

Chapter 6

Conclusions and recommendations

6.1 The committee believes this was a useful inquiry to investigate the ability of Commonwealth agencies to respond to climate change in the area of national security. The committee notes the consensus from the evidence that climate change is exacerbating threats and risks to Australia's national security. These include sea level rise, bushfires, droughts, extreme rainfall events, and higher-intensity cyclones. The committee was reassured that climate risks are being factored into preparedness policies and procedures at the whole of government level and by individual agencies, including Defence. There are well-established arrangements for states, territories and the Commonwealth to respond to domestic weather events and for the Commonwealth to provide regional humanitarian and disaster relief assistance (HADR).

6.2 Climate change is also adversely affecting other aspects of Australia's national security, including the economy, infrastructure, and community health and well-being. The committee did not receive substantial evidence on these matters, though some are being considered through other processes, such as Senate committee inquiries into the financial risk associated with carbon for businesses and the impacts of climate change on the built environment. In addition, a framework for a national strategy on climate, health and well-being was also recently released.¹ The committee's conclusions and recommendations focus on the areas where the committee received most evidence, including Commonwealth coordination, leadership, reducing climate risks, and building resilience in the region.

Commonwealth government coordination

6.3 Climate-related risks affect many government portfolios, including those dealing with domestic, regional and international security. Therefore, the committee supports the implementation of a whole of government approach to responding to climate risks at the Commonwealth level.

Whole of government approach

6.4 The Commonwealth whole of government approach is facilitated through the Secretaries Board on Climate Risk and the Disaster and Climate Resilience Reference Group (Reference Group).² The Reference Group is co-chaired by the Department of the Environment and Energy and the Department of Home Affairs, and Commonwealth agencies are represented at the deputy or first assistant secretary level. The Reference Group is considering the strategic implications of climate change for Commonwealth agencies, policies and programs. It is also facilitating engagement with the Commonwealth's expert science and research organisations, including the Bureau of Meteorology, Geoscience Australia and the CSIRO.

1 Framework for a National Strategy on Climate, Health and Well-being for Australia, Climate and Health Alliance, June 2017.

2 The committee did not receive any detail regarding the Secretaries Board on Climate Risk.

6.5 The committee supports the availability of robust climate data, science and expertise to facilitate modelling and planning to ensure preparedness. The committee was encouraged to hear the Reference Group is also engaging with external stakeholders such as the insurance industry and business groups on climate risk modelling and data. The committee emphasises that addressing the risks of climate change in the community involves not just Commonwealth Government agencies so it supports engagement with other stakeholders to facilitate the exchange of information and data.

Recommendation 1

6.6 The committee recommends that the Commonwealth Government commits to providing ongoing adequate funding for climate science and research organisations.

Coordination with states and territories

6.7 The committee also recognises that broader engagement on climate security by all Australian governments is required. Climate change is affecting areas of responsibility shared between the Commonwealth, states, territories and local governments, including emergency management. The committee notes there are well established policies and procedures between the Commonwealth and states and territories in relation to emergency management. However, evidence suggested that a new high-level taskforce or working group could undertake scenario planning and guide a coordinated national response to climate-related national security risks. The committee view is that at this time these issues are adequately considered by existing arrangements including the Council of Australian Governments (COAG) ministerial councils, and supporting senior officials committees such as the Australia-New Zealand Emergency Management Committee (ANZEMC).

Commonwealth government strategic planning and reporting

6.8 Climate and national security risks are identified in various national policy documents, including the 2011 *National Strategy for Disaster Resilience*, 2015 *National Climate Resilience and Adaptation Strategy*, the 2016 *Defence White Paper* and the 2017 *Foreign Policy White Paper*. Evidence suggested a white paper specifically on the national security implications of climate change could guide a coordinated whole of government response to climate risks, including extreme weather events, regional instability, and broader threats to the economy, infrastructure, and community health and well-being. The committee agrees that in order to ensure the national security aspects of climate change are being considered from a whole of government perspective that a white paper or other planning document should be developed.

Recommendation 2

6.9 The committee recommends that the Commonwealth Government develop a climate security white paper, or similar planning document, to guide a coordinated whole of government response to climate change risks.

6.10 Although the committee did not receive a large amount of evidence on the issue of health and well-being, the committee notes that in 2017 the Climate and

Health Alliance released a *Framework for a National Strategy on Climate, Health and Well-being for Australia*. The Framework seeks to guide government policy and decision making processes in addressing climate change and associated health impacts. Developed following consultation with a range of stakeholders including health professionals and experts in climate change and health, the Framework is structured around seven key areas of policy action and identifies a number of policy directions that could be adopted by governments across all levels.

6.11 The committee notes that although states and territories have responsibility for a range of health services, it is the Commonwealth Government that has responsibility for the national perspective on health and climate change. The committee suggests the Commonwealth draw on this framework to develop a national strategy on climate, health and well-being.

Recommendation 3

6.12 **The committee recommends that the Commonwealth Government develop a National Climate, Health and Well-being Plan based on the *Framework for a National Strategy on Climate, Health and Well-being for Australia*.**

6.13 The committee understands that climate risks are considered as part of agency risk assessments, and supports ongoing preparedness activities and scenario planning. The committee notes modelling and planning is critically important in relation to domestic emergency management. Emergency Management Australia—part of the Department of Home Affairs—is working with Defence and other stakeholders to understand climate risks and prepare to respond to extreme weather events in Australia. The committee heard examples of how arrangements can be adapted to respond to the forecast level of risk. For instance, the level of fire risk in each state and territory is monitored, and additional firefighting aircraft leased through the national and international markets if it appears fires in multiple states could occur concurrently following particularly dry periods.

Defence-specific planning and reporting

6.14 The committee notes that Defence also has modelling and planning processes that inform preparation for military missions, HADR operations, capability life cycle and estate and environmental management. The committee heard that Defence had undertaken preliminary investigations into how climate risks can affect the Defence estate. While this work remains classified, the committee notes that this year the United States released the *Climate-Related Risk to DoD Infrastructure Initial Vulnerability Assessment Survey (SLVAS) Report*. The committee suggests Defence consider making an unclassified version of its work publicly available in order to assist other affected local stakeholders.

Recommendation 4

6.15 **The committee recommends the Department of Defence consider releasing an unclassified version of the work undertaken by Defence to identify climate risks to its estate.**

6.16 The committee notes that climate risks are considered in strategic planning relating to Defence, including the *2016 Defence White Paper* and the Chief of the

Defence Force (CDF) annual preparedness directive to the Australian Defence Force. The preparedness directive considers the full range of security capabilities and risks, outlines the level of readiness, and guides Defence activities. The committee notes advice that the CDF adjusts preparedness requirements in accordance with the security environment and assessment of risks, including climate-related risks. The committee supports this regular consideration of climate risks, and notes it will be important as climate-related threats continue to increase demands for a wide spectrum of Defence responses, including domestic disaster recovery, regional HADR and stabilisation operations.

Ensuring Defence preparedness

6.17 Modelling indicates a manageable increase in Defence's climate-related commitments in the near term. However, climate change is increasing the likelihood of concurrent events, such as a combination of extreme weather events, HADR and military missions requiring responses simultaneously. Defence identified that higher levels of commitment and the risk of simultaneous disasters could create concurrency pressures and sustainment cost issues from as early as the middle of the next decade, or earlier if climate security threats accelerate. The committee is aware similar pressures are likely to affect other agencies, such as the Australian Federal Police.

6.18 Some submissions suggested that Defence should respond to these pressures by reforming its structure to equally prioritise warfighting and non-warfighting responsibilities. While the committee acknowledges war fighting will remain critical for defence, it also recognises the existing and emerging pressures to national security posed by climate change, and that its force structure is likely to change over time in response to such pressures. In this light, the committee notes that capabilities acquired to meet its war fighting role should where possible be adaptable and able to be used to respond to the effects of climate change such as additional HADR operations. The committee supports Defence investment in versatile and adaptable assets and ongoing training of personnel to provide HADR within Australia and the region when required, while maintaining its warfighting role.

6.19 The committee understands that the National Aerial Firefighting Centre (NAFC) currently leases firefighting aircraft from commercial operators through public tender processes. The committee heard evidence that this currently represents the most flexible and cost effective model. However, the committee notes climate change and other factors may alter market conditions in the future, and suggests this should be considered.

Recommendation 5

6.20 The committee recommends the National Aerial Firefighting Centre undertake a cost benefit analysis to assess whether leasing arrangements or government ownership of firefighting aircraft will provide the best value and support to firefighters and communities in the future.

Leadership

6.21 The committee heard concerns that there is an absence of dedicated senior climate security leaders across the Commonwealth, leaving the whole of government

response fragmented. Suggestions included establishing a climate security envoy with responsibility for international engagement, similar to the former United Kingdom Climate and Energy Security Envoy. Others supported the creation of a climate security adviser within the Home Affairs Portfolio to facilitate interagency coordination on national climate resilience. The committee notes there is already an array of leadership groups responsible for aspects of climate security policy, including the Reference Group and ANZEMC. The Department of Foreign Affairs and Trade (DFAT) has an Ambassador for the Environment. The committee suggests that, once the Home Affairs Portfolio has been fully established and operational for a time, the need for a national climate security position should be considered.

Recommendation 6

6.22 The committee recommends that the Commonwealth Government consider the need for a dedicated climate security leadership position in the Home Affairs Portfolio to facilitate coordination on climate resilience issues, including disaster risk reduction, infrastructure planning, community health and well-being, and emergency management.

6.23 The committee also heard proposals for elevating leadership on climate security within Defence. The recently-established Climate and Security Adviser role is held by a Colonel in the reserves. However, Defence emphasised staff at higher levels also share responsibility for climate security policy, including the Head Force Design, who examines climate change in the context of investment decisions. The Vice Chief of the Defence Force considers climate security when developing preparedness statements for the CDF, and participates in the Secretaries Board on Climate Risk. The Deputy Secretary, Strategic Policy and Intelligence, is the Defence lead on climate change policy and manages Defence contributions to the whole of government agenda. The committee notes that responsibility for responding to climate change security risks is currently shared between a range of leaders within Defence and suggests a dedicated leadership role could assist in Defence's planning and delivery of domestic and international HADR as demands and concurrency pressures increase over time.

Recommendation 7

6.24 The committee recommends that the Department of Defence create a dedicated senior leadership position to assist in planning and managing the delivery of domestic and international humanitarian assistance and disaster relief as pressures increase over time.

Increasing climate security capability

6.25 The committee notes recent efforts to improve climate security capability and knowledge through the development of short courses and partnerships between Defence and educational institutions. The committee supports the continuation and expansion of these courses and partnerships across Commonwealth agencies.

Recommendation 8

6.26 The committee recommends that national security agencies increase their climate security knowledge and capability by encouraging participation of staff in available courses.

Reducing climate risks

Disaster risk reduction

6.27 The committee recognises domestic disaster management is primarily a responsibility of state and territory governments. However, the Commonwealth will be required to continue supporting states affected by disasters in the context of climate change. Through the Natural Disaster Relief and Recovery Arrangements (NDRAA) the Commonwealth Government provides financial assistance directly to the states and territories to assist them with the costs associated with disaster relief and recovery assistance measures.

6.28 The committee is aware that new federal funding arrangements for recovery following disasters are expected to be implemented from July 2018. The committee is also aware that these new arrangements will provide incentives for states to deliver reconstruction projects more efficiently so that efficiencies can be put towards mitigation activities and projects.

6.29 While the committee supports the Commonwealth initiatives to support resilience building outlined in chapter 3, it notes that after being extended for 12 months in May 2017, the National Partnership Agreement on Natural Disaster Resilience (NPANDR) is due to cease on 30 June 2018.³ The committee has no information on whether the new arrangements are intended to replace the NPANDR. The committee would consider the conclusion of the NPANDR as premature and urges the government to further extend this agreement and review the need for it after the new arrangements are well established and data is available on the funding made available for mitigation activities.

Recommendation 9

6.30 The committee recommends the Commonwealth Government extend the National Partnership Agreement on Natural Disaster Resilience and review after the new funding arrangements are well established and data is available on the funding available for mitigation activities.

Mitigation

6.31 The committee views climate change mitigation through emissions reductions as a fundamental part of protecting Australia's national security. Australia is party to international climate mitigation agreements including the 2015 Paris Agreement. The Government has committed to reducing greenhouse gas emissions to 26–28 per cent

3 Funding for three states is to be provided under the National Partnership in the 2018–19 financial year, and negotiations are yet to be finalised regarding any future funding. Commonwealth of Australia, *Federal Financial Relations: Budget Paper No. 3 2018–19*, p. 58.

below 2005 levels by 2030. While some of the effects of climate change are already being experienced, the committee heard that stronger emissions reductions can contribute to reducing future risks. To address this, witnesses provided a range of suggestions for different national emissions reductions targets in the evidence. The committee recognises that senators and parties hold different views on the appropriate level of mitigation targets.

6.32 The committee supports Defence's use of renewable energy and alternative fuel sources, and notes Defence provides information on its environmental performance and changes to energy consumption in its annual report. The committee sees an opportunity for Defence to enhance this reporting by setting clear goals against which progress can be measured.

Recommendation 10

6.33 The committee recommends that the Department of Defence establish emissions reductions targets across stationary and operational energy use, and report against these in its annual report.

6.34 The committee notes that, in addition to reducing the risks of climate change, adopting a greater diversity of energy sources will improve Defence's energy security and resilience by reducing its reliance on external energy sources.

Building resilience in the region

6.35 The committee is concerned that the consequences of climate change are exacerbating the fragility of Australia's allies, including Pacific Island countries (PICs). The committee notes the Commonwealth Government has committed to some important regional resilience initiatives, including supporting the implementation of the *Framework for Resilient Development in the Pacific* and developing the Australia Pacific Climate Change Action Program.

6.36 Australia has also committed \$1 billion over five years from the existing aid budget to build climate change resilience and reduce emissions in developing countries. The committee supports the efforts of DFAT to align Australia's development assistance with the priorities of partner countries and communities, focus on human security, and empower groups disproportionately affected by climate change. The committee notes that climate finance is being embedded in existing programs, for example, by 'climate proofing' infrastructure projects such as roads. The committee also recognises Australia's positive contribution to the Green Climate Fund (GCF), and the ongoing work undertaken by DFAT to integrate climate finance into the Australian aid program. As Co-Chair of the GCF, Australia is supporting PICs to access resources for climate mitigation and adaptation.

6.37 The committee agrees that funding for climate mitigation, adaptation and disaster risk reduction measures represents an investment in the security and stability of Australia's region. Avoiding food and water insecurity and protecting critical infrastructure and institutions is likely to reduce future aid requirements and Defence costs to Australia, and help minimise population displacement. Therefore, the committee considers that public climate aid and finance contributions should be

increased, in addition to the existing development assistance budget, to the extent that financial circumstances allow.

Recommendation 11

6.38 The committee recommends the Commonwealth Government provide further funding for international climate adaptation and disaster risk reduction measures, in addition to the existing aid budget, to the extent that financial circumstances allow.

6.39 The committee emphasises that protecting Australia's national security in the context of climate change requires not only the whole of government approach being taken by Commonwealth Government agencies but also the ongoing cooperation of communities, academia, the private sector and all levels of government, as well as Australia's regional and international partners.

Senator Alex Gallacher

Chair