



**HESTA Submission -**

**Technology Investment Roadmap discussion paper** 



# Technology Investment Roadmap – a framework to accelerate low emissions technologies

# **Summary**

HESTA welcomes the opportunity to make a submission to the *Technology Investment Roadmap discussion* paper and to work with the Government to develop a clear pathway for a cleaner future.

Climate change presents a financial risk to the HESTA portfolio and the world in which our members will retire. An urgent response is required, the cost of inaction is far greater than the cost of responding to climate change.

Accordingly, we consider climate change risks in our investment decision making, as failing to do so will likely have a negative impact on the retirement outcomes of members.

Our members, through their work in health and community services, also deal directly with the impacts of climate change through related adverse health and broader environmental, societal and economic impacts.

Sophisticated institutional investors like HESTA have an important role to play in the transition to a low-carbon economy. To execute our fiduciary duties, we are focused on mitigating the risk of climate change across our \$52 billion portfolio and identifying important investment opportunities arising from the transition that will help deliver long-term value for HESTA members.

HESTA is developing a Climate Change Transition Plan (CCTP) set to be the most comprehensive plan ever undertaken by a superannuation fund.

The key climate related impact to our portfolio is that of a disorderly transition- market repricing from an abrupt policy transition from the current 3°C trajectory onto a <2°C pathway, therefore the work of governments to set an orderly path is crucial for our member's returns. As a part of our assessment of these risks we have conducted a scenario analysis across the portfolio and will use this to determine a set of targets to manage towards.

If efforts to transition are not successful, then we expect an increase in severity and frequency of damage from physical impacts of climate change.

Our submission seeks to help governments to understand the needs of experienced institutional investors to attract and retain capital over the long-term. Key to this is clear and consistent policy positions.

We are at a critical juncture, the choice to commit to a low-carbon economy is now, HESTA does not want to see a carbon led recovery.

We welcome the opportunity to discuss our submission further. Should you have any queries please contact Mary Delahunty, Head of Impact <a href="mailto:mdelahunty@hesta.com.au">mdelahunty@hesta.com.au</a>

### **Recommendations:**

#### 1) Commit to net-zero emissions by 2050:

We want to avoid a carbon led recovery, the current reliance on fossil fuels and inefficient energy generation represents a clear risk to our member's returns.

The current financial crisis presents an opportunity for Government to invigorate investment by setting long-term transparent emission reduction targets and providing a clear 'road map' to achieving them. The Technology Roadmap should form part of a broader national strategy to achieve carbon neutrality by 2050, with a 2030 milestone to ensure we are on a trajectory to achieve this. This commitment would provide much needed certainty for the investment community globally.

#### 2) Recognise that the role of gas in the transition is limited:

Competitiveness of renewables and improvements in storage technology mean the role of gas in the transition is likely to be reduced to firming up renewables and for use in industrial processes. Limiting the role of gas to these areas will provide greater investment certainty for the renewable sector.

# 3) Remove barriers to long-term investment by providing long term PPA tenor and a plan to upgrade the network:

Revisiting our renewable energy framework to provide longer term power purchase agreements tenor and a clear plan to upgrade the network to cater for a changing energy supply model, will provide greater certainty to the Australian energy market and ensure a lower cost of capital remains in Australia for further investment.

# 4) Enable innovative investment partnerships and structures to encourage investment in Clean Technology:

Government can act as 'facilitator' of private investment with the Biomedical Translation Fund providing a potential model. And can constructively engage internationally and transparently manage transition to a net-zero emissions economy to ensure Australia can attract investments as decarbonisation gathers momentum.

# **Towards 2050 - Avoiding a carbon-led recovery**

Australia's superannuation sector has important role to play in supporting the post-COVID19 economic recovery. The strong superannuation sector has provided vital support to members facing financial hardship through facilitating early access to super. The sector is also a central source of capital for companies and, as a long-term, patient investor, a stabilising influence on our markets.

Industry super funds, with a proven history of success in the unlisted assets class, have invested in productivity enhancing infrastructure and thereby underpinned the long-term success of the Australian economy.

However, the push to accelerate stimulus-focused government investment should not come at the expense of missing this opportunity to put Australia's economy and job creation on a more long-term, sustainable footing.

We are, in fact, at an important inflection point when it comes to government investment in our recovery. We encourage the government to take a comprehensive approach to evaluating where spending should occur, considering broader environmental and social factors that will build more resilient communities and greater long-term quality of life.

Prudent investment that supports a long-term, post-COVID19 emission reduction should be prioritised. Failure to do so risks locking in long-term carbon emissions and investing in major infrastructure that risks being becoming stranded.

# Managing sovereign risk appropriately

Australia's international standing in the global effort to address climate change is a crucial backdrop for investors as they seek to understand and measure policy risk in various jurisdictions around the world.

Australia was recently rated as among the worst performers in the Climate Change Performance Index (CCPI), which track countries' efforts to combat climate change.

Australia fell further in ranking to <u>56<sup>th</sup> out of a total 61 countries</u> and continues to receive 'very low' ratings in the Energy Use category and ranks at the bottom of 'low' performers in both the GHG Emissions and Renewable Energy categories.

As global pressure increases for more ambitious action on climate, Australia may face greater complexity in managing international and trade relations if it is seen to be slow transitioning its economy.

More broadly, global investors are stepping up efforts to manage climate risk across their portfolios and carbon intensive economies and industries will face increasing scrutiny.

As an active owner of Australian companies, we are also concerned about the impact of pessimism among corporate leaders about our ability to meet our Paris Agreement commitments and limit the negative impacts of climate change.

The recent <u>PwC's 23rd Annual Global CEO Survey</u> revealed only 12 percent of Australian CEOs believing business and government collaboration is effectively mitigating climate change risks, compared to a third of CEOs globally.

Nearly two thirds of Australian CEOs surveyed saw climate change as a major threat, with concerns increasing year on year over the last decade.

Policy certainty plays a role in providing confidence for business leaders and encouraging a proactive approach from companies when it comes to investing and implementing low carbon or energy efficient initiatives.

Australian CEOs are also trailing their global counterparts in their views of climate change driven product and service opportunities, with only 17 percent strongly agreeing there are opportunities for their organisation, down from 20 percent in 2010. What is commonly understood to be global leadership in addressing climate change is now clearly being established and Australia risks being left behind.

There are more than 70 countries who have committed to both increasing climate action in their 2020 national plans and to net-zero by 2050 ambitions.

Transparency around disclosing progress on carbon emissions and establishing strong institutions to evaluate and recommend actions to close gaps are vital for investor confidence and certainty.

HESTA looks to the newly established role of the Climate Change Commission in New Zealand as an encouraging model to provide independent oversight on government progress towards long-term emission reduction targets. The role of the Commission to deliver an emissions budget in 2021 will provide valuable transparency that would help investors and companies more accurately understand and manage climate risk and identify opportunities. The Commission will also assess if the country's nationally determined contribution (NDC) for emission reductions is consistent with the established goal of limiting global warming to 1.5 degrees above pre-industrial levels.

At the national level, Australia currently provides very little guidance as to how the Government plans to reduce long-term emissions or how it will transparently track and report progress.

# Target net zero by 2050

The Government has a role to play in ensuring Australia remains an attractive destination for global investment as the decarbonisation push gathers momentum around the world.

The Technology Roadmap should form part of a broader national strategy to achieve carbon neutrality by 2050, with a 2030 milestone to ensure we are on the right trajectory. This commitment would provide much needed certainty for the investment community globally.

Australia's standing in efforts to reduce global emissions and its progress in de-carbonising its own economy will impact investors' preparedness to invest in Australia, as they seek to manage climate risk across their portfolios.

Leading global investors such as the European pension and sovereign wealth funds are already implementing long-term climate change transition plans that will see ongoing significant reduction in carbon exposure across their portfolios.

The impact of government inaction is not an abstract concept, Sweden's Central Bank announced in November it had sold bonds issued by the <u>Queensland and WA Governments</u> due to climate change concerns. Norway's sovereign wealth fund, <u>Norges Bank</u>, has also flagged the possible exclusion of certain Australian companies, if they deem them an unacceptable climate risk.

We expect these types of decisions to become more common, as a growing number of global investors seek to manage climate risk. Australian superannuation funds cannot ignore this global context. As fiduciaries, we have a duty to manage climate change risk on behalf of members. This necessarily includes understanding and mitigating the risk our members face through exposure to the negative economic impacts of Australia being slow to decarbonise its economy.

The obligation of superannuation funds to manage climate related risks is clearly articulated by the Australian Prudential Regulatory Authority (APRA) and we await the development of a prudential practice guide on this. APRA has been clear in their expectations that funds need to develop rigorous processes to estimate the potential physical impacts of a changing climate as well as risks that may arise from the global transition to a low carbon economy.<sup>1</sup>

The Discussion Paper rightly points out that a key success measure of government investment in new technologies will be if private capital and other investment follows<sup>2</sup>. Institutional investment is essential to meet the scale of change that's required to transition to a net zero economy in timeframes required to limit global warming. It is hard to see how this would occur without comprehensive consideration of how government can create an enabling investment environment underpinned by stable and certain policy settings.

Primarily, this must entail a long-term emission reduction target to 2050 and a roadmap to get us to 2030 and beyond.

Recommendation 1: Commit to net-zero emissions by 2050.

<sup>&</sup>lt;sup>1</sup> https://www.apra.gov.au/understanding-and-managing-financial-risks-of-climate-change

<sup>&</sup>lt;sup>2</sup> Reference the actual section here

# **Certainty attracts private capital**

Policy settings are a vital backdrop to attract the potentially trillions of dollars in global institutional investment needed to underpin the necessary transition to a low carbon future.

Australia is effectively competing for its share of global capital. Already, national governments are putting in place long-term, often bipartisan policy approaches that aim to attract investment capital. HESTA has sought these jurisdictions to invest in as this policy context provides certainty that's attractive to investors deploying capital over the long-term timeframes required for these types of infrastructure investments.

HESTA believes that as a responsible steward, investing for multiple generations of members we have a duty to advocate and invest to support the transition to a low carbon future, this can be done in concert with delivering strong financial returns for members.

This transition will impact the long-term financial future of our members as well as their quality life. Simply divesting away from this risk will not be sufficient to protect our members' investments from climate risk, nor ensure a better society and environment for our members to live in and retire into.

To achieve a just, timely and well-managed transition to a net-zero economy in the timeframes required to keep temperature increases within safe limits widely accepted by scientific consensus will require unprecedented investment. Institutional investors will be central to achieving the scale of investment required.

Australia has long recognised that its stable political system, strong rule of law and consistent regulatory environment and well-developed financial markets help it compete for global investment.

In a world needing to hasten the shift to net zero emissions having a stable, predictable long-term policy to address climate change will also be key in attracting global investment needed to support the transition.

Ensuring investment enabling climate change policies and well managed transition will be a major factor in Australia maintaining the future international competitiveness of our economy.

We only need to look 'over the ditch' to see how countries are starting to position to get a slice of global investment focused on opportunities arising from the transition. New Zealand have set ambitious long-term goal of carbon neutrality by 2050 and has stated they want to be a global leader on climate change. This does more than signal the values of a government, it signals policy certainty.

European countries, both at a national level and through the European Union, are also taking significant steps to create a stable and predictable policy framework to encourage investors.

The European approach also recognises the importance of fostering community awareness and support, which contributes to building constructive consensus to support the need for difficult decisions ahead on the path to transition.

#### **European Union - the European Green Deal**

On 15 January 2020, the European Parliament voted to support the European Green Deal - a set of policy initiatives designed to decouple economic growth from resource use in the European Union and ensure no net emissions of greenhouse gases by 2050. The first climate action initiatives under the Green Deal include:

- <u>European Climate Law</u> to enshrine the 2050 climate-neutrality objective into EU law
- <u>European Climate Pact</u> to engage citizens and all parts of society in climate action.

#### **European Climate Law**

The Climate Law also addresses the necessary steps to get to the 2050 target:

- A new EU target for 2030 greenhouse gas emissions reductions.
- By June 2021, review, and where necessary propose to revise, all relevant policy instruments to deliver the additional emissions reductions for 2030.
- Adoption of a 2030-2050 EU-wide trajectory for greenhouse gas emission reductions.
- By September 2023, and every five years thereafter, assess the consistency of EU and national measures with the climate-neutrality objective and the 2030-2050 trajectory.
- The Commission will be empowered to issue Recommendations to Member States whose actions are inconsistent with the climate-neutrality objective
- Member States will also be required to develop and implement adaptation strategies to strengthen resilience and reduce vulnerability to the effects of climate change.

#### **European Climate Pact**

The European Climate Pact aims to engage citizens and communities in action for climate and environment. Alongside government policies and regulation, citizens, communities and organisations in all sectors of European society and economy have their part to play. It is designed to give everyone a voice and space to design new climate actions, share information, launch grassroots activities and showcase solutions that others can follow.

# Key EU legislation and policies

- <u>EU Emissions Trading System</u> (EU ETS) to reduce greenhouse gas emissions from the power sector, industry and flights within the EU
- <u>National targets</u> for sectors outside emissions trading, such as transport, buildings and agriculture
- Ensuring forests and land contribute to the fight against climate change
- Reducing greenhouse gas emissions from <u>transport</u>, e.g. through CO2 emission standards for vehicles
- Boosting <u>energy efficiency</u>, <u>renewable energy</u> and <u>governance</u> of EU countries' energy and climate policies
- Promoting innovative low-carbon technologies
- Phasing down climate-warming <u>fluorinated greenhouse gases</u>
- Protecting the <u>ozone layer</u>
- Adapting to the impacts of climate change
- Funding climate action

Underpinning the European Union's collaborative, long-term approach to tackling climate change are European nations who have also set their own ambitious emission reduction targets over the coming decades, including outlining robust pathways.

Australia lacks such a comprehensive national approach and lacks the bipartisan resolve to develop one. The development of such long-term strategies with clear emission reduction milestones over the coming decades will improve investors' ability to assess climate risks and opportunities and to better measure, manage and disclose exposures across their portfolio.

Such a long-term national strategy would support investors to manage transition risk and further invest in transition opportunities as greater transparency around the future direction of policy allows for better pricing of current and future climate risks.

Australia's more than \$3 trillion pool of superannuation savings, invested for multiple generations of members, could provide a significant source of long-term capital to assist Australia's economy to transition to a low carbon future.

#### Gas has a limited role

HESTA has serious reservations about increasing reliance on gas. We consider the role of gas in the transition may be overstated by some proponents, particularly for the provision of baseload energy. Emerging evidence of underreported methane emissions for unconventional gas and oil production call into question how 'clean' gas is compared to coal. Add to that the significant challenges seen to the business model of the US fracking industry raises further concerns about the economic viability of a wide-ranging expansion of gas. Our view is that the role of gas should be considered in the narrower context of firming up renewables and providing supply to industrial processes only. This role should only continue until technological advances allow for gas to be phased out.

We recognise that gas has a current role in the energy system; however, we do not believe that role is necessarily aligned with the rhetoric around 'gas as the transition' i.e. replacing coal as baseload.

#### **Role of Gas in Australia:**

Role as a 'firming' for a grid dominated by renewables and for use in industrial processes, consistent with AEMO's Integrated Systems Plan. The Roadmap paper notes that post-2030 other technology, namely batteries and hydrogen, are expected to reduce in cost and challenge gas as a firming source – on cost and emissions grounds.

#### Role of Gas in export markets (Asia)

We acknowledge that Australia's gas reserves position us for export, however we similarly recognise the challenges from an investment and emissions perspective.

The price of utility scale renewables is reducing dramatically in emerging markets<sup>3</sup> and we are therefore skeptical of the gas industry expectation of growth; particularly given the role of gas diminishes in long-term projections every year and the role of renewables is consistently underestimated (IEA World Energy Outlook)<sup>4</sup>.

The gas industry is keen to promote switching from coal to gas in Asia; however, we see the situation as analogous to the roll out of mobile phones in Asia/Africa. In those markets it was simpler and more cost effective to go straight to mobile without first building out landline infrastructure.

These market developments may present a potential stranded asset risk for investors that support fossil fuel infrastructure.

On its current trajectory the competitiveness of renewables will provide sufficient energy to negate the need for large scale investment in gas. As a result, capital intensive infrastructure projects need to consider the real risk of stranded assets and the potential for misallocation of investment.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> https://www.irena.org/newsroom/pressreleases/2019/May/Falling-Renewable-Power-Costs-Open-Door-to-Greater-Climate-Ambition

<sup>&</sup>lt;sup>4</sup> https://www.iea.org/topics/world-energy-outlook

<sup>&</sup>lt;sup>5</sup> https://www.irena.org/newsroom/pressreleases/2019/May/Falling-Renewable-Power-Costs-Open-Door-to-Greater-Climate-Ambition

Based on emissions, the positioning of gas as a 'clean' fossil fuel is challenged by the global warming potential of methane. Findings suggest that the benefits of gas replacing coal are lost where fugitive emissions from operations are greater than 3% of total production.<sup>6</sup>

Even where emissions from gas extraction can be minimised, effectively reducing the share of emissions from Australian domiciled companies, the emission contribution of that gas being used overseas must be factored into decision-making, as it impacts the global carbon budget.

As part of HESTA's active ownership approach with oil and gas companies, we stress the importance of considering the full emissions impact, including the scope 3 associated with end customers using gas. We have consistently encouraged companies to manage scope 3 risks and link emissions reduction targets to executive remuneration. Management of scope 3 emissions has become a standard investor expectation for companies exposed to the low-carbon transition, and we have recently seen multiple examples of global resources companies, including BHP, BP and Shell, setting scope 3 reduction targets.

Having a government stated position on the role of gas will help to direct investment towards clean technology.

Recommendation 2: Recognise that the role of gas in the transition is limited.

<sup>&</sup>lt;sup>6</sup> https://gisera.csiro.au/wp-content/uploads/2019/07/GISERA G2 Final Report-whole-of-life-GHG-assessment.pdf

### **Barriers to long term investment**

As an early investor in renewables and clean technologies HESTA has seen first- hand the barriers investors face in deploying long-term capital domestically into this space.

Over the past decade the lack of a bipartisan, long-term vision for tackling climate change in Australia has meant abrupt and ad hoc policy changes that make it difficult for investors and companies to set long-term transition strategies with confidence. Recent deployment in renewable assets in Australia has been constrained by 1. an inability to access projects with long-term power purchase agreements ("PPAs"), and 2. a lack of greater policy certainty as we transition from a centralised to decentralised energy model.

The possibility of sudden and far reaching regulatory action as the need to cut emissions grows more urgent in future decades increases the risk that investments may become stranded.

Current uncertainty around the broader 'context' in which any technology solution would be deployed creates additional barriers for investment.

The result is that it is difficult for investors to understand and price the risks specific to investing in new or emerging technologies as there is a limited track record of such technologies operating at scale within the Australian market. This increases the due diligence required on transactions and, when combined with the subsequent small project size of these opportunities in Australia, results in significant investment barriers.

This is particularly prevalent for institutional and superannuation capital, which is traditionally more conservative by nature. These investors tend to prefer project revenues which are underpinned by long-term contracts with strong creditworthy counterparties. This has been further exacerbated by institutional investors experiencing continual adverse outcomes (with regards to connection issues, curtailment and marginal loss factors) from both a greenfield and brownfield perspective. As a consequence, investors have focused their capital in countries where greater regulatory certainty can be provided.

#### **HESTA's investment experience in renewables**

HESTA looks to build a diversified infrastructure portfolio across sectors, regions, revenue and life cycle profiles. Investments in renewables through our infrastructure asset class is currently one of the major ways we gain exposure to transition opportunities. Investment in renewables currently represent approximately 5% of our infrastructure portfolio and is a portfolio underweight relative to other sectors.

Assuming renewables have the right risk/return profile through long-term stable contracts, HESTA would have significant appetite to invest in more renewable opportunities in Australia as they diversify GDP-linked assets currently in the portfolio. However, opportunities at an appropriate scale are relatively rare in Australia.

Since 2015, HESTA has actively worked with its partners to identify investment opportunities for renewable investment in Australia and globally for our infrastructure portfolio. Whilst we aim to be flexible to seek opportunities where a superior risk/return proposition is available, over time our philosophy and investment approach has anchored towards ensuring a level of downside protection through long-term contractual certainty. We have developed this approach to mitigate the risks of volatility and losses in greenfield and merchant renewable investment.

This inevitably means that we have looked abroad for jurisdictions that offer stable, predictable policy settings vital to achieve long-term contractual certainty.

HESTA has successfully deployed over 3 times as much capital in renewables globally as domestically despite the locational advantages of investing in our domicile. Globally, HESTA has observed that where there is strong policy support to reduce carbon emissions that is supported by robust regimes this allows for a significant availability and long-term tenor of power purchase agreements.

While HESTA have considered significantly more renewable investment opportunities in Australia in terms of volume, our issue for deployment has been an inability to access long-term contractual tenor with either corporate or retail counterparties of a suitable scale for investment.

When such opportunities are available, we have actively participated and in 2019 acquired a part ownership in Snowtown 2 Wind Farm in South Australia through our direct investment mandate with Palisade Investment Partners.

The Snowtown 2 Wind Farm is located on the Barunga and Hummocks Ranges in South Australia, approximately 130km north of Adelaide. It is comprised of 90 x 3.0MW Siemens Gamesa Renewable Energy turbines.

Snowtown 2 can generate 270MW of energy, equivalent to providing power to 145,000 homes every year. Annually, the energy generated by Snowtown 2 offsets 440,000 tonnes of carbon dioxide emissions into the environment.

This opportunity is a good example of a high-quality renewable investment that provides both a relatively long contracted period beyond the Renewable Energy Target period and elements of protection that can arise from grid stability issues.

Revisiting our renewable energy framework to provide 1. longer term PPA tenor and 2. a clear plan to upgrade the network to cater for a changing energy supply model, will provide greater certainty to the Australian energy market and ensure a lower cost of capital remains in Australia for long term investment.

Recommendation 3: Provide long term PPA tenor and a plan to upgrade the network

# Facilitate new partnerships and new models

HESTA wants to invest in renewables and low-carbon tech, our issue for deployment has been an inability to access long-term contractual tenor with either corporate or retail counterparties of a suitable scale for investment.

We are agnostic when it comes to particular technology solutions and would give consideration to opportunities that met appropriate risk and return parameters. While we remain open to a wide range of technology solutions, consideration should be given to the growing competitiveness of renewables and advancements in storage technology when weighing up the development of capital-intensive new technologies.

There is, however, a role for government as a 'facilitator' of opportunities in helping to 'seed' investment in new or emerging technologies. Investment in new technology development is higher risk, similar to early stage venture capital, where the failure rate of investments is high. The government can facilitate scale opportunities by partnering alongside private equity in start-up funding.

As has been previously mentioned the government has an important role to reduce risk by providing policy certainty that can enable investment.

The flow on effect is an increase in investment opportunities where there is long-term contractual certainty, allowing investors to deploy capital at scale with greater confidence.

HESTA's private equity investments have typically been focused at supporting the growth phase of company's development as they seek broader commercialisation and market share for their product or services.

Effective facilitation by Government would allow more investable opportunities across the risk spectrum of private equity investments, including providing debt / finance which would provide for more allocation options for investors.

The Government could consider two options:

- 1) Bolstering existing structures / institutions already supporting partnership with the private sector; and
- 2) Seeking new complimentary investment models that aim to share risk in early stage development, leveraging existing expertise, building capability and providing a pipeline of investable opportunities.

In supporting the first option the government could broaden the mandate and increase ongoing support and funding for both the Australian Renewable Energy Agency (ARENA) and the Clean Energy Finance Corporation (CEFC). Both ARENA and the CFEC have developed specialist expertise across a diverse range of projects they've been involved in.

There are opportunities to increase collaboration and ideation with institutional investors, including expanding their focus to support investor practice and knowledge sharing. The sophistication of how investors manage, measure and incorporate climate change considerations into their investment decision making and process continues to develop. Institutional frameworks to continue to integrate emerging investor practices into the decision making of ARENA and CEFC are important to fostering a pipeline of commercial opportunities that will meet future requirements of institutional investors.

The CEFC's broad range of investments in property and infrastructure and established networks also provide potential further opportunities to test and trial new technologies that are not yet commercial.

# **Supporting new investment models**

The Government has successfully invested alongside private investors in other fields. We look to the \$500 million Biomedical Translation Fund (BTF) designed to catalyse the commercialisation of biomedical research as a potential model that could accelerate the development of new low emission technologies.

As part of the BTF, the Federal Government offered a "dollar matching" program for institutional investors focused on life sciences venture capital in Australia. The Federal Government committed \$250m alongside institutional investors on a 1:1 ratio. Institutional investors achieve a slight return enhancement through the preferential return of investment gains relative to the Federal Government, once a return equivalent to the bond rate has been achieved. This is achieved via a 60:40 split of returns, relative to the 50:50 capital commitment, in favour of institutional investors.

HESTA has supported this innovative partnership and structure through its partnership with Brandon Capital Partners. The BTF structure leverages the expertise of specialist investment managers and has enabled impressive growth in biomedical production, services and outcomes. Furthermore, the return structure acted as an enabler to increase the flow of capital into the biomedical sector where at this early stage, exhibits greater risk. This structure and partnership approach with government, institutional investors and private equity managers can be translated to clean technology advancement and development.

The investment discipline and expertise specialist managers provided through this collaborative model is an investment approach that closely mirrors how Australian superannuation funds typically access private equity opportunities.

The experience of Brandon Capital Partners in building strong relationships with medical research institutes also points the way to how this type of approach can develop and leverage networks to further accelerate the commercialisation of new clean energy technologies.

The manager has close partnerships with more than 55 medical research institutions supported by State and Federal governments and investing alongside superannuation funds, including HESTA.

Similar partnerships to develop new technologies to assist the transition to a low carbon economy could provide opportunities to create centres of excellence in strategic areas and identify and develop technologies where Australia has a competitive advantage.

Recommendation 4: Enable innovative investment partnerships and structures to encourage investment in clean technology

#### Conclusion

Climate change presents a financial risk to the HESTA portfolio and the world in which our members will retire.

Sophisticated institutional investors like HESTA have an important role to play in the transition to a low-carbon economy.

We welcome efforts to advance the discussion of clean technology and stand ready to do our part as investors. Through our deep experience we understand that investors need more certainty than is currently offered in the Australian political landscape. We need the certainty of a net zero by 2050 target, it is more than signal of

values, it is a signal of policy stability. We need leadership from a federal level about the limited role of gas, acknowledging that it has a part to play but that the part is limited because it is not a clean option. We need the significant risk of tenor to be shared to better attract long term patient capital. And we need the government to facilitate innovative investment models to really drive forward the flow of capital into clean technology.

HESTA is a responsible asset owner, a leading steward of capital and a representative voice for our members who have faced the extraordinary task of keeping the community safe in 2020, first from the health impacts of extreme weather events and now from an unprecedented pandemic. Our members need leadership on climate change and they need it now.