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AUSTRALIA'S TECHNOLOGY INVESTMENT ROADMAP – A FRAMEWORK TO ACCELERATE LOW EMISSIONS TECHNOLOGIES

On behalf of the Australian Council of Superannuation Investors (ACSI), I am pleased to make this submission in relation to Australia's Technology Investment Roadmap – A framework to accelerate low emissions technologies.

Established in 2001, ACSI exists to provide a strong, collective voice on environmental, social and governance (ESG) investment issues on behalf of our members. Our members include 39 Australian and international asset owners and institutional investors. Collectively, they manage over \$2.2 trillion in assets and own, on average, 11 per cent of every ASX200 company, on behalf of millions of beneficiaries.

Our members recognise that ESG risks and opportunities have a material impact on investment outcomes. As fiduciary investors, they have a responsibility to act to enhance the long-term value of the savings entrusted to them.

Our members support the Paris Agreement aim of limiting global warming to well below 2°C and moving towards 1.5 °C, recognising this will require a shift to net zero emissions by 2050. We support a planned transition to a low carbon economy rather than a disorderly transition, on the basis that a planned transition will result in better economic outcomes, is better able to take account of the needs of various stakeholders, and better to manage uncertainty and volatility.

Our members recognise that climate change poses physical and transitional risks, but also opportunities for business and investors, as the economy adjusts to a lower carbon future. These risks are deeply embedded across the financial system and therefore will affect the value of our members' investments. We recognise that the Technology Roadmap Discussion Paper is one input into the Government's Long-Term Emissions Reduction Strategy and would welcome the opportunity to comment further on the strategy at an appropriate time.

Our comments are set out in this submission. I trust they are of assistance.

Please contact me or Kate Griffiths, ACSI's Executive Manager - Public Policy and Advocacy, should you require any further information on ACSI's position.



Louise Davidson AM
Chief Executive Officer
Australian Council of Superannuation Investors

OVERARCHING COMMENTS

We welcome the Technology Roadmap Discussion Paper's acknowledgement that the future for Australia's energy, industry and transport is low-carbon and the recognition of Australia's opportunities in cheap renewable energy. We agree with the statement in the Paper that '*Australia's role in the global response to climate change can go beyond simply reducing our own emissions*' (page 6) and encourage the Government to adopt the highest level of ambition in its Long-Term Emissions Reduction Strategy. We recognise that the Technology Roadmap Discussion Paper is one input into the Government's Long-Term Emissions Reduction Strategy and would welcome the opportunity to comment further on the strategy at an appropriate time.

Opportunities in recovery from COVID-19

The Discussion Paper highlights the opportunities to reduce emissions right across the Australian economy, leveraging investment to support economic growth and job creation. There is significant support across the market for COVID-19 economic recovery packages that rebuild a sustainable and strong economy, as well as support jobs. See for example [this statement](#) from a broad cross section of Australian business and [this statement](#) from the international Investor Agenda. We also note with interest the approach of multinational, BP plc, which when recently [announcing asset write downs](#), outlined its '*growing expectation that the aftermath of the pandemic will accelerate the pace of transition to a lower carbon economy and energy system, as countries seek to 'build back better' so that their economies will be more resilient in the future*'.

The recent '[Australia renewable export COVID-19 recovery package](#)' report written by EY (commissioned by the World Wildlife Fund) outlines that an economic rebuild based on renewables could reinvigorate local manufacturing, grow existing sectors and unlock new industries, increase exports, reskill the workforce, reduce carbon pollution and improve health – all worthy goals. This report also found that a renewables-led economic recovery would create almost three times as many jobs as a fossil-fuel-led recovery and calls for a mix of incentives, subsidies and regulations in support.

ClimateWorks' recent report [Decarbonisation Futures: Solutions Actions and Benchmarks for a Net Zero Emissions Australia](#) also shows how technologies in each sector can achieve climate goals in Australia when rebuilding the economy for future resilience. ClimateWorks outlines that this will require strong action by every level of government, businesses and individuals to support technology development, demonstration and deployment.

We agree with both ClimateWorks and EY that coordinated action across a range of levers (including policy, investment, incentives, business and individual behaviour, and technology research development and innovation) is required for effective action.

For effective action, cohesive and clear policy should supplement the Technology Roadmap to unlock private capital

The Technology Roadmap Discussion Paper largely considers policy options that would guide taxpayer investment in technology development. While the Technology Roadmap is a welcome step forward, more remains to be done. The Technology Roadmap needs to be supplemented with:

- Strong policy action to support the transition, including communication of economy wide strategies to support a clear Government target to achieve net zero by 2050. In addition, 2030 targets that are aligned to Paris Agreement objectives should be set; and
- Consideration of how Australia can unlock further private capital into the commercialisation and deployment of net-zero emissions technologies.

Private capital will be critical to ensuring a smooth transition as Government investment alone will not address the systemic risks that climate change presents.

Many businesses and investors are already making climate risk assessments in their portfolios, and taking emissions costs into account in their strategies. A number of ASX200 companies, including many of the largest mining, manufacturing and oil and gas companies, already use a shadow carbon price internally for investment and project design decisions, although reflecting uncertainty, companies often use a range of carbon prices to stress test project economics prior to investment.

Acceleration of these trends is required to unlock the full advantages of private capital. Investors will be interested in supporting the technologies that provide an effective transition to a low carbon economy, with

returns that appropriately reflect the risk adopted. To set a portfolio-wide investment strategy, investors need clear public policy that is delivered through an integrated and robust national approach to climate change that sets and encourages Australia's trajectory to net-zero emissions by 2050, consistent with our international obligations. Given the role of capital investment in the transition, we recommend that a broad range of investors be invited to participate in the ongoing policy discussions.

Support for the Investor Group on Climate Change

ACSI is a member of the Investor Group in Climate Change (IGCC) and supports an efficient transition to a low-carbon economy. We endorse the mission of the IGCC which recognises that climate change will impact investments, that there is an economic transition underway and it is accelerating. We support a response found in a science-based assessment of the carbon constraints required to avoid dangerous climate change and acknowledge that investors are key agents in facilitating an efficient transition.

We encourage the Ministerial Reference Panel to seek views from a broad range of investors, including the IGCC.

TECHNOLOGY ROADMAP QUESTIONS

Set out below are our views in response to some of the more specific themes outlined in the Technology Roadmap Discussion Paper.

A. THE CHALLENGES, GLOBAL TRENDS AND COMPETITIVE ADVANTAGES THAT SHOULD BE CONSIDERED IN SETTING AUSTRALIA'S TECHNOLOGY PRIORITIES

The global trend towards a carbon neutral world is clear. The ambition was set with the Paris Agreement, and many countries and organisations have taken significant steps towards reaching the goals.

The Technology Roadmap Discussion Paper outlines that global technology leaders, including Germany, the European Union, the United States and Japan have set in place long-term strategic approaches to their technology innovation and deployment programs (p14), with other major economies such as the United Kingdom, having recently implemented similar measures. The Discussion Paper notes that international experience demonstrates that clear articulation of national technology priorities has benefits beyond optimisation of the central government's investment and, over time, builds partnerships with key domestic and international stakeholders. The Paper further outlines that clear government technology priorities also allow private capital providers to take account of national goals in making their own investment decisions.

The same is true of clear policy positions that include emissions reductions goals. Many of the 'leaders' named in the Discussion Paper (such as Germany, the United Kingdom and the European Union) have also committed to 'net zero by 2050' policy positions, acting to provide important signals to private investors.

Recognising international policy signals, many Australian listed companies have also adopted similar targets including BHP Group, Dexus Property Group, Fortescue Metals, Goodman Group, Graincorp, Insurance Australia Group, Qantas Airways, Rio Tinto, South32, Scentre Group, Stockland, The Star Entertainment, Santos, Suncorp Group, Vicinity Centres and Woodside Petroleum. In turn, this operates as an important signal to investors that these companies are cognisant of the risks and further disclosure (where available) operates to provide insight as to how they manage these risks, and seek to maximise the opportunities.

It is also becoming increasingly common for investors and businesses to price carbon into their capital allocation decisions. Our research indicates that there a significant number of listed companies stress testing their portfolios against plausible low-carbon futures and disclosing this analysis to investors. Inputs into stress testing include low-carbon demand creation and high-carbon demand destruction, as well as carbon budgets and carbon costs. Listed company disclosure also shows that many companies accept the inevitability of a cost for emissions, with many already including a carbon price as an input into strategic decision making and capital allocation, for example Boral, Adelaide Brighton, BHP, Rio Tinto, BlueScope, Origin Energy, AGL, Beach Energy, Oil Search and Santos. These trends need to be accelerated across the ASX and more broadly.

The global trends and widespread acknowledgement of the financial risks associated with climate change indicate that an unplanned transition risks Australia falling behind, and also failing to fully realise the significant competitive advantages available.

For example, we note the Technology Roadmap Discussion Paper outlines Australia's world-leading rate of deployment of solar and wind. It also acknowledges the significant opportunities, for example stating '*If significant cost reductions in energy storage are realised, careful and systematic deployment of low-cost renewable generation could re-establish our advantage...the deployment of technology to firm variable supply and maintain supply and maintain grid stability should therefore be a priority (p27)*'.

Corresponding investments, policy and strategy are required. The recent report from the Australian Energy Market Operator found that Australia already has the technical capacity for the national electricity market to reach 75 per cent instantaneous renewable generation by 2025, but that market and regulatory reforms will be needed. Sound policy signals from Government can support private investment in technologies to support market reform including scalability and corresponding cost reduction.

Accordingly, global trends indicate a significant movement towards a low-carbon world. To overcome the challenges in Australia, coordinated action across a range of levers (including policy, investment, incentives, business and individual behaviour, and technology research development and innovation) is required for effective action, including to unlock private capital.

C. GOALS FOR LEVERAGING PRIVATE INVESTMENT

We agree that scale is important. We appreciate the Discussion Paper's call for stretch goals, which are largely focussed on cost targets. While these are important, we think that deployment targets will also assist the transition, given the cost reductions that typically follow increased deployment. Our view is that setting deployment targets will assist in catalysing investment, supporting scale and cost reductions.

Private investors are consistently looking for opportunities, many already take emissions costs into account in their strategies, and some have set emissions reductions targets in their portfolios. The appetite for clean technology investments is currently higher than the availability of investable opportunities, and deployment targets could assist in correcting this imbalance.

We encourage the Panel to speak directly to a broad representation of investors to leverage their expertise in this respect.

D. WHAT BROADER ISSUES, INCLUDING INFRASTRUCTURE, SKILLS, REGULATION OR PLANNING NEED TO BE WORKED THROUGH TO ENABLE PRIORITY TECHNOLOGIES TO BE ADOPTED AT SCALE IN AUSTRALIA WHILE MAINTAINING THE SUPPORT OF LOCAL COMMUNITIES

Ensuring that communities and workers directly affected by the transition are appropriately supported is an essential aspect of the transition to a low-carbon economy and should be addressed in the wider policy landscape. Policy action should aim to widely share the benefits of climate change action, with costs not unfairly burdening those least able to pay, or whose livelihoods are at risk as the economy shifts and changes. Dialogue could be supported by the adoption of a set of guiding principles, such as the [International Labour Organization's Guidelines for a Just Transition](#).