

Chapter 1

Referral

1.1 On 14 June 2017 the Senate referred the following to the Senate Foreign Affairs, Defence and Trade References Committee for inquiry and report by 4 December 2017:

The implications of climate change for Australia's national security, with particular reference to:

- a. the threats and long-term risks posed by climate change to national security and international security, including those canvassed in the *National security implications of climate-related risks and a changing climate* report by the United States Department of Defense;
- b. the role of both humanitarian and military response in addressing climate change, and the means by which these responses are implemented;
- c. the capacity and preparedness of Australia's relevant national security agencies to respond to climate change risks in our region;
- d. the role of Australia's overseas development assistance in climate change mitigation and adaptation more broadly;
- e. the role of climate mitigation policies in reducing national security risks; and
- f. any other related matters.¹

1.2 On 13 November 2017 the Senate agreed to extend the reporting date to 22 March 2018.² On 20 March 2018 the reporting date was extended to 20 April 2018.³ On 17 April 2018 the reporting date was extended to 17 May 2018.⁴

Conduct of the inquiry

1.3 Details of the inquiry were placed on the committee's website at: http://www.aph.gov.au/senate_fadt. The committee also contacted a number of relevant individuals and organisations to notify them of the inquiry and invite submissions by 4 August 2017. Submissions received are listed at Appendix 1.

1.4 The committee held two public hearings in Canberra, on 8 December 2017 and 20 March 2018. A list of witnesses who gave evidence is available at Appendix 3.

1.5 Submissions and the Hansard transcripts of evidence may be accessed through the committee website.

1 *Journals of the Senate*, No. 43—14 June 2017, p. 1408.

2 *Journals of the Senate*, No. 68—13 November 2017, p. 2191.

3 *Journals of the Senate*, No. 89—20 March 2018, p. 2824.

4 *Journals of the Senate*, No. 95—8 May 2018, p. 3001.

Acknowledgement

1.6 The committee thanks the organisations and individuals who participated in the public hearings as well as those who made written submissions.

Structure of the report

1.7 This chapter provides information on terminology and introduces the United States Department of Defense (US DoD) report mentioned in the terms of reference. It also summarises Australia's climate security governance arrangements.

1.8 Chapter 2 provides an overview of the key ways in which climate change threatens national security. Chapter 3 discusses national measures to improve Australia's climate security, and chapter 4 includes particular suggestions for the Department of Defence (Defence) from the evidence. Chapter 5 outlines suggested initiatives to enhance climate resilience in Australia's region. Chapter 6 includes the committee's conclusions and recommendations.

Context

Terminology

Climate change

1.9 Defence's submission used the United Nations (UN) definition of 'climate change':

...a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods (UN, UN 1992, United Nations Framework Convention on Climate Change).⁵

National security

1.10 The terms of reference focus on 'Australia's national security', which Defence defined as including 'state and human security' and being 'inherently linked to the security of health, water, energy, food and economic systems at the local, national, regional and global level'.⁶ 'Human security' is a concept that:

...shifts the political focus from states and their security to "the existential threats faced by millions of individuals around the world," including poverty, food insecurity, environmental degradation, political repression, and ill-health.⁷

5 Department of Defence (Defence), *Submission 63*, p. 3.

6 Defence, *Submission 63*, p. 3.

7 Australian Council for International Development (ACFID), *Submission 53*, p. 6.

1.11 Other submissions reiterated this broad understanding of national security.⁸ Dr Paul Barnes from the Australian Strategic Policy Institute argued that national security requires communities, infrastructure and the economy to be viable and resilient.⁹ The committee will take a broad view of national security that encompasses these diverse issues; however, it did not receive as much evidence on matters such as health, infrastructure, the economy or energy security.

Climate security

1.12 Submissions also used the term 'climate security', which has been defined as: 'the condition where people, communities, and states have the capacity to manage stresses emerging from climate change and variability'.¹⁰

Threat and risk

1.13 Though 'threat' is often used to refer to something likely to cause damage or danger, and 'risk' to describe the likelihood of this occurring, the evidence received by the committee generally used the terms interchangeably.

US Department of Defense report

1.14 The terms of reference refer to the 2015 US DoD report *National security implications of climate-related risks and a changing climate*. The report responded to a Congressional request to the US DoD to:

...identify the most serious and likely climate-related security risks for each Combatant Command, the ways in which the Combatant Commands are integrating mitigation of these risks into their planning processes, and a description of the resources required for an effective response.¹¹

1.15 As outlined in more detail in chapter 2, the report identified a range of risks to military installations, including extreme weather events, sea level rise and flooding, and temperature changes.¹² It indicated Geographic Combatant Commands considered climate risks in campaign, operation, contingency and security cooperation plans.¹³

8 See Dr Amrita Malhi, ACFID, *Committee Hansard*, 8 December 2017, pp. 41, 44; Ms Lucy Manne, ActionAid Australia, *Committee Hansard*, 8 December 2017, p. 41; Professor Anthony Burke and Professor Shirley Scott, *Submission 51*, p. 16.

9 *Committee Hansard*, 8 December 2017, pp. 12–13.

10 Lisa M. Dellmuth, Maria-Therese Gustafsson, Niklas Bremberg and Malin Mobjörk, 'Intergovernmental organizations and climate security: advancing the research agenda', *WIREs Climate Change*, vol. 9, 2018, p. 3.

11 US Department of Defense (US DoD), *National Security Implications of Climate-Related Risks and a Changing Climate*, July 2015, p. 1. Combatant Commands are US DoD organisations with responsibility for particular missions or geographic areas. Australia is located within the Pacific Command (USPACOM) region.

12 US DoD, *National Security Implications of Climate-Related Risks and a Changing Climate*, July 2015, pp. 4–5.

13 US DoD, *National Security Implications of Climate-Related Risks and a Changing Climate*, July 2015, p. 6.

1.16 The report also predicted 'climate change will have the greatest impact on areas and environments already prone to instability', and indicated Geographic Combatant Commands focused on cooperation and building the capacity of partner nations through infrastructure, training and equipping.¹⁴

Australia's climate security governance arrangements

1.17 This section provides an overview of Australia's international and national climate change and security governance structures and strategies.

Australia's involvement in international arrangements

1.18 Australia is a member of the Intergovernmental Panel on Climate Change (IPCC), which is open to all UN member countries. The IPCC aims to provide a scientific view on the current state of climate change knowledge and its environmental and socioeconomic impacts.¹⁵ Australia is also party to coordinated global responses to climate change, including the UN Framework Convention on Climate Change (UNFCCC) and 2015 Paris Agreement.¹⁶ Australia's other international mitigation commitments include participation in the International Civil Aviation Organization, the Montreal Protocol on Substances that Deplete the Ozone Layer, and the International Maritime Organization.¹⁷

1.19 Australia holds a co-chair position on the Board of the Green Climate Fund, and has also contributed funds to environmental activities in developing countries through the Global Environment Facility.¹⁸

1.20 International humanitarian and development agreements to which Australia has committed include the *Sendai Framework for Disaster Risk Reduction 2015–2030*, *Platform on Disaster Displacement* and the *2030 Agenda for Sustainable Development*.¹⁹ Australia is also part of the FRANZ partnership (France, Australia and New Zealand), which provides coordinated support to Pacific Island countries that require military and humanitarian support for disaster response and early recovery.²⁰

14 US DoD, *National Security Implications of Climate-Related Risks and a Changing Climate*, July 2015, p. 8.

15 Intergovernmental Panel on Climate Change, *Organization*, <http://www.ipcc.ch/organization/organization.shtml> (accessed 2 April 2018).

16 Department of Foreign Affairs and Trade (DFAT), *Submission 61*, p. 24.

17 An International Civil Aviation Organization scheme requires airlines to offset industry growth in emissions above 2020 levels and increase the uptake of sustainable alternative fuels. Australia has also ratified the Kigali Amendment to the Montreal Protocol, which will guide reductions in hydrofluorocarbons emission. Further, members of the International Maritime Organization have agreed to adopt a strategy on the reduction of greenhouse gas emissions from ships by April 2018. *Submission 61*, pp. 24–25.

18 *Submission 61*, p. 23. The co-chair position will be held by Ewen McDonald, Deputy Secretary DFAT, until December 2018. Green Climate Fund, *Overview*, <http://www.greenclimate.fund/boardroom/overview> (accessed 2 April 2018).

19 *Submission 61*, pp. 5, 12.

20 *Submission 61*, p. 11.

In the aftermath of Tropical Cyclone Winston in 2016, 'FRANZ coordinated our respective military assets, delivery of supplies, and agreed on a division of labour to avoid duplication of assistance and effectively support the Fiji Government's efforts'.²¹

1.21 Disaster resilience is considered by committees within the Council of Australian Governments (COAG) framework, including the Ministerial Council for Police and Emergency Management (formerly part of the Law, Crime and Community Safety Council).²² This is supported by the Australia-New Zealand Emergency Management Committee, which 'provides strategic leadership on national priorities in disaster resilience policy and supports national capability and capacity development initiatives'.²³ It comprises senior officials from the Australian, state and territory governments, the Australian Local Government Association and New Zealand.

1.22 Australia also cooperates with regional partners and US Pacific Command through the Pacific Environmental Security Forum.²⁴ This forum includes representatives from Indo-Pacific nations and works to understand 'the geostrategic implications of threats to environmental security' and develop 'adaptation and mitigation strategies to counter the effects of climate change'.²⁵

Commonwealth arrangements

1.23 The work of many Commonwealth Government departments and agencies is related to climate security policy. Submissions predominantly focused on the Defence portfolio, which includes the Department of Defence and the Australian Defence Force (collectively known as Defence). Defence appointed a Defence Climate and Security Adviser in mid-2016 to build climate awareness and to support the adoption of climate change considerations into 'business as usual' arrangements.²⁶

1.24 Australia's national security and emergency management sectors were recently changed due to the establishment of the Home Affairs Portfolio on 20 December 2017, which 'brings together Australia's federal law enforcement, national and transport security, criminal justice, emergency management, multicultural affairs and immigration and border-related functions and agencies'.²⁷ This portfolio includes the Australian Border Force, Australian Criminal Intelligence Commission, Australian Federal Police and the Australian Transaction Reports and

21 *Submission 61*, p. 13.

22 Attorney-General's Department, <https://www.ag.gov.au/About/CommitteesandCouncils/Law-Crime-and-Community-Safety-Council/Pages/default.aspx> (accessed 6 April 2018).

23 Attorney-General's Department, *Submission 58*, p. 2.

24 Defence, *Submission 63*, p. 14.

25 *Submission 63*, p. 14.

26 *Submission 63*, p. 4.

27 Australian Government, *Australian National Security: National security agencies*, <https://www.nationalsecurity.gov.au/whataustraliaisdoing/pages/nationalsecurityagencies.aspx> (accessed 2 April 2018).

Analysis Centre.²⁸ The Australian Security Intelligence Organisation is also intended to transition into the portfolio following the passage of legislation.²⁹ The Department of Home Affairs leads Australian Government policy on domestic resilience and emergency management through Emergency Management Australia.³⁰

1.25 Other agencies relevant to the terms of reference include the Australian Federal Police, Australian Secret Intelligence Service, Department of Foreign Affairs and Trade, Department of Health, and the Office of National Assessments (ONA).³¹ The ONA website indicates it views climate change as a national security risk, and states that ONA 'first wrote about climate change in 1981'.³² The work of ONA is not publicly available; however, during 2007 ONA confirmed it had undertaken work on the implications of climate change for national security and international relations in the region.³³ The Director General at the time stated that their 'work traversed the economic, scientific, political and strategic implications of climate change'.³⁴

1.26 Pertinent bodies also include the Australian Government Secretaries Board on Climate Risk, led by the Department of the Environment and Energy (DoEE), and the Disaster and Climate Resilience Reference Group, which considers strategic issues for federal agencies caused by climate change and disasters. It is co-chaired by DoEE and the Department of Home Affairs, and includes representatives from 22 federal agencies, including Defence.³⁵

National climate change and security strategies

1.27 Australia does not have a climate security strategy; however, there are some national strategies which are particularly relevant. For example, the 2011 *National Strategy for Disaster Resilience* underscored 'the increasing severity and regularity of natural disasters in Australia and the need for a coordinated and cooperative national effort to enhance Australia's capacity to withstand and recover

28 Australian Government, *Australian National Security: National security agencies*.

29 Australian Government, *Australian National Security: National security agencies*.

30 Mr Mark Crossweller, Director General of Emergency Management Australia (EMA), *Proof Committee Hansard*, 20 March 2018, pp. 2, 6–7.

31 Australian Government, *Australian National Security: National security agencies*.

32 Office of National Assessments (ONA), A Short History of the Office of National Assessments, <https://www.ona.gov.au/about-ona/overview/history-ona> (accessed 2 April 2018).

33 Mr Peter Varghese, Director General, ONA, *Committee Estimates Hansard*, 22 May 2007, pp. 160–162.

34 Mr Varghese, *Committee Estimates Hansard*, 22 May 2007, pp. 160–162.

35 Defence, *Submission 63*, p. 10; Mr Crossweller, Director General of EMA, *Proof Committee Hansard*, 20 March 2018, pp. 2, 23. A list of participating departments was provided by the Department of Home Affairs (answers to questions on notice, 20 March 2018 (received 9 April 2018)).

from emergencies and disasters'.³⁶ The 2015 *National Climate Resilience and Adaptation Strategy* identified principles to guide climate adaptation practice and resilience building.³⁷

1.28 The 2016 *Defence White Paper* described climate change as 'a major challenge for countries in Australia's immediate region', and committed Australia to provide leadership and support in the region, stating:

Our strategic weight, proximity and resources place high expectations on us to respond to instability or natural disasters, and climate change means we will be called on to do so more often. We will continue to play that role in close collaboration with New Zealand, France, the United States, Japan and other partners.³⁸

1.29 The 2017 *Foreign Policy White Paper* also framed climate change as an issue requiring inter-country cooperation, and indicated responses to this threat 'will be an important influence on international affairs and Australia's economy'.³⁹ It argued nations 'need to factor climate change in to long-term planning and investment, including its implications for national and regional security'.⁴⁰ The 2017 *Foreign Policy White Paper* warned the effects of climate change:

...impede economic development, drive additional displacement of people and, if left unchecked, add to global stresses on the supply of food and water. Many countries in Australia's immediate region, especially small island states and those with large delta cities, will be increasingly affected.⁴¹

1.30 Chapter 2 provides more detail on how climate change is affecting national security.

36 Australian Disaster Resilience Knowledge Hub, *National Strategy for Disaster Resilience*, February 2011, <https://knowledge.aidr.org.au/resources/national-strategy-for-disaster-resilience/> (accessed 2 April 2018).

37 Australian Government, *National Climate Resilience and Adaptation Strategy*, 2015.

38 Australian Government, *2016 Defence White Paper*, February 2016, pp. 55–56.

39 Australian Government, *2017 Foreign Policy White Paper*, November 2017, p. 33.

40 *2017 Foreign Policy White Paper*, p. 84.

41 *2017 Foreign Policy White Paper*, p. 84.

