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**Submission to the Department of Foreign Affairs  
and Trade**

***Call For Public Submissions: Foreign Policy White Paper***

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**WORKING PAPER**



AUSTRALIAN-GERMAN  
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## Submission summary

We appreciate the opportunity to provide a submission as part of the development of the Department of Foreign Affairs and Trade (DFAT) Foreign Policy White Paper.

Our submission draws attention to the extensive economic opportunity for Australia offered by the global transition towards renewable energy. Australian scientists, industry and policymakers have been world-leading throughout the formative stages of this transition. Our national science agencies and academic institutions have been directly involved in technological breakthroughs. Employment in the renewable energy sector has been one of the fastest growing in recent decades. Most critically, however, Australia has untapped potential to be one of the world's most competitive locations for large-scale energy-intensive industrial processes in a zero carbon world. There is immense potential for export expansion and a reinvigoration of Australia's ailing manufacturing sector.

The Foreign Policy White Paper is an opportunity for the Australian government to signal to the rest of the world that Australia does not intend to sit and watch the energy transition from the sidelines. Instead, Australia should lead and become an energy superpower in the future zero carbon world. By deepening our partnership with Germany, we have the potential to learn from an 'early adopter' in the energy transition, and provide mutual benefit to each other through the exchange of technological, policy, and research innovations.

## Recommendations

We recommend that the Foreign Policy White Paper:

- Notes the critical role of a global zero carbon energy transition in mitigating climate change;
- Notes the severe risks that a lack of action on climate change presents to our national agricultural production, water supply, biodiversity and tourism;
- Notes the indirect impacts of climate change via our regional trading partners and Pacific neighbours;
- Acknowledges that accelerating our transition to a net zero carbon economy is in the Australian national interest;
- Commits Australia to increasing its research collaboration on energy transition research with Germany;
- Recognises that increasing Australia's research collaboration on energy transition research with Germany should create opportunities for Australia to



help important partners like India, or our other South-East Asian neighbours, with their own energy transitions;

- Commits Australia to supporting our Pacific neighbours with their energy transitions, and their adaptation to future climate impacts;
- Recognises that positioning Australia at the leading edge of the energy transition will ensure the Australian Government's continued leadership role in international forums such as the United Nations Framework Convention on Climate Change (UNFCCC) and G20, and also ensure Australia retains its leading role in the Pacific;
- Commits Australia to continuing to build its technical credentials on climate change and climate policy;
- Examines the economic potential for energy exports, including via high-voltage direct current, hydrogen or zero carbon synthetic fuels, and energy-intensive goods (such as aluminum and processed iron ore);
- Examines the economic potential for creating new 'clean manufacturing' export-based trade opportunities through the re-establishment of a strong Australian manufacturing sector, built on a stable, zero carbon energy supply; and
- Acknowledges that in a zero carbon world, Australia has the potential to be an energy superpower.



# 1) Australia's national interests in a changing world

## **“How should we define Australia's national interests in a changing world?”**

Both domestically and internationally, climate change will underpin the mega-trends, disruptions and transitions of the 21st century. It is inevitable that the impacts of more than a century and a half of fossil fuel emissions will continue to worsen, modifying local climates, ecosystems, agriculture, and the severity and frequency of climate-related natural disaster events. Although feedback from greenhouse gases through the global climate system is delayed, these changes are already becoming evident, severely impacting vulnerable sectors and nation-states.

The momentum behind addressing this issue through a transition to zero carbon fuel sources is now unstoppable. Implementation barriers and integration challenges will determine the speed of the transition, but the economics of lower-cost renewable energies are rendering the zero emissions economy a foregone conclusion. This is not only from the perspective of climate change mitigation, but also from the perspective of international economic competitiveness. The energy transition will reshape global energy infrastructure and the way we use energy over the next 30 years. It presents both challenges and opportunities to Australia's economy, trade, and national interests.

The Paris Agreement established the international legal framework for national responses to the energy transition. The principal goal of the Paris Agreement is to limit the average global temperature increase to below 2°C. At Paris, the government committed Australia to reducing emissions to 26-28 percent on 2005 levels by 2030. However, it is widely recognised that to keep global warming below 2°C national commitments will need to be ‘ratcheted up’.<sup>123</sup> The aspirational 1.5°C target, strongly advocated by the ‘High Ambition Coalition’, will require an even more intense international effort.<sup>4</sup> With much of Australia's foreign policy focused on our region and the needs of our Pacific neighbours, engaging meaningfully with the Paris framework - through our domestic agenda and foreign relations - will be central to defining our national interests over the next decade.

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<sup>1</sup> Rogelj, J., M. Den Elzen, N. Höhne, T. Fransen, H. Fekete, H. Winkler, R. Schaeffer, F. Sha, K. Riahi and M. Meinshausen (2016). "Paris Agreement climate proposals need a boost to keep warming well below 2 C." *Nature* 534(7609): 631-639.

<sup>2</sup> ‘Delivering the two degree global climate change target using a flexible ratchet framework’, Ritchie and Reay (2016), <http://www.tandfonline.com/doi/abs/10.1080/14693062.2016.1222260>.

<sup>3</sup> Robiou du Pont, Y., M. L. Jeffery, J. Gütschow, J. Rogelj, P. Christoff and M. Meinshausen (2017). "Equitable mitigation to achieve the Paris Agreement goals." *Nature Climate Change* 7(1): 38-43.

<sup>4</sup> Ibid.



- **We recommend that the Foreign Policy White Paper acknowledges that accelerating our transition to a net zero carbon economy is in the Australian national interest.**
- **We recommend that the Foreign Policy White Paper notes:**
  - **the critical role a global zero carbon energy transition will play in mitigating climate change;**
  - **the severe risks that a lack of action in this sector presents to our national agricultural production, water supply, biodiversity and tourism; and**
  - **the indirect impacts on Australia via our regional trading partners and Pacific neighbours.**



## 2) Australia's relations with other countries

### **“Which countries will matter most to Australia over the next 10 years? Why and in what ways?”**

The energy transition will increase the importance of Australia's relationship with Germany. Germany's service and manufacturing sector and its *Energiewende* puts it in a strong position to lead the energy transition. Further, Germany is investing heavily in energy transition research. For example, Germany has invested over \$140 million in the Kopernicus project, which will help transform Germany's energy sector.<sup>5</sup> To ensure a successful and rapid energy transition, Australia should deepen its relationship with Germany.

Our relationship with India will also grow in importance in the future. Australia-India trade has increased from \$6.8 billion in 2003/04 to \$14.8 billion in 2013/14.<sup>6</sup> Both countries have committed to completing the Comprehensive Economic Cooperation Agreement.

In the Pacific region, Australia has historically played an important role in development, disaster relief, and capacity building and training. Therefore this region will remain important to Australia.

### **“How should we deepen and diversify key relationships?”**

Australia should deepen its relationship with Germany on the energy transition by increasing research collaboration. There is no significant bilateral collaboration right now. More collaboration will ensure Australia successfully and rapidly transitions to a zero carbon economy.

Australia should use the energy transition to enhance its relationship with India. India has committed to the energy transition but its goals are ambitious. In 2015, Prime Minister Modi announced a target of 175GW of additional renewable energy capacity

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<sup>5</sup> 'Copernicus Supports Transformation of Energy Sector - Research in Germany', accessed 26 February 2017, <http://www.research-in-germany.org/en/research-landscape/news/2016/04/2016-04-05-copernicus-supports-transformation-of-energy-sector.html>.

<sup>6</sup> 'Australia-India Comprehensive Economic Cooperation Agreement', *Department of Foreign Affairs and Trade*, accessed 26 February 2017, <http://dfat.gov.au/trade/agreements/aifta/Pages/australia-india-comprehensive-economic-cooperation-agreement.aspx>.



by 2022.<sup>7</sup> India's Paris Target requires 40 percent of its electricity to be provided by renewables by 2030. We expect that India will be looking to other countries for their guidance and knowledge to achieve these goals. Given the potential benefits, Australia must be one of the countries partnering with India to help guide India's energy transition. Further, Australian-Indian collaboration on the energy transition may lead to spillover benefits in other areas of the relationship. For example, it may facilitate the ongoing negotiations around the Comprehensive Economic Cooperation Agreement.

In terms of Australia's Pacific neighbours, we should help them improve their energy security and access, and their resilience to climate impacts. Action here would demonstrate Australia's role as a supportive global and regional citizen. It would help ensure regional stability and promote regional co-operation.

- **We recommend that the Foreign Policy White Paper commits Australia to increasing its research collaboration on energy transition research with Germany.**
- **We recommend that the Foreign Policy White Paper recognises that increasing Australia's research collaboration on energy transition research with Germany should create opportunities for Australia to help important partners like India, or our other South-East Asian neighbours, with their own energy transitions.**
- **We recommend that the Foreign Policy White Paper commits Australia to supporting our Pacific neighbours with their energy transitions, and their adaptation to future climate impacts.**

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<sup>7</sup> Urmi Goswami et al., 'India's Renewable Energy Targets Catch the Attention of Global Investors, Still Need Ground Work', *The Economic Times*, accessed 26 February 2017, <http://economictimes.indiatimes.com/news/politics-and-nation/indias-renewable-energy-targets-catch-the-attention-of-global-investors-still-need-ground-work/articleshow/53015707.cms>.



### 3) Australia's work with regional and international organisations

#### **“Which regional and global organisations matter most to us?”**

The UNFCCC is the principal international organisation in relation to the energy transition. The UNFCCC will be the central forum for the further negotiations that are needed to complete the details of the Paris Agreement. Since Australia is a signatory of the Paris Agreement and therefore interested in its future development, the UNFCCC will remain an organisation of vital importance to Australia. In addition, other multilateral initiatives will be key, including a strong engagement with IEA, IRENA, G20 and international partnerships such as Mission Innovation.

Furthermore, the implementation of the energy transition will increasingly depend on knowledge transfer networks, either at the city level, or at the national, regional and state level. It would be in the national interest of Australia to enable its cities, regions and states to contribute to the activities under those networks, or to support the establishment of new ones. For example, there are vast opportunities for a state-to-state collaboration with California, especially in battery storage, electric vehicles, and other aspects that are central to the energy transition.

#### **“How should we support and shape them? How can we maximise our influence?”**

The international community must see Australia as a leader in the energy transition if the Australian government is to influence future UNFCCC negotiations. Australia can lead by implementing innovative national policies like the clean energy finance corporation. Policies like these will be scrutinized and welcomed by other international actors. Also, gestures on the federal level matter for Australia's international reputation and influence. A piece of coal in Parliament can overshadow the vast number of Australian success stories that implement and support the international vision of a safe climate future. Australia, with one of the most threatened natural treasures, the Great Barrier Reef, could turn the global transition towards zero emission economies into its defining growth vision for the continent. Blessed with renewable as well as mineral resources, Australia could position itself as the leader, with numerous side benefits to follow.

On the more material side, Australia is known for its high level of technical expertise. For example, the DFAT team at the international climate negotiations is one of the most experienced and technically knowledgeable teams. This is a tremendous asset that Australia should build on.





- We recommend that the Foreign Policy White Paper recognises that positioning Australia at the leading edge of the energy transition will ensure the Australian Government's continued leadership role in international forums such as the UNFCCC and G20, and also ensure Australia retains its leading role in the Pacific.
- We recommend that the Foreign Policy White Paper commits Australia to continuing to build its technical credentials on climate change and climate policy.



## 4) Future economic opportunities for Australia

**What steps should be taken to maximise our trade and investment, and expand commercial opportunities for Australian business? How can we ensure Australia is positioned to take advantage of opportunities in the global economy?**

The energy transition offers Australia enormous economic opportunities. The International Energy Agency estimates that by 2030 additional global clean-tech investments will reach \$13.5 trillion.<sup>8</sup> Australia's substantial renewable energy resources, which are largely untapped, puts Australia in an ideal position to attract this investment.

But the energy transition offers an even bigger economic opportunity for Australia than this: in a zero carbon world, Australia could be an energy superpower. Australia is not only endowed with vast mineral wealth but also has world-class renewable energy resources, as noted by the government's 2015 Energy White Paper.<sup>9</sup> In a zero carbon world, this will make Australia an attractive place for energy-intensive mineral industries. In short, Australia will be able to supply the world with energy-intensive, but low-carbon products.

- **We recommend that the Foreign Policy White Paper examines the economic potential for energy exports, including via high-voltage direct current, hydrogen or zero carbon synthetic fuels, and energy-intensive goods (such as aluminum and processed iron ore).**
- **We recommend that the Foreign Policy White Paper examines the economic potential for creating new 'clean manufacturing' export-based trade opportunities through the re-establishment of a strong Australian manufacturing sector, built on a stable, zero carbon energy supply.**
- **We recommend that the Foreign Policy White Paper acknowledges that in a zero carbon world, Australia has the potential to be an energy superpower.**

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<sup>8</sup> 'WEO\_INDC\_Paper\_Final\_WEB.pdf', accessed 26 February 2017, [http://www.iea.org/media/news/WEO\\_INDC\\_Paper\\_Final\\_WEB.PDF](http://www.iea.org/media/news/WEO_INDC_Paper_Final_WEB.PDF).

<sup>9</sup> <http://ewp.industry.gov.au/sites/prod.ewp/files/EnergyWhitePaper.pdf>

