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Re: Submission to the 2015 Defence White Paper Consultation Process

The Centre for Policy Development (CPD) is an independent and non-partisan policy institute dedicated to generating creative, viable ideas and innovative research to inject into Australia's policy debates. We are focused on the real and urgent challenge of putting our economy and environment on a sustainable footing, including ensuring the long-term capacity and resilience of Australia's national security arrangements.

The 2015 Defence White Paper is a key opportunity to further this objective. We commend the *Defence Issues Paper* released by the Department of Defence to inform the discussion on the White Paper for its breadth and depth in identifying key national security threats and opportunities for Australia. However, the lack of any mention of the serious risks to

SUMMARY OF RECOMMENDATIONS

The 2015 Defence White Paper should incorporate a *Climate Security Strategy*, similar to those recently produced by the United States and Britain. This strategy would outline how climate change is likely to impact:

- homeland and regional security;
- Australian Defence Force (ADF) capabilities; and
- ADF procurement policies.

In doing so the following heightened security risks resulting from climate change should be considered:

- increased natural and humanitarian disasters at home and abroad;
- large-scale regional population movements; and
- threats to operational energy security for defence purposes.

The strategy should also set ambitious and measurable targets for the integration of emissions reductions planning into existing ADF programs and practices.

Australia's national security stemming from climate change is a significant omission.

The exclusion of climate change from the *Defence Issues Paper* is surprising given that the climate security challenge was identified in the last two *Defence White Papers* (2009 and 2013), the 2013 *National Security Statement* and the 2012 *Australia in the Asian Century White Paper*. Australian public policy think-tanks, such as the Australian Strategic Policy Institute (APSI) and the Lowy Institute, have also produced research that identifies climate change as a major security challenge, as have a number of security experts from academia (for example Dr Matt MacDonald at the University of Queensland, Professor Alan Dupont at the University of NSW and Professor Robyn Eckersley and Associate Professor Peter Christoff, both of the University of Melbourne).

The omission of climate security issues from the *Defence Issues Paper* also contrasts sharply with the greater integration of climate change considerations into the defence strategies of our closest allies, led by the United States and Britain.

WHAT OUR KEY ALLIES ARE DOING

The United States defence establishment has engaged deeply with the climate security threat in recent years in two main ways. First, climate change has been mainstreamed as an issue of strategic importance, by both the Department of Defense (DoD) and leading defence think-tanks such as the CNA Corporation and the American Security Project.

The mainstreaming of climate security began in 2008 with the Bush Administration's *National Defense Authorization Act*, which requires all defence agencies to consider the effects of climate change in future strategic policy development. Climate security considerations have subsequently featured prominently in President Obama's 2010 *National Security Strategy* and the *Quadrennial Defense Reviews* of 2010 and 2014. The latter states that

“The impacts of climate change may increase the frequency, scale, and complexity of future missions, including defence support to civil authorities, while at the same time undermining the capacity of our domestic installations to support training activities. Our actions to increase energy and water security, including investments in energy efficiency, new technologies, and renewable energy sources, will increase the resiliency of our installations and help mitigate these effects.”

DoD has also emphasised the need for ambitious reductions in global emissions to lessen the severity of climatic destabilisation, and, in its latest *Climate Adaptation Roadmap* (2014) even linked climate change to the social, political and economic instability that often breeds extremist ideologies and terrorism.

The second dimension of the US response to the climate security challenge is the regulatory measures stemming from President Obama's *Executive Order 13514*. This requires all federal departments, including DoD, to reduce operational and non-operational emissions, evaluate risks posed by climate change, produce an annual environmental sustainability plan and develop a climate change adaptation plan. DoD's 2013 *Sustainability Performance Report* defines a range of climate security objectives that the Department considers necessary to maintain readiness in the face of climate change. These include:

- reducing greenhouse gas emissions from stationary energy, land vehicles, aircraft, ships and other equipment by 34% by 2020 from 2008 levels;
- reducing the use of petroleum-based fuels in non-tactical vehicles by 30% by 2020 from 2005 levels;
- decreasing the energy intensity of defence facilities by 37.5% between 2003 and 2020;
- producing or procuring 18% of electricity consumed by defence installations from renewable sources by 2020; and
- a range of other targets to reduce water consumption and solid waste production.

As of 2012, most of these targets were on track to be met or exceeded, while energy, water and waste production efficiency programs were already generating significant costs savings.

Since 2012 DoD has also published two *Climate Change Adaptation Roadmaps*, which outline:

- a policy framework for climate change adaptation planning;
- an assessment of agency vulnerability to climate change risks;
- a process for adaptation planning;
- actions to better understand climate change risks and opportunities; and
- actions to address these risks and opportunities.

DoD's latest *Climate Adaptation Roadmap* (2014) sets three key adaptation goals concerning planning, operations, training, testing, infrastructure, natural resources and procurement. These are to:

1. identify and assess the effects of climate change on the Department;
2. integrate climate change considerations across the Department and manage associated risks; and

3. collaborate with internal and external stakeholders on climate change challenges.

In October 2014 Britain announced that it would for the first time fully integrate climate change impacts into its next strategic defence and security review. This follows significant work on climate security by the British Ministry of Defence (MoD) over the last decade. For instance, MoD's 2008 National Security Strategy identified climate change as a security threat for its potential to:

- increase the frequency and severity of extreme hazards;
- challenge the rules-based multilateral security system;
- generate increased population pressure on urban areas and increased pressure on food and water supplies;
- increase cross-border movement of people as basic resources become scarcer;
- generate territorial disputes arising from the melting of sea ice and the opening of new sea lanes;
- undermine energy security; and
- facilitate new disease vectors.

MoD's Strategic Trends Programme also regularly assess climate security risks. Its latest report, *Global Strategic Trends – Out to 2045* (2014), details the likely security implications of climate change and energy scarcity over the next thirty years. These include:

- degraded and threatened environments, food shortages and other resource constraints with the potential to destabilise communities and increase migration;
- security forces being called upon more frequently to render humanitarian assistance and disaster relief;
- intensified competition over some resources and the exacerbation of existing political and security tensions, potentially acting as a catalyst for intra- and inter-state conflict; and
- the potential of nuclear proliferation if nuclear power is more widely adopted as an energy source as fossil fuels are phased out.

In 2008 MoD also developed a *Climate Change Strategy* and more recently has examined the adaptation challenges for the defence estate posed by rising sea levels and other climate risks.

The security implications of climate change have also been debated in the United Nations Security Council and General Assembly on several occasions since 2007, while in September 2014 the North Atlantic Treaty Organization (NATO) declared that

“Key environmental and resource constraints, including health risks, climate change, water scarcity, and increasing energy needs will further shape the future security environment in areas of concern to NATO and have the potential to significantly affect NATO planning and operations.”

HEIGHTENED CLIMATE RISKS

Recent developments in climate security thinking have occurred in the context of increasingly serious predictions about the scope, intensity and rapidity of climate change impacts. Based on the current trajectory of global emissions, the latest science indicates average global temperatures will rise between 1.5 and 4 degrees Celsius over this century. Even at the lower end of this range, the Intergovernmental Panel on Climate Change’s *Fifth Assessment Report* (2014) identifies the following climatic risks with *high confidence*:

- the risk of death, injury, ill-health, or disrupted livelihoods in low-lying coastal zones and small island developing states and other small islands, due to storm surges, coastal flooding, and sea level rise;
- the risk of severe ill-health and disrupted livelihoods for large urban populations due to inland flooding in some regions;
- systemic risks due to extreme weather events leading to breakdown of infrastructure networks and critical services such as electricity, water supply, and health and emergency services;
- the risk of mortality and morbidity during periods of extreme heat, particularly for vulnerable urban populations and those working outdoors in urban or rural areas;
- the risk of food insecurity and the breakdown of food systems linked to warming, drought, flooding, and precipitation variability and extremes;
- the risk of loss of rural livelihoods and income due to insufficient access to drinking and irrigation water and reduced agricultural productivity;
- the risk of loss of marine and coastal ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for coastal livelihoods; and
- the risk of loss of terrestrial and inland water ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for livelihoods.

Although these risks are likely to be most serious for least developed countries and vulnerable communities, they also have clear security implications for wealthy nations. This is especially the case for Australia, which is considered one of the developed countries most at risk from climate change, and the Southeast Asia and Oceania region more broadly, which compromises many highly vulnerable communities.

MoD’s latest *Global Strategic Trends* (2014) report identifies the following climate change risks facing Australia and the region. These include:

- food and water shortages;
- rising sea levels and extreme weather events leading to humanitarian disasters requiring international assistance; and
- the increased frequency of bushfires, droughts, floods, impacting particularly on the Australian continent.

All of these trends are likely to have significant consequences for Australia's national security and the operational capacity of the Australian Defence Force (ADF).

AUSTRALIA'S CLIMATE SECURITY CHALLENGE

Given Australia's significant vulnerability to climate risks, the increasing severity of potential climate impacts and the significant steps that have already been taken by our allies to address climate security issues, we recommend that, at a minimum, the 2015 Defence White Paper incorporate a *Climate Security Strategy*. This section of the paper would outline how climate change could potentially effect homeland and regional security, ADF capabilities and procurement. In doing so the following factors should be considered:

- the increasing need for national and regional disaster relief;
- regional large-scale population movements;
- regional insecurity caused by resource scarcity and exacerbated by climate change;
- climate related health and wellbeing effects on defence personnel and their families;
- operational energy security;
- the integration of emissions reductions planning, including specific and measurable targets, into existing ADF programs and practices; and
- the need to build durable regional partnerships to cooperatively lessen climate security risks.

As an extension of the White Paper Process, we recommend that the Department and the ADF follow the example of the United States, Britain and other world powers and develop a more systemic Climate Security Strategy that attends to all of the climate risks outlined above and sets ambitious and measurable targets for mitigating them. We also believe Australia must make a detailed assessment of how major powers are integrating climate security concerns into national security strategy. This is especially pertinent in the case of the US, given our emphasis on interoperability between the ADF and US forces. The lessons Australia could draw from these developments will be the subject of a CPD research paper on *Australia's Climate Security Challenge* to be released in mid-2015.

Thank you for providing an opportunity to contribute to the 2015 Defence White Paper and for considering our submission. We wish you well in developing the White Paper. Please do

not hesitate to contact the Centre for Policy Development if you have any questions regarding our submission.