ms Catherine Eggert
773	Mr Stephen Morris	801	Ms Claire Cahalan
774	Heather Saville	802	Mrs Carol McPhail
775	Miss Sarah Brennan	803	Mr Jim Downing
776	Mr Nicholas Moffatt	804	Miss Evie van Emmerik
777	Mrs Dorte Planert	805	Mr Dror & Anthea Ben-Naim
		806	Dr Janine Rizzetti

807	Ms Mary Jeavons	835	Mr Anthony Fisk
808	Mrs Belinda Skelton	836	Dr Michael Low
809	Mr Don Vogt	837	Ms Lani Shea-An
810	Dr Pam Garton	838	Miss Jasmine Bowtell
811	Ms Erin Liddell	839	Ms Frances Davies
812	Dr Jenny Cheng	840	Mr Philip Rickards
813	Ms Hilary Davies	841	Ms Alice Anderson
814	Ms Elizabeth Cox	842	Mr Keith Stead
815	Prof Marie-Paule Austin	843	Dr Carolyn Currie
816	Mr Marcus Strang	844	Ms Jacqui McElwee
817	Dr Dorit Becher	845	Mrs Alice Gable
818	Ms Lesley Hodges	846	Mrs Katharine Saunders
819	Mrs Carol Newton	847	Mrs Karli Franks
820	Mr Hugh Geddes	848	Ms Rebecca Chew
821	Mr Tony Rowse	849	Dr Rochelle Hine
822	Mrs Helen Middleton	850	Ms Sue Dwyer
823	Archer Mountain Earth Community	851	Dr Shaun Watson
824	Clive Huges	852	Dr Kristen Pearson
825	Sandra Gleeson	853	Mrs Jennifer Curtis
826	Peter Godsell	854	Dr Jane Loveday
827	Bruce Raeburn	855	Bruce James
828	<i>Name Withheld</i>	856	Mrs Edith Newton
829	Mr George Carrard	857	Ms Deborah Frenkel
830	Mr Peter Wargent	858	Dr Elizabeth Young
831	Phil Browne	859	Dr Stephen Glasby
832	Ms Jenny Gee	860	Mr Peter Tuft
833	Bronwyn Westcott	861	Mr Michael Chanas
834	Virginia White	862	Mr Richard Sale
		863	Ms Helen Greer

864	Dr Rosemary Kennedy	893	Mrs Tanya McNaughtan
865	Mr Patrick Dancer	894	Fridays 4 Future Online
866	Mr Andrew Hubben	895	Dr Kym Kilpatrick
867	Trevor Hoare	896	InfraTech Partners
868	Mr Peter Brown	897	Hon Peter Vickery QC
869	Ms Julie Antill	898	Elizabeth Walton
870	Ms Rosalind King	899	Ms Nathalie Verellen
871	Dr Katrin Swindells	900	Mr Stephen Nelson
872	Mrs Isabelle Gagnon	901	Frank Ross
873	Mr Kyle Kenna	902	Mr Geoff Adams
874	Mr David Gobbett	903	Sue Starr
875	Mrs Jill Johnston	904	Helen Lynes
876	Ms Jodi Phillis	905	Ms Fay Redmond
877	Mr Patrick Sloan	906	Ms Lara Whitton
878	Ms Pamela Moss	907	The Hon Garry Downes AM QC
879	Elizabeth and John Hooper	908	Ms Kerry Todd-Smith
880	Ms Sarah Winkler	909	Ms Mary O'Carroll
881	Mrs (Helen) Rosemarie Parker	910	Mr Gavin Newman
882	Dr Nicholas Scott	911	Mrs Patricia Nesbitt
883	<i>Name Withheld</i>	912	Jim Allen
884	Ms Atsuko Kunugi	913	Ms Margaret Gluek
885	Stephen Fuller	914	Mrs Jaimee Stakelum
886	Mr Nicholas Stacher	915	Mr Paul Graveson
887	Ms Sarah Weber	916	Mr Edson Pike
888	Ms Joanne Sharpe	917	Ms Louise Baber
889	Ms Nina Skuja	918	Mr Ian Anderson
890	Mr Ultan Macdonald	919	Ms Rox De Luca
891	Mr David Smith	920	Ms Jennifer Lang
892	Ms Wendy Dugmore		

921	Dr Katherine Jacka	949	Gillian King
922	Ms Michele Elliot	950	Ms Felicity Cahill
923	John Gherardi	951	Mr Daniel Conte
924	Mr Phil Hawkins	952	Ms Emma Scragg
925	Mrs Rebecca Lumley	953	Ms Kate Duffy
926	Natasha Hurley-Walker	954	Diane Butt
927	Ms Jill Robinson	955	Amanda Fenton
928	Mr Noel Corkery	956	Ms Janet Lilley
929	Mr Jason Tolmie	957	Mrs Emma Brown
930	Margaret Vautin	958	Ms Lisa Train
931	Mrs Gabrielle Martinovich	959	Ms Shan Huang
932	Ms Dianne Hearn	960	Eve Strano, Etha Architecture
933	Ms Julie Tayoor Mills	961	Roger Whittaker
934	Dr Stephen Lake	962	Ms Sonda Banney
935	Ms Jacqueline Cusack	963	Mr Andy Macdonald
936	Prof Neville Nicholls	964	Ms Bridget Harrington
937	Ms Briana Hendry	965	Ms Monique Mayze
938	Ms Pauline Bleach	966	Mrs Sally Oakman
939	Mr Jack Egan	968	Ms Alanna Melville
940	Mr John Sutherland	969	Mr Jim Fraser
941	Ms Jeanne Scott	970	Ms Natalia Dusanovic
942	Julie Marlow	971	Mr Sydney James Craythorn
943	Edwina Floch	972	Miss Makenzie White
944	Emeritus Professor Kay Lawrence AM	973	Dr Ian Carr-Boyd
945	Dr Cybele Dey	974	Georgina Roussac
946	<i>Confidential</i>	975	Master Ted Bowers
947	Anne Craig	976	Ms Jacqui Malins
948	Marianne Kearney	977	Dr Paul Tonson
		978	Mrs Daniel Howard

979	Mr. Andrew Edwards	1007	Mrs Ingrid Ralph
980	Sue Martin	1008	Mr Chris Thomas
981	Ms Fay Jones	1009	Mrs Janene Flick
982	<i>Name Withheld</i>	1010	<i>Name Withheld</i>
983	Dr John Mayze	1011	Mr Alan Smith
984	Mr Roland van Amstel	1012	Nicholas M Hollo
985	Gary Fry	1013	Ms Kathryn Keen
986	Ms Nicole Leuning	1014	Dr John Price
987	Prof Andrew Parkin	1015	Ms Liesl Bourke
988	Ms Lynette Wilks	1016	Tristan
989	Michael Houston	1017	Mr Jeremy Cameron
990	Mr David Bacon	1018	Ms Adrienne Cross
991	Ms Lynn Misurka	1019	Dr Ulf Steinvorth
992	Mr Bruce Steele	1020	Mr Craig Linn
993	Dr Robert Taylor	1021	Ms Victoria Bell
994	Mr Jesse Marquard-Karp	1022	Mr Peter Havord
995	Ms Marta Mangold	1023	Mr David Gogoll
996	Mr Rodney Mackay Sim	1024	Mrs Jane Linthicum
997	Ms Alison Ritchie	1025	Dr Gareth Dickenson
998	Cleantech Industries Sunshine Coast	1026	Mr Don Stokes
999	Ms Kathleen Lynch	1027	Mr Gary Drysdale
1000	Mr Tanmay Kulkarni	1028	Mrs Sarah Reid
1001	Ms Siena Hopkinson	1029	Mr Rasik Makan
1002	Ms Kathryn McCarthy	1030	Mr Cameron Khorrami
1003	Mr Thomas King	1031	Ms Renee Nuske
1004	Leisa Tough	1032	Ms Liz Martin
1005	Ms Caileen Cachia	1033	Ms Joanna Sercombe-Moore
1006	Dr Penelope Mitchell	1034	Ms Gillian Coote
		1035	Mrs. Dorthe Hansen

1036	Ms Natalie Leader	1064	Mr Ross Culey
1037	Mr Richard Batsford	1065	Elise Springett
1038	Mr Ray Wu	1066	Dr Kate Crowley
1039	Mr Andrew Brown	1067	Ms Emma Coupland
1040	Mrs Catherine Saunders	1068	<i>Name Withheld</i>
1041	Mr Michael Vail	1069	Ms Rose Saltman
1042	Mr Jonathan Smith	1070	Ms Amy Vos
1043	Mr John Waterhouse	1071	Ms Judith Hodges
1044	Mrs Marg Flint	1072	Ms Paula Russell
1045	Mr Bruce Lambert	1073	Eve Lamb
1046	Ms Linda Bradburn	1074	Ruth Ann Haig
1047	Dr Stewart Dallas	1075	Ms Jasmine Campbell-Ellis
1048	Miss Katherine Thomas	1076	Mr Jeffrey Wilson
1049	Mr Bill Bovington	1077	Ms Claire Budden
1050	Mrs Steena Barnett	1078	Dr Roger King
1051	Mr Damien Bovalino	1079	Mr Gulliver Coote
1052	Mr Julius Timmerman	1080	Mr David Moser
1053	Ms Sarah Rickard	1081	Mr Martin Carroll
1054	Ms Lauren Pavli	1082	Mr Joshua Dwyer
1055	Mr Cameron Culey	1083	Jennifer Fisher
1056	Mrs Sarah Watson	1084	Dr Simon Ward
1057	Mr Pavle Cajic	1085	Mr Patrick Hockey
1058	Ms Therese Blaisdale	1086	<i>Name Withheld</i>
1059	Mrs Rebecca McKenzie	1087	Miss Fiona Kepert
1060	Mr David Hart	1088	Ms Michele Konrad
1061	Ms Tessa Rainbird	1089	Mr Jason Ramsay
1062	Associate Professor Vivien Holmes	1090	<i>Name Withheld</i>
1063	Mr David Lee	1091	Ms Lynne Swift
		1092	Mr Andrew Fraser

1093	<i>Name Withheld</i>	1124	Ms Malika Reese
1094	Ms Briony Mitchell	1125	Mr Vincent Parisi
1095	<i>Confidential</i>	1126	Damian Harrison
1096	Lois Levy	1127	Malcolm & Katrina Gilfillan
1097	Dr Peter Greig	1128	<i>Confidential</i>
1098	Mr Andrew McNee	1129	Ms Anna Harvey
1099	<i>Name Withheld</i>	1130	Mrs Sharlee Gibb
1100	Mrs Nicole Bannister	1131	Ms Jill Steverson
1102	Mrs Kate Webb	1132	Ms Lara Chapman
1104	Ms Rebecca Purchon	1133	Liz Barton
1105	Ms Ilse Fait	1134	Mrs Serena Silvestro
1106	Mr Robert Tate	1135	Ms Valerie Joy
1107	Ms Linda Cassidy	1136	Miss Melisha Leggett
1108	Mr David Aynsley	1137	Janet Foote
1109	Mr John Mongard	1138	Paul Hardcastle
1110	Mr Edward Haslingden	1139	Mr Peter Sharp
1111	Mr David Nunn	1140	Mr Damian McCrohan
1112	Ms Jacqueline Ratcliffe	1141	Prof Laurence Mather
1113	Ms Sarah Bickford	1142	Cleanwood
1114	Dr James McArdle	1143	Dr Sarah Malone
1115	Ms Natalie Jiricek	1144	Mr Alan Stewart
1116	Ms Kate Botting	1145	Mrs Christy Spier
1117	Mr Benjamin Rogers	1146	Ms Paula Hurley
1118	Mrs Julie Scott	1147	Colin Mitchell
1119	Mr David Yaun	1148	Ms Fiona Radford
1120	Dr Mani Berghout	1149	<i>Name Withheld</i>
1121	Cr Sarah Grattan	1150	Marie Hollingworth
1122	Jon Clarke	1151	Ian Maloney
1123	Mr Has Altaiar	1152	Mr Joseph Azar

1153	Miss Claire Ogden	1182	Miss Naomi Findlay
1154	Mr Phillip McColgan	1183	Mr Jeff Wilson
1155	Dean Morelli	1184	Ms Jessica Fairfax
1156	Ms Jude Page	1185	Ms Penelope Vos
1157	Mr Brian Wilson	1186	Mr Mark Schaschke
1158	Carol and Ray Bailey	1187	Ms Priscilla Nielsen
1159	Mr Jason Gardner	1188	Dr Warwick Rouse
1160	Mrs Nicole Tognetti	1189	Martina Gabrielsson
1161	Mr David Christie	1190	Robin Andrew Summons
1162	Mr David Thomas	1191	Ms Carey Buls
1163	Mr Cameron Hancock	1192	Ms Bec Page
1164	<i>Name Withheld</i>	1193	<i>Confidential</i>
1165	Olivia Noto	1194	Ms Tanya Marwood
1166	Mr Greg McDonald	1195	Ms Cara Horner
1167	Mr Shaun Flynn	1196	Mr Evan Barrett
1168	Mr Andrew Wilkie MP	1197	<i>Name Withheld</i>
1169	Nick Tight	1198	<i>Name Withheld</i>
1170	Michael O'Sullivan	1199	Mrs Sharon Lowe
1171	Ms Sandrine Barouh	1200	Tim Kelly
1172	Ms Monique Kurdian	1201	Vernon Baber
1173	Bev Cowan	1202	Cr Natalie Warren
1174	Ms Antonette De Jesus	1203	Justin Doyle
1175	Ms Esther Grimes	1204	<i>Name Withheld</i>
1176	Mr Stephen North	1205	Dr Michelle Storey
1177	Penny Osterhaus	1206	Gillian Pechey
1178	Prof Andrew Hopkins	1207	Madeline Holly
1179	Mr Samuel Brown	1208	Mr. Michael Mullerworth
1180	Ms Sharee McCammon	1209	David Passmore
1181	Jim Butler	1210	Mr Graeme McCormack

1211	Ms Ingrid Jolley	1240	Mrs Heather Firth
1212	Helen Abrahams	1241	Ms Elizabeth Holly
1213	Ms Catherine Loye	1242	<i>Name Withheld</i>
1214	Ms Tracey Johnson	1243	Ms Cristel Chambers
1215	Dr Sylvia French	1244	Mr Andrew Lawson
1216	Ash Berdebes	1245	Mr David Curzon
1217	Ms Christina Smith	1246	Dr Graeme Dunlop
1218	Leah Dent	1247	Mr Tim Maguire
1219	Ms Kathryn Hannan	1248	Mrs Rebecca Altaffer
1220	Mr Peter Coleman	1249	Mrs Elizabeth Gilmore
1221	Mrs Kathie Fetterplace	1250	Mr Jeremy Swift
1222	Jonathan Peter	1251	Kirsty & Michael Campbell
1223	<i>Confidential</i>	1252	Ms Rachel Coffey
1224	<i>Confidential</i>	1253	Mrs Kristina Bennett
1225	Nina Digiglio	1254	Dr Joanne Fifer
1226	Lachlan Feggans	1255	Mr Robert Parker
1227	Matt Taylor	1256	Mr Peter Morris
1228	Professor Stephen Keen	1257	Dr Alexandra Pavli
1229	Ms Maree Nutt	1258	<i>Name Withheld</i>
1230	Mr Nathan Stitt	1259	Ms Eve Clark
1231	Mr Govind Maksay	1260	Col Jennings
1232	Mr Philip Rutherford	1261	Dr Amy Ashman
1233	Mr Foster Cunningham	1262	Malcolm Robins
1234	Judith Ohana OAM	1263	Dr Steve Dennis
1235	Susan M Swain	1264	Mrs Kirstine McKay
1236	James Ahern	1265	Mr Greg Carman
1237	Ben and Pen Clark	1266	Dr Hilary Green
1238	Vicki Brooke	1267	Mrs Gaynor Mitchell
1239	Mr Thomas Olsen	1268	Mrs Eve Elliott-Smith

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|------|--|------|------------------------|
| 1269 | Ms Joanna Jackson | 1297 | Ms Julie Beagley |
| 1270 | Mr Rafael Gonzalez | 1298 | Dr Geoff Lipsett-Moore |
| 1271 | Mr Luke McElnea | 1299 | Mr David Brennen |
| 1272 | Mr AJ Duncanson | 1300 | Deborah Coffey |
| 1273 | Mr Nathaniel Wong | 1301 | Greg Roberts |
| 1274 | Ms Eleanor Reuvers | 1302 | Mrs Amanda Schmidt |
| 1275 | <i>Name Withheld</i> | 1303 | Ms Naama Lev |
| 1276 | Darryl Bubner | 1304 | Mr Dean Thill |
| 1277 | Mrs Emily Wilson | 1305 | Patrick Mitchell |
| 1278 | Ms Elisabeth Dark | 1306 | Rowena Parry |
| 1279 | Mr Peter Symons | 1307 | Mrs Diane Bowles |
| 1280 | Ms Lynn Murray | 1308 | <i>Name Withheld</i> |
| 1281 | Professor Ann Paterson | 1309 | Ms Christine McKenzie |
| 1282 | Ms Simone Novello, Blue
Mountains Eco | 1310 | Mr John Vernon |
| 1283 | Sir Richard Branson | 1311 | <i>Name Withheld</i> |
| 1284 | Natalie Hanna | 1312 | Mr Denis Krizanovic |
| 1285 | Mr Jeremy Hagan | 1313 | Benjamin (LB) Johnston |
| 1286 | Mrs Jennifer Harris | 1314 | Mr Michael Wiles |
| 1287 | Mrs Julie Taylor | 1315 | Dr Peter Lawrence |
| 1288 | Mr and Mrs Glen and Carol
Lockyer | 1316 | Mr Bruce Trevena |
| 1289 | <i>Name Withheld</i> | 1317 | Ms Patricia Morrow |
| 1290 | Mr Pieter van der Vegte | 1318 | Timothy Robilliard |
| 1291 | Ms Annelies Hodge | 1319 | Mrs Ros Lewis |
| 1292 | Mr Paul Cullen | 1320 | Mrs Kathleen Chappell |
| 1293 | Mrs Erin Remblance | 1321 | Mr Nicholas Robinson |
| 1294 | Mr Neil Lawson | 1322 | Mr Gerry Egan |
| 1295 | Mrs Joanne Chenery | 1323 | Dr Jennifer Koch |
| 1296 | Mrs Alysha Randall | 1324 | Mr Jack Dennis |
| | | 1325 | Mr William Ifield |

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|------|----------------------|------|--------------------------------------|
| 1326 | Christine Robilliard | 1355 | Giselle Mawer |
| 1327 | Dr Alicia Lloyd | 1356 | Jennifer Hurley |
| 1328 | Ms Sascha Ettinger | 1357 | Louisa Clark |
| 1329 | Mr Paul Jones | 1358 | Glynn Ryall |
| 1330 | Geoff and Helen Cole | 1359 | Joshua Brown |
| 1331 | Coralie Kingston | 1360 | Mr Miklos Bolza |
| 1332 | Ms Kari Sann | 1361 | Ms Raechel Murray |
| 1333 | Mr Nick Sharp | 1362 | Mrs Robyn Coghlan |
| 1334 | Dr Cassandra Rogers | 1363 | Mr Barrie Hill |
| 1335 | Dr Hayden Schilling | 1364 | Dr Elizabeth Kaziro |
| 1336 | Dr Trent Jansen | 1365 | Ms Roxana Swanson Manuel |
| 1337 | Julia Coffey | 1366 | Mrs Carolyn Crossman |
| 1338 | Jen Barling | 1367 | Ms Elizabeth Patterson |
| 1339 | Maureen Timmermans | 1368 | Angus Donovan |
| 1340 | Anna Berthelsen | 1369 | Mark Rowbotham |
| 1341 | Poppy Carter | 1370 | Mr Colin Tansley |
| 1342 | Lilly Schwartz | 1371 | Stuart Crossman |
| 1343 | Laura Ramos Javier | 1372 | Desley Kippax |
| 1344 | Kobi Shetty | 1373 | Tony Edge |
| 1345 | Brian Miller | 1374 | Kirsty & Peter Gold, Rhodium Capital |
| 1346 | Doreen Cheong | 1375 | Gregory John Olsen |
| 1347 | Angus Richards | 1376 | Mr Caleb Grimes |
| 1348 | Peter Campbell | 1377 | Ms Hannah Koch |
| 1349 | Adam Lippiatt | 1378 | Mrs Denise Paine |
| 1350 | Miriam Rotstein | 1379 | Herbert W Wildes |
| 1351 | Andrew Williams | 1380 | Mr Russell Marston |
| 1352 | Chris Ferguson | 1381 | Mr Tim Brown |
| 1353 | Beverley Dick | 1382 | Mrs Katrina Chandler |
| 1354 | Dr Alanah Jeffries | | |

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|------|---|------|---|
| 1383 | Mr John Garnett | 1412 | Ms Margaret Armitage |
| 1384 | Transition Wyndham | 1413 | Ms Kaye Bysouth |
| 1385 | Rebecca Short | 1414 | Susan Scott |
| 1386 | <i>Name Withheld</i> | 1415 | Prof Doreen Rosenthal |
| 1388 | Mr William Falkiner | 1416 | Liellie McLaughlin |
| 1389 | Ms Belinda Xie | 1417 | Dr Marian Turner |
| 1390 | Mr Ken Enderby | 1418 | Robyn Bird |
| 1391 | Ms Anne Wennagel | 1419 | Rolf Edler |
| 1392 | Ms Andrea Wilson | 1420 | Grantham Research Institute
on Climate Change and the
Environment |
| 1393 | Andrew Lenart | 1421 | Humane Society International
Ltd |
| 1394 | Ms Louise Shepherd | 1422 | Ms Mary Reardon |
| 1395 | Dr Anne Nelson | 1423 | Ian R. Elsum |
| 1396 | Mr Jameson Wright | 1424 | Dr Sandra Clague |
| 1397 | Jeff Telfer | 1425 | Stella Groves |
| 1398 | Dr Bronwyn Walker | 1426 | Ms Victoria Osborne |
| 1399 | Dr Adrian Plaskitt | 1427 | Teresa Cannon |
| 1400 | Julie Gaul, NSW Early
Childhood Environmental
Education Network (ECEEN) | 1428 | Dr Juliet Bennett |
| 1401 | Mrs Ann Sharp | 1429 | Timothy Pallin, Paddy Pallin |
| 1402 | Ms Judy Clisby | 1430 | Pamela & Michael Jones |
| 1403 | Beverley Crossley | 1431 | Prof Ruth Irwin |
| 1404 | Ms Annabel Sides | 1432 | Mr Jon Marquard |
| 1405 | Nelly Gava | 1433 | Patricia Spencer |
| 1406 | Dr Lian Parry | 1434 | Mr Randall Taylor |
| 1407 | Dr Karen Campbell | 1435 | Penny Harris |
| 1408 | Mr Donald Norris | 1436 | Miss Megan Grigarius |
| 1409 | Mr Barry Mitchell | 1437 | Dr Jasper Lee |
| 1410 | Ms Margaret Brewer | 1438 | Mrs Anne O'Hara |
| 1411 | Mrs Pam Pitt | | |

- 1439 Jo Compson
- 1440 Mr Ian Yorke
- 1441 Mr Chris Darmanin
- 1442 Luci Foote-Short
- 1443 Ms Kristie Goote
- 1444 Ms Cat Macleod
- 1445 Ms Julia Jones
- 1446 Miss Nina Marquard-Karp
- 1447 Mr Jonathan Trope
- 1448 Mr Jack Anglberger
- 1449 Ms Laurel Waddell
- 1450 Mrs Kia Wahl
- 1451 David Cook
- 1452 Linda Gatfield
- 1453 Margaret Armstrong
- 1454 Amanda Linn
- 1455 *Name Withheld*
- 1456 Ms Casey Dunn
- 1457 Dr Bronwyn Batten
- 1458 Ms Marita McGuirk
- 1459 Dr Mark Yates
- 1460 Mrs Carolyn Kent-Muldrew
- 1461 Mr Peter Clisby
- 1462 Beata Stasak
- 1463 Mayor Michael Regan,
Northern Beaches Council
- 1464 Miss Sophie Yang
- 1465 Mr Geoffrey Wright
- 1466 Michael Nay
- 1467 Ruth Osborne
- 1468 Australian Religious Response
to Climate Change
- 1469 Mr Leon Berghout
- 1470 Ms Sue-Ellen Smith
- 1471 Eveline Goy
- 1472 Amelia Cooper
- 1473 Ms Naomi Blakey
- 1474 Ms Diana Gibson
- 1475 Lori Callahan
- 1476 Mr Paul Adams
- 1477 Pamela Wright
- 1478 Mrs Leanne George
- 1479 *Name Withheld*
- 1480 Ms Katherine Svalbe
- 1481 Clancy Strickland
- 1482 Mr Kim Riley
- 1483 Dr Alan Butler
- 1484 Maria Tiimon Chi-Fang,
Pacific Calling Partnership
- 1485 *Name Withheld*
- 1486 Ms Josephine Gianni
- 1487 Mr Paul Karlik
- 1488 Mr Brett Mason
- 1489 Dr Lorraine Hardwick
- 1490 Mr Thomas Griffiths
- 1491 Mr Benjamin Bridge
- 1492 Ms Chloe Lines
- 1493 Dr Patricia Murray
- 1494 Mr David Marquard

1495	Darryl Fallow	1523	Mr Graham Brice
1496	Ms Diane More	1524	Susie Morgan
1497	Mrs Joyce Erceg	1525	Mrs Annabelle Burley
1498	Mr Hugo Deal	1526	Miss Lou Muscolino
1499	Ms Jennifer Rose	1527	Mr Bruce Hawken
1500	Mrs Yifen Axford	1528	Adele Geraghty
1501	John Thompson, Mitchell Community Energy	1529	Ms Pamela Riordan
1502	Vicki Perrett	1530	Katherine McKenzie
1503	Viniana Vererua	1531	Ms Kate Turner
1504	Vince Lindsay	1532	Ms Bronwyn Crawford
1505	Judith A. Ware	1533	Ms Julianne Tice
1506	Caroline McDaid	1534	Miss Shirley Pearson
1507	Mr Paul Douglass	1535	Dr Christopher Blaxland
1508	Miree Le Roy	1536	Dr Deepthy Koshy
1509	Dr Nicholas Souter	1537	Mrs Rebecca Dengate
1510	Matthew R Rowan	1538	Mrs Anthea Falkiner
1511	Dr Michelle Hamrosi	1539	Larry Melocco
1512	Mr Matthew Pye	1540	Ms Abby Mather
1513	Miss Frances Samalionis	1541	Miss Erin McPhail
1514	Mr Simon Madden	1542	Ms Siobhain O'Leary
1515	Ms. Anna Markey	1543	Dr Andrea Gaynor
1516	Mr Robert Hunter	1544	Mr Tom Hunt
1517	Ms Karen Cameron	1545	Ms Georgina Pike
1518	Gwilym Summers	1546	Dr Trevor Powell, The Climate Conversations Group
1519	Dr Peter McCallum	1547	Annette Maie
1520	Phil Jones	1548	Dr Deborah Randall
1521	Miss Josee Hart	1549	Mrs Kath Whitson
1522	Mr David Gosden	1550	Nicole Raffin

1551	Ms Annette Geary	1580	Mr Stephen Walter
1552	Ms Kathryn Ridge	1581	<i>Name Withheld</i>
1553	Mr Michael Hassett	1582	Mrs Jane Pye
1554	Dr John Crawford	1583	Dr Eileen Langford
1555	Dr Katriona Wylie	1584	Helen Webb
1556	Mrs Megan Cassidy	1585	Diccon Loxton
1557	Ann Howard	1586	Anne McNulty
1558	Mrs Rebecca Lochel	1587	Jo Runciman
1559	Mr Bruce Munday	1588	Rebecca Parker
1560	Dr Jonathan Chey	1589	Ms Lucia Ravi
1561	Sam Marshall	1590	Naomi Stafford
1562	Karen Vegar	1591	Ms Virginia Macleod
1563	Dr Felicity Murphy	1592	Mr Barry Briggs
1564	Angelika Lange	1593	Dr Marie Ferland
1565	Mrs Yolanda Dasgupta	1594	Rosalie Toth
1566	Mr Bruce Echberg	1595	The Hon Paul Munro
1567	Ms Emma Supriyono	1596	Dr Christine A. Millward
1568	Miss Elise Fancourt	1597	Miss Jessica Rattanong
1569	Ms Philippa Hambleton	1598	Mr Terry Jones
1570	Mr Steve Brennan	1599	Mrs Eliza Weekes
1571	Dof Dickinson	1600	Mrs Amanda Durack
1572	Virginia Ford Zink	1601	Peter Coyne
1573	Mike Miller	1602	Dr Catherine Grant
1574	Ilithya Bone	1603	Miss Monica Rattanong
1575	Mr Howard Ralph Seccombe	1604	Mrs Fiona Bullivant
1576	Business Council of Australia	1605	Monique Jack
1577	Dr Stan Bolden	1606	Russell Rollason AM
1578	Miss Dana Lanceman	1607	Mr Matt Tomaszewski
1579	Mr James Gatland	1608	Gerry Phelan

1609	Mr Colin Rosewell	1634	Mr Ian Coffey
1610	Peter & Robin Marsh	1635	Ms Christine Morris
1611	Local Government NSW	1636	Mr Lachlan Ward
1612	Graeme Beere	1637	Mrs Francoise Hochart
1613	Sunshine Coast Environment Council	1638	Ms Christina Shepherd
1614	Mr Kemble Walker	1639	<i>Name Withheld</i>
1615	Mr Colin Rosewell	1640	Wendy Corrick
1616	Prof. Michael Lawrence	1641	Mr Terry Strong
1617	The Australia Institute	1642	Alice Bradshaw
	▪ 1617.1 Supplementary to submission 1617	1643	Mr Luke McCartney
1618	Mr Jesse Young	1644	Mrs Sue Erbag
1619	Bevan Dockery	1645	Dr John Van der Kallen
1620	Dr Cameron Wilson	1646	Natasha Prewett
1621	Law Council of Australia	1647	Mrs Sarah Scott
	▪ 1621.1 Supplementary to submission 1621	1648	Mrs Maria Loyez
1622	Mrs Kathryn Teagle	1649	Mr Francoise Hochart
1623	Dr Kristin Boyle	1650	Ms Jennie Cary
1624	<i>Name Withheld</i>	1651	Ms Kath Naish
1625	Dr Gregor Lawrence	1652	Prof Rufus Clarke
1626	Miss Nicola Allen	1653	Dr Sarah Waddell
1627	Miss Justine Dodd	1654	Ms Emily Bayford
1628	Ms Kate Duigan	1655	Ms Amber Yepa
1629	Mr Rohan Byrnes	1656	Mr Francis Breen
1630	Jane Marquard	1657	Ms Emma Kallen
1631	Ms Annie Close	1658	Mr Greg Richardson
1632	Mr Joseph Fernandez	1659	Mr Jonathon Hoare
1633	Tom Seiler	1660	Miss Jessica Cairnes
		1661	Ms Sarah Morgan
		1662	Ms Isabel Fernandez

- 1663 Ms Vanessa Moskal
1664 Mrs Elizabeth Brown
1665 Ms Bridie Guy
1666 Ms Christine Aldred
1667 Mr Andrew Marks
1668 Mr Robert Nay
1669 William G Allaway
1670 Dr Helen Fountain
1671 Mrs Alix Bradfield
1672 Ms Robyn Kerr
1673 *Name Withheld*
1674 Mr Martin Cousins
1675 Dr Courtney McPhail
1676 Prof Ian Acworth
1677 Ms Aida Tebbutt
1678 Ariel Johnson
1679 Mrs Serina Lawley
1680 Ms Kiri Athanasiov
1681 Emily Dickson
1682 Mr Timothy Gregory
1683 Mr Dean Trimboli
1684 Mr Robert Henderson
1685 Mr. Tony (Anthony) Fontes
1686 Ms Colette Dash
1687 Ms Fiona Howie
1688 Mr Matthew Stanton
1689 Mr Philip Johnson
1690 Mr Andrew Manwaring
1691 Ms Heather Graham
1692 Mr Michael Rynn
1693 Mr Simon Court
1694 Mrs Anthea Griffiths
1695 Mr Michael McEvoy
1696 Ms Annabelle Evans
1697 Elizabeth O'Hara
1698 Ms Helen Jones
1699 Mr Jack Gill
1700 Mrs Miranda Bridges
1701 Mr Colin Bailey
1702 Ms Nicole Hodgson
1703 Ms Meredith Kefford
1704 Kay Wood
1705 Dr Jennifer Mills
1706 Andrew Boorman
1707 Dr Alanah Kazlauskas
1708 David Taylor
1709 Mr Neil McCrossin
1710 Mr Jim Henderson
1711 Mrs Tamar Sommerville
1712 Mr. Jody Williams
1713 Mrs Shanta Gerbi
1714 Annette Kilarr
1715 Mr Sean Moran
1716 Ms Sandra Hession
1717 Mr Keith Burrows
1718 *Name Withheld*
1719 David Arthur
1720 Mrs Susan Murray

1721	Dr Adrian Flitney	1749	Tory Bridges
1722	Shannan Langford Salisbury	1750	Ms Christine Hannan
1723	Ms Emma Storey	1751	Rachel Davies
1724	Ms Vicki Cook	1752	Ms Danie Lomas
1725	Rob Firth	1753	David Hudspeth
1726	Dr Michael Forrester	1754	Ms Amanda Healy
1727	Miss Kate Baldry	1755	Ms Carol Rea
1728	Mrs Marie Carvolth	1756	Ms Nicole Johnston
1729	Mr Julian Clarkson	1757	Mr Jonathan Barnett
1730	Mrs Catherine Money	1758	Mr Todd Hislop
1731	Ms Linda Surplice	1759	Geoff Miell
1732	Mr Craig Sommerville	1760	Chloe Mason
1733	Colin Bridges	1761	Barrett Moulds
1734	Mrs Susan Walters	1762	Nick Abel
1735	Ms Vilailaksana Ramangkura	1763	Graham Wood
1736	Mr Benjamin Riley	1764	Sandra Killick
1737	David Glynne Jones	1765	Dr Natasha Deen, Save Our Coast
1738	Loftus Public School	1766	Rowan Huxtable
1739	Mr Thomas Sherlock	1767	Joanna Gardner
1740	Patricia Saunders	1768	Mr Harry McNally
1741	Ben Holt	1769	Adrienne Kabos
1742	Mr Howard Gwatkin	1770	Eliana Leopold
1743	Mary & Dallas Ford	1771	Lynne Lawrence
1744	Dr Valerie Kay	1772	Yolande Stone
1745	Ms Joanne Tulau	1773	Susan Smith
1746	Mr Robert Bosler	1774	Col Seiler
1747	Dr Christina Kirsch, ClearSky Solar Investments	1775	Jacqui Scruby
1748	Tanya Cullen	1776	Laura French-Moran

1777	Amanda Mackenzie	1806	Alister Huth
1778	Cristy McAuliffe	1807	Malcolm Duffield
1779	Tom Allen	1808	Diane Deane
1780	Colin Alexander Nicolson	1809	Valerie Thiessen
1781	Ms Catherine Mc Naughton	1810	Leonie Cowan
1782	Raymond Cox	1811	James Gralton
1783	Bev McPhee	1812	Colin McDougall
1784	Gail Pett	1813	Dr Mike Forrester
1785	Grit Schuster	1814	Joanne Stead
1786	Dr Jan Aldenhoven	1815	John Desmond Fitzgerald
1787	Wendy Tubman	1816	Prudence Bardsley
1788	Rachel Nelson	1817	Richard Mayhew Thompson
1789	Malcolm G Ward	1818	Stephen Abell
1790	Simon Shute	1819	Ann Nielsen
1791	Ian Bowie	1820	Mark Fetterplace
1792	Eugene von Nagy	1821	Christine Gordon
1793	Sharon McDonell	1822	Steven Ellwood
1794	Jeanette Lippiatt	1823	Dr Pia Bernardi
1795	Monica Pflaum	1824	Christabel Carvolth
1796	Kerry Silcock	1825	Geoff McDonald
1797	Tina Hollis	1826	Kim Bagot
1798	Megan Wynne-Jones	1827	Helen Mccall
1799	Amanda McDougall	1829	Diane Hallion
1800	Vivien Friedrich	1830	Australian Rainforest Conservation Society Inc
1801	Anne Woodham Claypole	1831	Mrs Robin Thomas
1802	Gabriella Hont	1832	Helen Lucas
1803	Therese Ryan	1833	Catherine Blair Palese
1804	Gemma Sim	1834	Craige Cronin
1805	Mary Martin		

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|------|---|------|---|
| 1835 | Louis de Villiers | 1861 | Uniting Church in Australia,
Synod of Victoria and
Tasmania |
| 1836 | Julie Fibbin | 1862 | John Gude |
| 1837 | Ilona Renwick | 1863 | Ken McInnes |
| 1838 | Jennifer Bailey | 1864 | Rachel Timm |
| 1839 | Kathleen Donovan | 1865 | Catherine C Sweeney |
| 1840 | Catherine Franconi | 1866 | Janet Thompson |
| 1841 | Philippa Rowland | 1867 | Rosemary Hadaway |
| 1842 | Jacqueline Marlow | 1868 | Felicity Sheaves |
| 1843 | Dominic WY Kanak | 1869 | Sustainable Population
Australia Inc |
| 1844 | Laura Wellauer | 1870 | Claudia Tregoning |
| 1845 | Daniel Menges | 1871 | Rahsn Witt |
| 1846 | Dimity May | 1872 | Hilary Lovibond |
| 1847 | <i>Name Withheld</i> | 1873 | Dr John Patterson |
| 1848 | Waste Wise Peninsula | 1874 | Sandra Reed |
| 1849 | Dr Rachael Litchfield | 1875 | Marie Mattinson |
| 1850 | Charles McInnes | 1876 | Dereka Ogden |
| 1851 | Mara Dimond | 1877 | Bart Citroen |
| 1852 | Averil Strom | 1878 | Sulochi Walisinghe |
| 1853 | Dr Madelaine Hanson | 1879 | Janet Colman |
| 1854 | Rob Scott | 1880 | David Dennison |
| 1855 | Cathy Merchant | 1881 | Maritime Union of Australia |
| 1856 | Sara Green | 1882 | Margaret & Jonathon Page |
| 1857 | Lyn Smith | 1883 | Christine Hogan |
| 1858 | Yan Yiu | 1884 | Annie Marlow |
| 1859 | Southcoast Health and
Sustainability Alliance
(SHASA) | 1885 | Jasper McCormack |
| 1860 | Dr Harley Wright | 1886 | Fletcher McCormack |
| | | 1887 | Southern Cross Kayaking |

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|------|---|------|--|
| 1888 | Joanna Joy | 1915 | Australian Architects Declare and Biodiversity Emergency |
| 1889 | Nikki Starr | 1916 | Caroline Pidcock |
| 1890 | Duncan Reid | 1917 | Amanda Lawson |
| 1891 | Dr Robert Staib | 1918 | Alan Tyler |
| 1892 | Roslyn Staib | 1919 | Australian Olympic Committee |
| 1893 | Jennifer Lloyd | 1920 | Louise Taylor |
| 1894 | Gerd Koblitz | 1921 | Mosman Council |
| 1895 | Jodi Ormsby | 1922 | Brotherhood of St Laurence |
| 1896 | Keith Welsh | 1923 | Sally Shimada |
| 1897 | Dr Emma Gilberg | 1924 | North Coast Environment Council |
| 1898 | Ian Fraser | 1925 | Sarah Bruns |
| 1899 | Renee Imbesi | 1926 | Ulrika Lindholm |
| 1900 | Zero Emissions Sydney North Inc | 1927 | Mitzi Tuke |
| 1901 | Paul Hood | 1928 | Renny Bradtke |
| 1902 | Christine Watson | 1929 | Julie Cutten |
| 1903 | Jon Coe | 1930 | Dorothy Umeofia |
| 1904 | Jack Watkins | 1931 | Tricia Ross |
| 1905 | Australian Medical Association Northern Territory | 1932 | Smart Energy Council |
| 1906 | James & Julie Edgerton | 1933 | City of Sydney Council |
| 1907 | Anne Benjamin | 1934 | Yajilarra Trust |
| 1908 | Jemma D'Astoli | 1935 | Dr Liz Hanna |
| 1909 | Dennis Morton | 1936 | Wendie McCaffley |
| 1910 | Dr Karen Shand | 1937 | Central Land Council |
| 1911 | Jane Mundy | 1938 | IFM Investors |
| 1912 | Dr Mel Bradley | 1939 | Eily Stevenson |
| 1913 | Tom Evans | 1940 | FrontRunners |
| 1914 | Protect the West Group | 1941 | UniSuper |

1942	OzHarvest	1967	Energy Savings Industry Australia (ESIA)
1943	The Royal Australian College of General Practitioners	1968	Jordan Hodgson
1944	Julie Hart	1969	Tina Jackson
1945	Dr Deborah White	1970	Australian Conservation Foundation Community Boroondara
1946	Pascal Rodrigue	1971	Australian Council of Superannuation Investors (ACSI)
1947	Royal Society of South Australia	1972	Climate Act Now, North Sydney
1948	Global Compact Network	1973	Margaret Potts
1949	Lock the Gate Alliance	1974	Peter James Cox
1950	Liz Reen	1975	Aboriginal Peak Organisations of the Northern Territory (APO NT)
1951	Zoe Champion	1976	Altis Property Partners Pty Ltd
1952	David Liddle	1977	Angela Stephenson
1953	Business Council or Sustainable Development Australia (BCSDA)	1978	Dinesh Piskala Mahadevan
1954	Climate Tasmania	1979	Zannah Carroll
1955	Mark Ellis	1980	Dianne Cassen
1956	James Galton	1981	Ivan Quail
1957	ClimateWorks Australia	1982	Climate Change Transformations (CCT)
1958	Paul Maddock	1983	AgZero2030
1959	Bronwyn Elmore	1984	Aman Ahtisham
1960	Environmental Leadership Australia	1985	Daniel Benni
1961	Angela Keith	1986	Allice Gable
1962	Australian Education Union (South Australia)	1987	Hank van Laar
1963	Paul Farrar	1988	Vera & Anita O'Donovan
1964	Ms Zali Steggall OAM		
1965	Rhonda Hodgson		
1966	Electric Vehicle Council		

1989	Australian Democrats	2011	Dr William Laing
1990	Minimise New Zealand	2012	Mr Peter Ball
1991	Anne Webb	2013	Ms Patricia Asch
1992	Robert Erwin Firth	2014	Ms Anne Daw
1993	Jeannine Wilson	2015	Graeme McCormick
1994	Central Australian Aboriginal Congress	2016	Jeremy McManus
1995	Planners Declare	2017	Toni Noble
1996	Gary Hammond	2018	Professor William Plain
1997	Dr Cyeble Day	2019	Rod Dudgeon
1998	Social Workers for Climate Action	2020	Justin Grunwald
1999	Joan Wheatley	2021	Lesley Russell French
2000	Helen Kang	2022	Bunya Valley Landcare
2001	<i>Confidential</i>	2023	Warren Wallamulla
2002	Ms Amy Luschwitz	2024	John Steley
2003	Mr John Kubale	2025	Trevor Mahoney
2004	Archer Mountain Earth Community	2026	Dr Rod O'Connor
2005	Mr Philip Nicholas	2027	<i>Name Withheld</i>
2006	Local Action on Climate and the Environment, Adelaide Hills	2028	<i>Confidential</i>
2007	<i>Confidential</i>	2029	<i>Name Withheld</i>
2008	<i>Confidential</i>	2030	Sample of the Get Up campaign submission 2,618 received
2009	<i>Confidential</i>	2031	Sample of the Australian Conservation Foundation via DoGooder submission 1,913 received
2010	Department of Agriculture, Water and the Environment	2032	Mr Graeme Kelleher
	<ul style="list-style-type: none">▪ 2010.1 Supplementary to submission 2010▪ 2010.2 Supplementary to submission 2010	2033	Prof Andrew Blakers, Prof Matthew Stocks and Prof Ken Baldwin
		2034	Alan Robinson

- 2035 Ms Meredith Goulding
- 2036 Dr Bob Riessen
- 2037 *Name Withheld*
- 2038 CANWest
- 2039 Keelah Lam
- 2040 *Confidential*
- 2041 *Name Withheld*
- 2042 *Name Withheld*
- 2043 *Confidential*
- 2044 *Name Withheld*
- 2045 Mr Graeme Tychsen
- 2046 Mr Graham Plumb
- 2047 Clean Energy Regulator

B. Public hearings

Friday, 29 January 2021

Canberra

Department of Agriculture, Water and the Environment

- Ms Beth Brunoro, First Assistant Secretary, Climate Adaptation and Resilience Division

Department of Industry, Science, Energy and Resources

- Ms Kushla Munro, Acting Deputy Secretary
- Mr Rob Sturgiss, General Manager
- Ms Alannah Pentony, General Manager

Veterinarians for Climate Action

- Dr Angela Frimberger, Board Member
- Dr Janet Berry, Volunteer

Doctors for the Environment

- Dr John Van Der Kallen, National Chair

Nuclear For Climate Australia

- Mr Robert Parker, Founder

Australian Academy of Technology and Engineering

- Ms Kylie Walker, Chief Executive Officer
- Professor Hugh Bradlow, President

Climate Council of Australia

- Professor Lesley Hughes, Councillor

Australian Conservation Foundation

- Ms Suzanne Harter, Climate and Energy Campaigner

WWF-Australia

- Dr Nicky Ison, Energy Transitions Manager
- Dr Kita Ashman, Threatened Species & Climate Adaptation Ecologists

Institute for Energy economics and Financial Analysis (IEEFA)

- Mr Tim Buckley, Director, Energy Finance Studies Australasia/South Asia

Clean Energy Council

- Ms Anna Freeman, Policy Director, Energy Generation

Planning Institute of Australia (PIA)

- Mr John Brockhoff, National Policy Manager

Property Council of Australia

- Mr Tim Wheeler, Policy Manager, National Advocacy Team
- Ms Francesca Muskovic, National Policy Manager, Sustainability and Regulatory Affairs

Responsible Investment Association Australasia (RIAA)

- Mr Simon O'Connor, Chief Executive Officer
- Ms Nicolette Boele, Executive Manager Policy, Research and Standards

Australian Industry Group

- Mr Tennant Reed, Climate, Energy and Environment Policy

SOS (Save Our Surroundings) Central West NSW

- Mr Dennis Armstrong, Member
- Mrs Margaret Armstrong, Member

Monday, 1 February 2021

Canberra

ACT Climate Change Council

- Professor Penny Sackett, Chair

Local Government NSW

- Councillor Linda Scott, President

Alexandrina Council

- Mr Glen Rappensberg, Chief Executive Officer
- Dr Monika Rhodes, Environmental Strategy Officer

Mornington Peninsula Shire

- Ms Kerri McCafferty, Councillor

Wingecarribee Net Zero Emissions Inc

- Ms Nathalie Swainston

Just Transitions South Gippsland

- Dr Michael Borgas

The ANU Climate Change Institute

- Professor Mark Howden, Director
- Professor Justin Borevitz, Research School of Biology

Centre for Policy Development

- Mr Travers McLeod, Chief Executive Officer
- Mr Sam Hurley, Policy Director

The Australia Institute

- Mr Richie Merzian, Climate & Energy Program Director

Professor John Quiggin, Private capacity

Professor Tim Flannery, Private capacity

Professor Will Steffen, Private capacity

Professor Rosemary Lyster, Private capacity

Australian Council of Social Service (ACOSS)

- Dr Cassandra Goldie, CEO
- Ms Kellie Caught, Senior Adviser Climate and Energy

NSW Council for Civil Liberties

- Mr Jared Wilk, Vice-President

Australian Council of Trade Unions

- Mr Mark Wakeham, Senior Policy Advisor, Climate Energy and Just Transitions

Law Council of Australia

- Ms Robyn Glindemann, Chair, Australian Environment and Planning Law Group, Legal Practice Section; Chair, Climate Change Working Group

Wednesday, 24 March 2021

Canberra

Department of Agriculture, Water and the Environment

- Ms Maya Stuart-Fox, Acting First Assistant Secretary, Climate Adaptation and Resilience Division
- Dr Nicholas Post, Assistant Secretary, Climate Adaptation and Services Branch, Climate Adaptation and Resilience Division

Climate Change Authority

- Mr Brad Archer, Chief Executive Officer
- Ms Eliza Murray, General Manager

C. Exhibits

- 1 *Our water mark: Australians making a difference in water reform*, The Victorian Women's Trust
- 2 *Einstein's Last Message: Saving our world by changing the way we think*, Dr Rod O'Connor
- 3 *The Great Global Warming Swindle*, Trevor Mahoney