



# Joint Standing Committee on Trade and Investment Growth (JSCTIG)

# Inquiry into

# Australia's Transition to a Green Energy Superpower

# Submission by



15 December 2022





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#### 1. Introduction

- 1.1 The Australia China Business Council (**ACBC**) welcomes the opportunity to make this submission to the Joint Standing Committee on Trade and Investment Growth (**Committee**) and its **Inquiry into Australia's transition to a green energy superpower**.
- 1.2 ACBC is a membership-based, non-profit, non-governmental organisation composed of some 500 member companies engaged in bilateral trade and investment with China. Founded in 1973, our mission is to support productive two-way trade and investment between Australia and the People's Republic of China (China) for the benefit of our members and the Australian community.
- 1.3 In September 2022, ACBC released a milestone report<sup>1</sup> "The Climate Challenge: Opportunities from collaboration between Australia and China" (Report) highlighting the economic opportunities for Australia from greater collaboration with China on the Climate Challenge.
- 1.4 This submission reflects the insights gleaned from multiple interviews and research undertaken in relation to the preparation of the Report, as well as our understanding of Australia's relative strengths from contributions from our members (mining, energy, resources, finance, agriculture and services) and key collaboration partners in Australia and China.
- 1.5 We address each of the four areas of focus that the Committee is examining and do so through the lens of the critical role China plays in addressing Australia's economic prosperity.
- 1.6 Before doing so, we make some general observations.

#### 2. Australia, green energy superpower, or green economy leader?

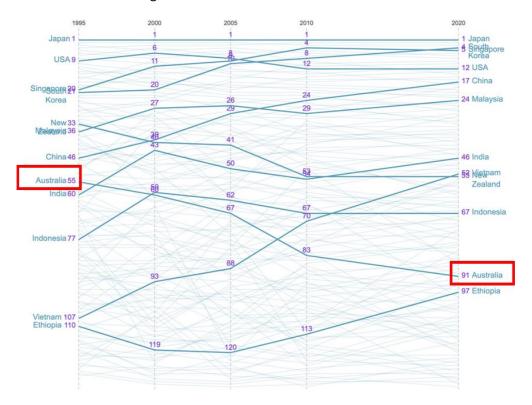
- 2.1 We support the government's ambition to envisage Australia as a renewable energy superpower, helping to meet the energy needs of our nation and the immediate region.
- 2.2 Under this scenario, Australia will become:
  - a major exporter of renewable energy;
  - a significant exporter of green commodities; and
  - a major exporter of the critical minerals used in renewable energy technology.
- 2.3 This is a lofty ambition and one that we should pursue. *However, we believe that our ambition should be greater than this.* We should harness our green energy superpower ambitions to drive a wider transformation of the future growth centres of our economy to create a future-focussed nation, one that will allow Australia to succeed internationally with a broader domestic economic capacity focussed on green economy developments.
- 2.4 Our ambition as a nation should extend beyond being a **Green Energy Superpower** to becoming a **Green Economy Leader within our region, and the world.**
- 2.5 Shifting Australia's export mix to leverage our relative strengths in renewable energy is important but not sufficient to transform Australia's economy to be competitive in the

<sup>&</sup>lt;sup>1</sup> https://www.kwm.com/content/dam/kwm/insights/publications/2022/acbc-the-climate-change-report/20220914-The-Cllimate-Challenge.pdf





- future. Building a resilient economy that can address future disruptions and challenges, and target the areas where tomorrow's opportunities lie, requires that we build productive knowledge, innovation, adaptability and diversity into our economy.
- 2.6 This will require a new mind-set and action to move beyond our legacy primary production-focussed export economy. It requires us to address the alarming decline in Australia's export complexity<sup>2</sup>.
- 2.7 A report issued by the Observatory of Economic Complexity (**OEC**)<sup>3</sup> highlights the fact that, unlike most wealthy nations, Australia's economy lacks both diversification and sophistication.
- 2.8 The OEC report brings into sharp focus Australia's economic reliance on the export of items of low complexity in the form of raw commodities and agriculture. While our GDP is high, Australia's economy is not very complex in fact, it is going backwards compared to other economies.
- 2.9 Despite our decades of abundance we haven't yet built the industries and structural foundations required for a diversified, resilient economy. Instead, we've been complacent with our success. Australia's our lower value-add and weaker connectedness with the global economy (compared to our high-income peers) is a serious issue for our future prosperity.
- 2.10 The actions and commitments of Australia's major trading partners to net zero targets (as evidenced by the OEC graph below) underline the need for Australia to commit to an inspiring and transformative road map that provides the catalyst for green, clean and innovative technologies.



<sup>&</sup>lt;sup>2</sup> https://atlas.cid.harvard.edu/

<sup>&</sup>lt;sup>3</sup> https://oec.world/en/profile/country/aus





- 2.11 The good news is that the green economy presents enormous opportunity to increase the sophistication and complexity of our economy across all sectors as we become a more diverse, more sustainable and more connected economy.
- 2.12 At the same time we must build entire new industries, building on new knowledge to boost our economic sophistication and unlock new growth, and to compete globally.
- 2.13 Our message is clear: let's embrace the need to become a green energy superpower, but at the same time let's also use the opportunity to transform our entire economy.
- 2.14 To do this we need to collaborate widely and with other nations, including China, which is already a global leader of all aspects of renewable energy, and is driving its own industrial transformation focussed on a new high-quality and green growth agenda.
- 2.15 International collaboration will be the new normal for the green economy incorporating many aspects from earth science, telecommunications, energy security, food security, circular economy and nature positive actions to restore biodiversity and the environment. To do this without closer collaboration with China is limiting our potential, and unproductive in the race to a net zero carbon world.

## 3. China's green economic transformation

- 3.1 China is in the midst of a wholesale economic transformation, driven by the central government's pursuit of sustainability in all its forms: political, economic, social, and environmental. At the heart of this transformation are China's 'dual carbon' targets<sup>4</sup>: to peak emissions before 2030 and achieve carbon neutrality before 2060.
- 3.2 As the largest emitter of carbon dioxide gas in the world, the World Bank has stated that "without China successfully transitioning to a low-carbon economy, achieving global climate goals will be impossible".<sup>5</sup>
- 3.3 On the positive side, China is an undoubted leader in many aspects of the net zero transition, but as has been stated in the Breakthrough Agenda Report of the COP27 meetings, "international collaboration will be critical to success, given the global scale and fast pace of change required."

#### 4. The role of hydrogen in the Green Energy superpower model

- 4.1 In the course of preparing our Report, we had the opportunity to meet with government and industry in all Australian states and territories, as well as with key federal government departments.
- 4.2 What was apparent through this experience was not just a (pleasing) firm acceptance of the need to address the climate challenge as a reality, but (more concerningly) a perception that hydrogen, in some form as an energy vector, will be the export product panacea to replace the loss of a hydrocarbon economy.
- 4.3 This seems an ambitious green energy extension of an old economy worldview, swapping carbon (coal) for molecules (hydrogen) in a commodity export market, and not the

<sup>&</sup>lt;sup>4</sup> https://news.un.org/en/story/2021/09/1100642

<sup>&</sup>lt;sup>5</sup> The World Bank: <a href="https://www.worldbank.org/en/news/press-release/2022/10/12/china-s-transition-to-a-low-carbon-economy-and-climate-resilience-needs-shifts-in-resources-and-technologies">https://www.worldbank.org/en/news/press-release/2022/10/12/china-s-transition-to-a-low-carbon-economy-and-climate-resilience-needs-shifts-in-resources-and-technologies</a>

https://iea.blob.core.windows.net/assets/49ae4839-90a9-4d88-92bc-371e2b24546a/THEBREAKTHROUGHAGENDAREPORT2022.pdf





- ambition of a green economy superpower, leading the world in the application of that abundance of green energy in its dynamic new economy.
- 4.4 While we recognise the vital importance of hydrogen in Australia's green economy mix, there are a number of fundamental challenges that need to be addressed. In the 16 November 2022 issue of Nature<sup>7</sup>, these challenges are summarised as:
  - the cost of the huge amounts of renewable energy required to create green hydrogen;
  - the cost (and utilisation rate) of electrolysers; and
  - the location of the point of use (storage, transport and delivery)
- 4.5 In its *Hydrogen Superpower* scenario<sup>8</sup>, the Australian Energy Market Operator (**AEMO**) states that Australia will require an increase of 8 times current energy generation on the National Energy Market (**NEM**) to meet these requirements.
- 4.6 With the retirement of fossil-fuel-based sources of energy, this equates to 34 times the current capacity of Variable Renewable Energy (VRE).
- 4.7 In practical terms, this means 270GW of wind and 280GW of solar from a current base of 16GW, to which must be added the requirements for storage and distribution for the watts (be that as electrons or hydrogen) to be consumed at the point of industrial use. (i.e. our export customers).
- 4.8 This raises the question of why we are not looking more closely at attracting the industrial investment into Australia to make Australia the place to produce and use the green energy and advance our value-adding manufacturing base.
- 4.9 The International Energy Agency (IEA) projects<sup>9</sup> that by 2030, global hydrogen demand might rise by 20 to 30 per cent, compared to today. The low-carbon hydrogen projects that are in the pipeline so far will be enough to cover only about one quarter of that. That suggests that Australia's hydrogen expansion plans are not yet ambitious enough!

#### **Green Economy Superpower**

- 4.10 It is because of these three challenges (renewable energy generation, hydrogen production & storage, and industrial point-of-use) that we believe our proposition for Australia to be a **Green Economy Leader**, beyond a **Green Energy Superpower**, needs to be considered.
- 4.11 Australia should be using this massive economic transformation to set the policy framework and industry development focus to add-value on-shore in Australia, beyond merely exporting the electrons or molecules.

Turning now to each of the four areas of the Committee's inquiry:

# 5. Australia's trade - products

5.1 Australia's economic resilience (and prosperity) over the last 20 years has benefited from China's success in transforming its economy, lifting 700 million people out of poverty, and

<sup>&</sup>lt;sup>7</sup> https://www.nature.com/articles/d41586-022-03699-0

<sup>&</sup>lt;sup>8</sup> https://aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp

<sup>&</sup>lt;sup>9</sup> https://www.iea.org/reports/global-hydrogen-review-2022/executive-summary





- bringing 300 million into middle-income status. This has been achieved through the increased consumption of Australia's resources (iron ore) and energy (coal, gas).
- 5.2 Although consumption of these commodities will continue as China continue to grow, the policy settings now in place in China will have an impact on our exports. Current gas demand anomalies aside, China has alternatives for coal and LNG and is diversifying its iron ore sources. Geopolitics aside, Australia's fossil-fuel led economy is at risk.
- 5.3 The development of Australia's nascent 'future-facing' minerals sector (lithium, copper, nickel, etc) has shown dramatic growth in the last 24 months, with future market demand driving a 40-fold requirement of expansion over the next 20 years.
- 5.4 The US Inflation Reduction Act is seen by some as a panacea to break China's supply chain dominance via alternative markets. Others (such as the EU) see it as a disruptor to market economies and a threat to domestic advanced manufacturing.
- 5.5 Australia holds a trade surplus with China, however when one considers the scale of input materials required for Australia's energy transition (such as solar PV, wind turbines, batteries, balance of system electrical components, electrolysers and electric vehicles), as things currently stand, Australia will likely be a net importer of the components required for the green energy transition in generation, storage, transport and utilisation. We should instead be aiming to be a 'green' producer of these.
- 5.6 Other Australian export products that contribute to Australia's GDP, including agricultural products and processed metals (aluminium), are also coming under increased pressure in a global green economic reality. The European Union and China are both working on "Carbon Border Adjustment" mechanisms, and Singapore is raising its carbon tax levels progressively from 2024. 10.
- 5.7 All of Australia's export primary production, (namely grain, protein, fruits and vegetables), and their processed variants (including wine), will need to be transparent in their carbon footprint, and able to contribute positively to the emissions intensity of their down-stream customers to be competitive (or even allowed).
- 5.8 Australia's *green energy* strengths would be better served contributing to Australia's *green economy leadership* by being coordinated into a strategic, national, value-adding economic framework. We believe this demands a **national green economy plan** that links climate and the economy together, ensuring that economic and environmental policies, and public and private sector actors, are working together toward a net zero future.
  - Education. Environment. Advanced Manufacturing. Innovation.

#### 6. Australia's trade - services

- A consequence of the COVID disruptions of the last 3 years is that the previous trend in growth of services exports as a direct result of Australia's favourable bi-lateral trade with China has slipped off the economic radar as a significant economic contributor to national GDP.
- 6.2 Being a **green economy leader** offers significant potential to deliver some even greater benefits to Australia's services sector through the delivery of solutions across multiple sectors, at policy level and at a commercial level.

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<sup>10</sup> https://www.nccs.gov.sg/singapores-climate-action/carbon-tax/





- 6.3 ACBC's Report highlights many areas offering expanded commercial opportunity, including:
  - engineering and project management in sectors such as mining, energy, infrastructure and water
  - environmental consulting and sustainable land use and agriculture
  - financial and asset management
  - energy and carbon trading
  - climate finance
  - climate risk and adaptation consulting
  - urban and precinct design
  - sustainable cities and technologies for urban living
  - transport decarbonisation
  - technology and innovation.
- These skills and capabilities are already well understood within Australia, but currently, Australia is missing out on the potential to scale up the export of these services through a lack of strategic focus in three key areas: Migration, Education and Tourism.

#### Migration

- As Australia's post-pandemic economy rebounds, it is apparent that skills shortages are already hampering the transition to greener economy. The global 'war for talent', (especially in those areas that support green economic development) is a reality for virtually every business and industrial sector and requires a comprehensive policy response. The recent Skills Summit was a key first-step in this, however faster action in improving Australia's competitiveness in migration products and services is needed.
- 6.6 In the Republic of Korea, for example, two new skills councils have been created: one on the renewable energy sector, and the second on green industry trends, risk analysis and green finance.
- 6.7 Similar reskilling programs, training and improved policy coordination will be essential in Australia, but if we are to achieve our superpower ambition, more will be required. We have an opportunity to attract the best talent to solve the world's problems through our world-leading education system and high penetration of renewable energy.
- 6.8 Innovation and investment required to solve the challenges of the green economy should be made a feature of our migration system.
- 6.9 Inviting people to create a future for themselves in a country committed to making a difference in all areas of delivery of the UN's Sustainable Development Goals<sup>11</sup> It may also add weight to Australia's bid to host COP31.

#### **Education**

- 6.10 Australia's education sector was doubly impacted by the shifting geo-political environment and the pandemic.
- 6.11 However, Australia still holds a strong appeal globally as a destination for furthering one's academic interests and career prospects through our world-class national education system.

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<sup>11</sup> https://sdgs.un.org/goals





- 6.12 Imagine if our research institutions (e.g. CSIRO, ARC and CRCs) were more closely aligned with the green economy requirements of our region (especially with those nations that are members of the Regional Comprehensive Economic Partnership (RCEP)), and Australia itself as a whole, was recognised as a Green Economic Development Zone<sup>12</sup> (see section 8 below). The place to inspire, trial and commercialise new ideas.
- 6.13 Australia's current leadership as a green energy producer (in areas such as high penetration of variable renewable energy, FCAS, virtual power plants, demand response management, hydrogen safety, circular economy, recycling etc), should be leveraged to develop Australia's tertiary education market as THE destination focus for those indemand skills of the future.
- 6.14 Australia should focus its education market appeal around the green economy impact of our advanced uptake of green energy.
- 6.15 Our institutes should focus on knowledge sharing around green manufacturing, (green steel, green ammonia, green beef), green products, green packaging, green monitoring, green finance, green reporting, green cities AND green energy.
- 6.16 Australia should leverage its natural leadership in green energy underpinning our ability to lead the development of the knowledge economy required to deliver the green economy.

#### **Tourism**

- 6.17 Australia's appeal as a nature-based tourism destination is well established. Again, favourably benefiting from a prosperous China, Chinese visitors surpassed New Zealand in 2019 to be Australia's top inbound visitor source.
- 6.18 The loss of this market, as with other pandemic-related challenges, has had a devastating impact on the industry.
- 6.19 These 1 million+ Chinese inbound visitors came from a base of only 5 per cent. of China's population having a passport. With 300 million having entered middle-income since 1990, and a similar number likely to be added to this by 2050, these visitors will be back. However, when they do, their expectations will be different.
- 6.20 China's domestic tourism offerings have advanced dramatically in the last 10 years with the population's embrace of high-speed rail, cashless payments, hundreds of new international airports, and new visitor experiences focussed on functional-foods, ecotourism and health-focussed and nature-based tourism.
- 6.21 Their expectations of value from an Australian visitor experience will have changed.
- 6.22 What has not been addressed, and another reason for ACBC's desire to focus on the green economy opportunity beyond beyond just a green energy superpower, is the need for a national policy framework for the RAPID transformation of the means for travel (ie: green planes, trains, bus, ferry, boats and cars, etc), and the growth of Australia's value-adding economy of the new products and service potential to take advantage of this green tourism globally.

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<sup>12</sup> https://gasez.org/



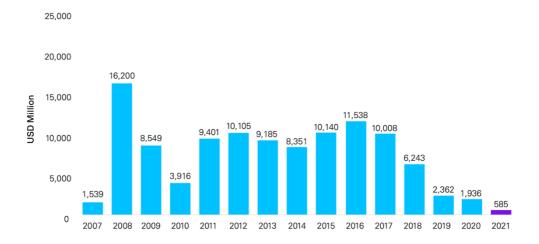


- 6.23 Green fuels, electric vehicle charging, fuel cell manufacturing, hydrogen refuelling, emissions monitoring, marine park management, national parks and biodiversity, green airports, seaports, hotels and restaurants. All need to be able to deliver with integrity to support Australia's 'clean and green' positioning, (whilst acknowledging the ESG reality of our Scope 3 (coal/ gas) emissions contributions).
- 6.24 All these elements need to be addressed if we are to deliver a 'green' visitor experience with authenticity. Today's consumers are demanding it. Tomorrow's travellers will not book without it.

#### 7. Investment

- 7.1 Australia is a net importer of capital. Pre-2016 much of this investment was into infrastructure to enable the resources and energy sectors to meet the commodities boom from China.
- 7.2 A recent report<sup>13</sup> from KPMG (graph below) notes that since 2016 inbound investment from China to Australia has plummeted and the settings remain a source of friction.

#### Chinese ODI into Australia 2007 - 2021 by value (USD million)





Chinese investment in Australia declined by **69.8%** 

**09.870** from USD 1.9 billion in 2020 to USD 0.6 billion in 2021.

In Australian dollar terms, the decline is 69% from AUD 2.5 billion to AUD

0.8 billion.

The number of completed transactions almost halved

rom 20 transactions in 202 to 11 in 2021.

By industry

The mining industry accounted for 70.1% of the total Chinese investment inflows, which equated to AUD 545 million.

Commercial real estate accounted for 26.7% of the total Chinese investment inflows, which equated to AUD 208 million.

accounted for 3.2% of the total Chinese investment inflows, which equated to AUD 25 million.

Renewable energy sector

<sup>&</sup>lt;sup>13</sup> https://home.kpmg/au/en/home/insights/2022/04/demystifying-chinese-investment-in-australia-april-2022.html





- 7.3 However, Australia still has tremendous interest from Chinese investors. Not the least those Chinese companies that already have substantial investments in Australia and that are under tremendous pressure domestically from mainland China to decarbonise their business Scope 1 & Scope 2 emissions and demonstrate compliance on China's path to achieve its 'dual carbon' goals.
- 7.4 Opportunities for additional investment we uncovered during interviews for our Report include:

# Value-added manufacturing:

- Longi <a href="https://www.longi.com/en/products/hydrogen/">https://www.longi.com/en/products/hydrogen/</a>
- Sungrow https://en.sungrowpower.com/
- Tianqi Lithium www.tianqilithium.com.au
- CATL https://www.catl.com/en/
- StateGrid <a href="http://www.sgcc.com.cn/">http://www.sgcc.com.cn/</a>
- Beijing Clean Energy Holdings <a href="https://bjceaustralia.com/">https://bjceaustralia.com/</a>
- Shandong New Energy Group <a href="http://www.shneg.com.hk/">http://www.shneg.com.hk/</a>
- JingliHydrogen <a href="https://www.jinglihydrogen.com/">https://www.jinglihydrogen.com/</a> (John Cockerill)
- Goldwind www.goldwindaustralia.com
- Mingyang <a href="http://www.myse.com.cn/en/">http://www.myse.com.cn/en/</a>
- Envision Energy <a href="https://www.envision-group.com/envision-energy">https://www.envision-group.com/envision-energy</a>
- 7.5 A key take out from these discussions was the prevailing **positive interest** from all these companies to contribute to Australia's green economy transition.
- 7.6 Of particular interest, however, to Australia's potential as a green energy superpower, or green economy leader, was the desire of these companies to enter into discussions regarding the development of Australia's own domestic value-added manufacturing capacity in this new energy space.
- 7.7 Companies like Tianqi Lithium have already invested heavily beyond resource extraction into lithium processing in Western Australia. The parent company has also recently committed funds from its recent capital raise in Hong Kong to the greening of the supply chain and full life-cycle resource recovery (circular economy). While national interest considerations must be given due weight, there remains a significant opportunity for Australia to leverage an already strong cross-border relationship, for our national advantage.
- 7.8 Longi New Energy, already one of the leading distributors of solar PV in the world, is now also one of the leading participants in China's booming hydrogen economy. It has invested in electrolyser manufacturing capacity, built hydrogen refuelling stations, solved storage and transport challenges and is working with some of the biggest industrial players for the use of green hydrogen in their operations.
- 7.9 CATL, the world's leading producer of LFP batteries, is also in-market to determine the potential for downstream manufacturing of battery cell components and assembly.





## Large-scale generation development

7.10 Of course, Australia's green energy superpower ambitions are of appeal to many component manufacturers, developers and EPCs. Australia also has a long history of bilateral trade with some of the world's largest electricity grid companies and grid infrastructure component manufacturers. All are interested in investment in Australia and bringing in their experience from the 90GW China renewable energy market.

# 8. Emerging and possible future trends

- 8.1 The scale of the industrial transformation in the green economy provides a sustainable, scalable platform for innovation and new technology solutions. On a matter of scale, China's installed renewable energy capacity reached 1063 gigawatts (GW) in 2021. Australia has 30GW.
- 8.2 Within Australia, a number of precincts, clusters and development zones have been created in various states and territories, and in different sectors, to pilot the development of new products, and their scaling up.
- 8.3 These are to be encouraged, but we should also consider models from other countries that may help accelerate the process, and which may also expand the geographic expansion (and influence) of them.
- 8.4 We outline below several opportunities for consideration.

#### Australia as RCEP's Green Industrial Development Pilot Zone

- 8.5 First, Australia could leverage its strengths, and advance its competitiveness in the region, by positioning itself as the Green Economy Development Zone for the countries participating in the Regional Comprehensive Economic Partnership (RCEP).
- As highlighted by the Global Alliance for Special Economic Zones<sup>14</sup>, special economic zones (**SEZs**) can make important contributions to economic growth and sustainable development. Zones can help attract investment, create jobs, boost exports, and build productive capacity. They can support global value chain integration, industrial upgrading and diversification.
- 8.7 Due to Australia's advanced penetration of variable renewable energy and experience with integrating renewables into the grid, Australia has the opportunity to become the pilot demonstration zone for global innovations in green industry transformation.
- 8.8 By adjusting some policy settings, and promoting to the global zones, Australia, being already ahead, can further advance the application and demonstration of industrial-scale solutions. Such an approach would attract investment, stimulate innovation and accelerate the transition, potentially bringing new green industries to Australia.

## **Renewable Energy and Hydrogen Development Zones**

8.9 Second, ACBC's partnership with the Association of Green Industrial Parks in China (GPIPC)<sup>15</sup> also highlights great promise to cross-border knowledge exchange and green industry development.

<sup>14</sup> https://gasez.org/

<sup>15</sup> https://greendev.org.cn/





- 8.10 GPIPC represents 250 of the more than 2,000 Industrial Parks and Economic Development Zones designated in China, within which some 25 per cent. of China's GDP is generated.
- 8.11 In 2016, under the guidance of the Ministry of Commerce, GPIPC began to measure the inputs and outputs of these parks, and the industry/ companies within them, to provide some baseline knowledge about energy, emissions, environmental and economic impact of these locations.
- 8.12 The research is now driving policy direction about 'carrots and sticks' to support the effective transition of China's economy to that of its now directed "high-quality growth" agenda.
- 8.13 Polluting companies are being fined, new innovations are being commercialised, and new industries are being supported.
- 8.14 GPIPC is collaborating with 15 International economies to share these learnings and manage inbound and outbound investment.
- 8.15 Australia needs to be at the table to understand what's happening at a global level, and work out how it can contribute, and compete, with a rapidly changing global green economy.

# The role of key commonwealth agencies including Austrade, in identifying new trade and inward investment opportunities.

- 9.1 Austrade is Australia's 'official trade and investment promotion agency', which provides services to Australian businesses looking to enter or expand into global markets, and assists in attracting foreign direct investment to Australia]
- 9.2 Austrade plays an invaluable role in the promotion of Australian products and services to global markets, and the attraction of inbound investment.
- 9.3 DFAT should continue to support Austrade, and its global representation presence, in the promotion of Australian trade and investment.
- 9.4 A key structural challenge for Austrade in the acceleration of the green economy is the accelerated pace of change in the investment landscape, and the depth of technical expertise required in the consideration of the solutions for promotion.
- 9.5 ACBC is familiar with Austrade's strong focus on China already and values our collaborative efforts. This focus is important, but beyond this, it is proposed that Austrade develops a global **Green Economy strategic development** team to identify opportunities, including through whole of government coordination of investment & trade focus. Australia needs to develop an objective GAP analysis of our strengths, act on our weaknesses and take advantage of the opportunities.
- 9.6 Austrade should continue its efforts to work collaboratively with both the industrial end user at a domestic and international level, as well as the innovation ecosystem of academic commercialisation departments, CSIRO and venture capital ecosystems.
- 9.10 Some suggested areas for continued attention by Austrade (and other government departments), in conjunction with key industry partners include:





- Education knowledge sharing about the market, and market opportunities
- Investment attraction policy development. Preparation for targeted overseas FDI
- Promotion Australia as a dedicated Green Economy economic development zone
- Delegations preparation for more efficient inbound and outbound delegations
- Investment efficiency reducing the friction between interest and action
- 9.11 Australia is in a globally competitive environment for trade and investment. All of our ASEAN neighbours are well-progressed with their green economy promotion within RCEP. Investing in Australia's capacity to connect to these markets, through Austrade, should be a policy priority.

# 10. Areas of growth:

- 10.1 The scale of the transformation is huge. As is the opportunity for Australia to move beyond its 'dig it and ship it' economy.
- 10.2 ACBC believes Australia's realisation of this opportunities can be accelerated and/or assisted through a dedicated national program that positions Australia as a **Green Economic Zone**.
- 10.3 Australia can capitalise on its bi-lateral trade agreements (including with China) and other developing economic frameworks within the region (such as RCEP) to be the Green Economy leader because we are a green energy superpower.
- 10.4 We need to accelerate our ascendance back UP the ladder of economic complexity.

#### Summary

- 10.5 In summary, we see Australia, in close collaboration with China, being a:
  - a manufacturer of renewable energy components (panels, batteries, inverters, etc)
  - a leader in the integration and management of battery storage (VPP, ESCAS)
  - a preferred location to advance the trial and demonstration of new energy supply and infrastructure
  - a key contributor to value-added components within the electric vehicle industry:
    - charging stations
    - monitoring
    - recycling
    - o autonomous driving
    - agritech
  - a key player in infrastructure management:
    - IoT and green building monitoring
  - an advanced manufacturer:
    - build factories fast (with China)
    - electrolysers
    - storage
  - a leading provider of services:
    - education, project management, safety monitoring, operations and maintenance
  - a leading provider of technology:
    - off-shore wind





- 10.6 Of particular interest to Australia's maturing green economy vision will be leadership in:
  - Education (new industries, new roles)
  - Skills (industrial transformation, community development)
- 10.7 Critical to the ability of Australia, and the world, in meeting the goals of 2030 and 2050 will be our ability to achieve net zero faster.
- 10.8 And even more critical to Australia is to learn from those who have demonstrated, at scale, how to transform manufacturing, streamline supply chains, and accelerate technology learning curves.
- 10.9 And we believe we can achieve that faster together with China, not isolated from it.

We are happy to provide follow-up responses to any queries the Committee may have. Your sincerely

# **David Olsson**

National President Australia China Business Council

# **Anthony Coles**

Chair, Net Zero Working Group Australia China Business Council

15 December 2022