

# Targets, Pathways and Progress

CPD submission to the Climate Change Authority

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The Centre for Policy Development (CPD) welcomes the opportunity to respond to the CCA’s consultation on *Targets, pathways and progress*. CPD is a leading independent policy institute with a focus on progress toward a society that expands opportunity and social justice, an economy that is clean, innovative and productive, a government that is active and effective, and a country that is respected for its leadership and cooperation.

Overall, CPD has made recommendations related to tightening emissions reduction targets, altering public procurement and government investment mechanisms to catalyse finance for the net zero transition, and ensuring benefits are shared amongst all Australians. Some of the recommendations have been informed by a recent visit to Scotland by one of the authors of this submission.

### Summarised recommendations

Topic	Recommendation
Q1: Climate science and Australia’s international obligations	<ul style="list-style-type: none"> <li>• The CCA should recommend a target for 2035 in the range of a 71-90% reduction in emissions from 2005 levels.</li> <li>• The CCA should advise the Australian Government to set a target for reduction of Australia’s Scope 3 emissions.</li> </ul>
Q2: Ambition and achievability	<ul style="list-style-type: none"> <li>• The CCA should not dull ambition for setting Australia’s NDC target to fit within what is perceived as currently achievable.</li> </ul>
Q5: Mandates, rules, and standards	<ul style="list-style-type: none"> <li>• Minimum environmental standards should work to shift funds towards the net zero transition.</li> </ul>
Q6: Private finance for the net zero transition	<ul style="list-style-type: none"> <li>• The CCA should recommend the Australian Government complement its emerging industrial policy by setting a clear strategic direction and creating a diverse policy mix to support this direction.</li> <li>• More Australian Government funding should be spent on programs that support the early-mid stages of the innovation process.</li> </ul>
Q7: Markets, for emissions reduction outcomes	<ul style="list-style-type: none"> <li>• The CCA should recommend that the Safeguard Mechanism be consistently expanded until it functions effectively as an economy-wide carbon price.</li> </ul>
Q8: Accelerating emissions reductions	<ul style="list-style-type: none"> <li>• Public procurement frameworks should more consistently integrate environmental considerations; establishing a national workstream under the Heads of Treasuries could support intergovernmental collaboration in approaches to green procurement.</li> </ul>
Q9: Sequestration	<ul style="list-style-type: none"> <li>• Governments should strongly prefer to allocate resources towards mitigation instead of removal/sequestration.</li> </ul>

<p>vs mitigation vs adaptation</p>	<ul style="list-style-type: none"> <li>• The CCA should not recommend the use of international carbon offsets in helping Australia meet its emissions targets.</li> <li>• Governments have a key role to play in ensuring that all households are able to adapt to the growing pressures of climate change.</li> </ul>
<p>Q10: Sharing benefits and burdens</p>	<ul style="list-style-type: none"> <li>• The CCA should include socioeconomically-disadvantaged households in their list of priority groups to consult under Pillar 2 of the analytical framework.</li> <li>• For the net zero transition to be successful, all Australians must feel that they are sharing in the benefits.</li> </ul>
<p>Q12: Supporting wellbeing</p>	<ul style="list-style-type: none"> <li>• Establish an authority, similar to the Scottish Just Transition Commission, to provide advice to the Australian Government on how to deliver a just transition for all (including but not limited to fossil-fuel-exposed communities).</li> </ul>

## 1. How should the authority take account of climate science and Australia's international obligations in considering possible emissions reductions targets for 2035?

**Recommendation 1:** The CCA should recommend a target for 2035 in the range of a 71-90% reduction in emissions from 2005 levels.

The CCA is currently proposing a target for Australia to reduce emissions in the range of 65-75% below 2005 levels by 2035 on the basis that this target would be ambitious but also achievable. The lower bound (65%) is based on assumptions by the IPCC of what will be required globally. However, Australia, as a developed country that has benefited immensely from past and current highly emissions-intensive activities, should not base its ambitions on a global average. This lower bound is not appropriate for Australia.

As the CCA refers to, Meinshausen and Nicholls calculate emissions reduction pathways for Australia based on global carbon budgets and the CCA's own previously established "fair share" value for Australia of 0.97%.<sup>1</sup> The remaining global budget for 1.5°C is consistent with an Australian goal of a 90% reduction below 2005 levels by 2035. If the CCA deems this to be too ambitious, then a 1.6°C goal implies a 71% emissions reduction by 2035 (on 2005 levels).

A 1.6°C pathway could be a defensible approximation of "pursuing efforts" to limit warming to 1.5°C, as per the Glasgow Pact and Paris Agreement. However, this means that even if the temperature goals are slightly relaxed, a 65% emissions reduction for Australia (as currently proposed by the CCA) would not be sufficient to satisfy our international obligations.

While ambitious, the required emissions reductions for a 1.6°C pathway per year would be around 20Mt CO<sub>2</sub>e per annum (yearly emissions reductions would need to be 27Mt

CO<sub>2</sub>e for a 1.5°C pathway).<sup>2</sup> This is similar to the largest historically achieved reductions: the reduction in emissions between 2019 and 2020 was 29Mt CO<sub>2</sub>e and emissions fell by 21Mt CO<sub>2</sub>e between 2014 and 2015.<sup>3</sup>

**Recommendation 2:** The CCA should advise the Australian Government to set a target for reduction of Australia's Scope 3 emissions.

In the Issues Paper, the CCA acknowledges the double dividend that Australia could achieve by focusing on exports of clean energy and low-emissions products: (1) support for the emissions reduction efforts by trading partners and (2) continued prosperity for Australia as demand for high-emissions industries declines. The CCA notes that the development of some clean export industries at scale may lead to an increase in Australia's domestic emissions. This should be carefully balanced against the likely contribution to global emissions.

CPD welcomes this thinking on how to contribute to decarbonisation beyond our own borders through decarbonising supply chains. However, the CCA does not clarify how the Government should measure the success of its ambitions. CPD suggests that the CCA should consider recommending the Government capture these commitments explicitly in its NDC. For example, a 2035 target should include commitments to reduce scope 3 emissions from Australian exports of iron ore, bauxite, coal, and gas through a combination of scaled-up, clean, onshore processing and scaling down of fossil fuel exports.

## 2. How should the authority weigh the goals of ambition and achievability in considering possible emissions reductions targets for 2035?

**Recommendation 3:** The CCA should not dull ambition for setting Australia’s NDC target to fit within what is perceived as currently achievable.

As explained in the CCA’s Issues Paper, the Paris Agreement asks countries to reflect “their highest possible ambition” in their NDCs. Thus, ambition should not be constrained by what is *currently* seen as achievable. As our response to Q1 shows, meeting our international obligations and achieving Australian Government ambitions of having a net zero economy will not be possible within current systems and technologies.

As we highlighted in a previous submission to the CCA, the value of the CCA’s advice on target setting could be strengthened by critically considering how far Australia’s emissions could be reduced and setting this as an upper bound for Australian ambition: the fastest possible “warp speed” scenario. This would be the absolute best case scenario and should go beyond what is currently considered possible, similar to the way the world approached development of the COVID-19 vaccine (in the US this was referred to as “Operation Warp Speed”).<sup>4</sup>

Faster action on renewable deployment is likely to yield positive economic outcomes as it will enable Australian industry to capture a larger share of the benefits from the global clean energy transition. Setting an (upper bound) target that aligns with this ambitious outcome would enable policymakers to think about and design policies, such as a regional transition fund to assist with social licence, around this target.

To identify the fastest possible rate of decarbonisation, CPD suggests the CCA identify the absolutely fundamental physical

constraints that put a limit on renewable-build out. These might include:

- Lack of existing technologies in a proof-of-concept stage that could be scaled by 2035
- A limited or under-skilled workforce
- Upper limits in supply from global supply chains
- Time lags in land-use change limiting the development of carbon farming
- The time it takes to physically build new facilities

The upper bound target could then be developed by reducing the rate of decarbonisation to the most limiting constraint identified from the above. This target may be net negative (that is, more ambitious than net zero). For example, after accounting for limitations in land-use change, it may not be possible for Australia to achieve more than a 120% reduction on 2005 emissions by 2035.

## 5. How can governments use mandates, rules, and standards to accelerate Australia’s decarbonisation? Is more planning by governments needed? If so, how should this be coordinated and how can this be done while making the transition inclusive, adaptive, and innovative?

**Recommendation 4:** Minimum environmental standards should work to shift funds towards the net zero transition.

There is an opportunity to introduce standards for many different types of goods and services, for example in how goods are produced and transported, and the types of goods and services procured by governments. The Australian Government is taking some promising steps towards regulating industries to improve their impacts

on the environment, for example through the forthcoming New Vehicle Efficiency Standard.

Minimum standards can, for example, increase resilience by ensuring that steps are taken to avoid exposure to climate risks, and provide assurance that good practices are being followed. Compared to providing grants and other types of financial support for households and businesses to green their activities, mandates may also be less expensive for governments to implement.

In our upcoming report on how to green public procurement, CPD examines the role of minimum requirements for environmental standards in procurement. Environmental criteria – which can relate to energy, water, circular economy, carbon emissions, biodiversity, and more – could be used as a screening or eligibility requirement for tenders. Strict environmental standards would mean that even the most cost-effective tender would be ignored if it does not meet the standards. In Ireland, all public procurement must incorporate green criteria from 2023 onwards.<sup>5</sup> Lithuania had a similar ambition for 2023, and, in December 2023, 94% of its public procurement spending by value used green criteria.<sup>6</sup>

Another sector in which standards are particularly important is for buildings, as the private sector plays a large role in making decisions about construction and use. Australia could use Scotland as an example for what types of standards could be considered for buildings. The Scottish Government is implementing standards for improving the energy efficiency of both residential and commercial buildings. Standards differ depending on the type of tenant – whether the household lives in social housing, the private rented sector, or owns their home – and whether the building is new or existing.<sup>7</sup>

In introducing standards, governments should consider impacts on all stakeholder groups. For example, standards for increasing the procurement of green construction materials should consider whether this demand can be met by existing suppliers. Standards that

mandate households make changes to their energy use should be implemented in such a way that the most vulnerable do not face higher energy costs. For example, shifting when households use energy in response to time-of-use tariffs may be particularly challenging for vulnerable groups.<sup>8</sup>

## **6. How can governments stimulate private finance needed for the net zero transition – are there innovative instruments that could be deployed or new business models that governments could support? Is there a bigger role for governments to play in coordinating the investment needed to transition the economy?**

In the absence of regulation or government support to create markets, large-scale clean supply chains are unlikely to emerge on their own in Australia. It is not enough to assume that once low-emissions technologies are mature the industries will migrate to Australia where sun is plentiful. The important investments in establishing new green industries are large and lumpy; for example, multi-billion dollar plants for processing iron ore, of which there will be a limited number built across the world this decade. These will be built where the business model – including government subsidies and support – makes the most sense. And once established these industries will stay where there is the workforce and know-how.

In previous work, CPD has focused on two aspects of how the Australian Government should coordinate the investment needed for the net zero transition. First, there is a need for the Government to be more directional in setting industrial policy, particularly in areas of climate change where market failures prevent the most efficient and socially-beneficial industries from emerging, and where the country's long-term competitive advantages conflict with the short-term investment horizons of private sector



players.<sup>9</sup> Second, there is a need for innovative forms of finance to support the early firms in a low-emissions industry.<sup>10</sup> The most significant blockers to the development of new clean supply chains include the large upfront capital requirements associated with their scaleup, and the uncertain demand for products. This creates a first-mover problem, because it is in everyone's best interest to wait for others to invest in high-cost (and high-risk) early deployment, watch whether these first-movers are successful, and then to undercut the first-mover higher-cost producers.

**Recommendation 5:** The CCA should recommend the Australian Government complement its emerging industrial policy by setting a clear strategic direction and creating a diverse policy mix to support this direction.

Modern industrial policy should aim to use the whole apparatus of government to encourage industry development in key priority areas. An integrated industrial development plan requires governments to embrace their positions as key players in the economy by setting a clear and purposeful direction. As new industries face many challenges, establishing transformative new industries requires more than just capital. Instead, governments can play an important role in boosting innovation, coordinating supply (e.g. through education and training), getting firms to scale (e.g. by providing start-up grants), and building demand (e.g. via changes to public procurement). Mobilising broad areas of government and the economy in a particular strategic direction requires alignment across a myriad of actors – for example, bureaucrats, investors, researchers, political advisers, small businesses, and suppliers. Thus, governments that pursue a purpose-driven industrial policy should implement an overarching governance and coordination mechanism. The Commonwealth Government's Future Made in Australia policy is showing promising signs that the Government is serious about industry policy. Further development of the policy would

benefit from alignment with the recommendations in our *Setting Direction* report.<sup>11</sup>

**Recommendation 6:** More Australian Government funding should be spent on programs that support the early-mid stages of the innovation process.

Currently, the Australian Government is focusing much of its efforts on financing the development of new industries in the later stages of the innovation process, through initiatives such as the Clean Energy Finance Corporation and the National Reconstruction Fund. The funding available for these types of initiatives far exceeds the amount of capital available for early-stage R&D and scaling up of new ideas. In forthcoming research, CPD finds that only around 18% of the total funding issued by the Australian Government for domestic programs focusing on developing new, low-carbon industries went to programs that finance the early-mid stages of innovation (roughly Technology Readiness Levels 1-8)<sup>12</sup> in 2022-23. 77% of all funds was for programs that expect a positive financial return. The focus on the later stages of the innovation process limits the provision of concessionality (and therefore the true economic subsidies that some new industries need to develop) and levels of risk-taking throughout the economy.

More government funding should be spent on the earlier stages of the innovation process. In previous work, we proposed a model for a package which would cost around \$85 billion of new funding (not off-budget).<sup>13</sup> Roughly half of the package should support first-movers and pioneers (through contracts-for-difference and financial support to front-load investment in major firmed, dispatchable renewable installations). Around a quarter should go as production credits to the fast followers that build up a critical mass. The final quarter should be made available as support for communities, loans (e.g. for critical minerals processing and value-added manufacturing), research grants (testing and research), a Net Zero Government Fund to



defray costs of procuring low-carbon materials, and regulatory reforms (permitting and approvals reform, and resourcing local councils).

## 7. How can governments better support markets, including carbon markets, to deliver emissions reduction outcomes?

**Recommendation 7:** The CCA should recommend that the Safeguard Mechanism be consistently expanded until it functions effectively as an economy-wide carbon price.

Changes to the Safeguard Mechanism are needed to ensure that it is able to meaningfully reduce emissions from Australia's highest greenhouse gas emitting facilities. These changes should include both expanding the coverage of the Mechanism and ensuring the integrity of emission reductions.

Currently, the electricity sector is included in a different way in the Safeguard Mechanism than other industries. Instead of firms having their own baselines for emissions, the electricity sector has a single sectoral-wide baseline that applies to all electricity generators connected to one of Australia's main electricity grids. As long as total emissions from grid-connected electricity generators do not exceed the sectoral baseline, there is no need for individual generators to reduce their own emissions or buy offsets. Including the electricity sector in the overall Safeguard Mechanism by removing the sectoral baseline and applying individual facility emissions baselines could streamline emissions reductions under one policy mechanism. As the sectoral baseline for electricity generators is currently set quite high, such a change could drive further emissions reductions in the electricity sector.<sup>14</sup>

Moreover, there is a need to address the issue of poor quality offsets that facilities can use under the Safeguard Mechanism to achieve their baselines. For the Safeguard Mechanism scheme to work, the offsets must have integrity: they must represent an actual reduction in emissions that would not have happened otherwise. One way to do this would be to incentivise facilities to favour at-source emissions reductions (e.g. reductions that come from switching energy sources). An option could be for the Australian Government to increase the cost of offsets after a certain threshold quantity. For example, beyond a certain tCO<sub>2</sub>-e of purchased offsets, the Australian Government could mandate that any further offsets only apply at a reduced discount (say 70%) of their face value. This would mean that facilities find it more expensive to continue to use offsets after their facility-specific threshold.

## 8. What further actions can be taken by governments (e.g. through public funding), the private sector and households to accelerate emissions reductions, including in relation to the deployment of technologies and access to new opportunities in the transition to net zero? What barriers stand in the way and how could they be overcome?

**Recommendation 8:** Public procurement frameworks should more consistently integrate environmental considerations; establishing a national workstream under the Heads of Treasuries could support intergovernmental collaboration in approaches to green procurement.

Many processes across the Commonwealth and state governments are reshaping how Australian governments procure carbon-intensive inputs. However, public procurement in Australia is not yet fully

aligned with the policy goal of decarbonising the Australian economy. In particular, there are many areas of procurement systems where environmental aspects are not fully integrated. The Australian Government recently released its Environmentally Sustainable Procurement Policy, which requires certain Commonwealth entities to ask questions related to environmental sustainability of tenderers on certain projects, take answers from tenderers into account when making purchasing decisions, and report on progress under the initiative. However, it is patchy in its application, it (1) does not include all entities; (2) does not include all types of procurement; and (3) only includes projects above a certain estimated procurement value. Crucially, it does not include the largest source of the Commonwealth Government's Scope 3 emissions: grants to states and territories for infrastructure. There is also no clear framework for how entities should include the information from tenderers when making their decisions about which option to procure.

There would also be great value in broader inter-jurisdictional collaboration and higher levels of consistency in procurement frameworks – creating opportunities for jurisdictions to learn from one another to improve their approaches, and developing a common framework between jurisdictions for monitoring supply chain decisions and engaging with suppliers. Currently, different levels of government as well as different departments within the same government exhibit varying levels of sophistication around their approach to lowering government emissions. This creates challenges for industry as it must consider different green procurement standards in each state and territory and potentially also across each government department rather than one harmonised framework.

One option for higher levels of collaboration is to create a Heads of Treasuries workstream with a mandate to develop a cooperative framework. Many of the most carbon-intensive projects in Australia are funded by multiple levels of government, and

so cooperation under a common framework will make reform easier and simpler. Establishing a relevant Heads of Treasuries workstream would also help elevate the importance of green public procurement.

One of the major issues for procurement managers in decarbonising purchasing activities is balancing environmental impacts with other policy goals, such as supporting Indigenous businesses, small and medium enterprises and gender diversity, boosting innovation, and adhering to local content requirements. Without clear and quantified decision frameworks, balancing these trade-offs is often just a tricky judgement call. Future work needs to consider how to balance these different priorities.

## 9. How should governments decide upon the appropriate allocation of resources towards reducing emissions, removing carbon from the atmosphere, and adapting to climate change impacts?

**Recommendation 9:** Governments should strongly prefer to allocate resources towards mitigation instead of removal/sequestration.

Governments should strongly prioritise preventing emissions in the first place over removing emissions from the atmosphere. Carbon sequestration can be a useful technology for achieving net zero emissions in sectors that are particularly hard-to-abate, however should not be viewed as a way to maintain the status quo. The IEA predicts that if consumption of oil and gas were to continue as expected based on current policy settings, the necessary carbon capture technologies in 2050 would require more electricity than global demand in 2022 to limit temperature rises to 1.5°C.<sup>15</sup> Technologies that capture carbon emissions are also expensive and largely unproven at scale; carbon capture projects that capture less

carbon than their capacity consistently outnumber successful projects worldwide including in Australia.<sup>16</sup> Locating suitable storage sites is also difficult, and the trapped carbon dioxide must be monitored for a very long time to ensure it does not leak back into the atmosphere. Thus carbon sequestration technologies, such as carbon capture and storage, consistently fail in terms of potential (how much carbon they can capture), and cost.

**Recommendation 10:** The CCA should not recommend the use of international carbon offsets in helping Australia meet its emissions targets.

In the Issues Paper, the CCA have said that their analysis will consider whether there is a role for international carbon offsets in assisting Australia to meet its targets. There are several reasons to warn against this. First, Australia is not able to directly regulate these offsets to ensure they are of high quality. Second, as the CCA acknowledges, international carbon offsets are in their infancy.

Finally, international offsets (and offsets more broadly) have thus far presented many challenges to credibility. In its plans for a net zero government, the WA Government has introduced an emissions reduction hierarchy. Offsets come last, with energy efficiency, electrification and renewable energy being viewed as first priorities. If carbon offsets are required, covered government entities are to prefer local projects wherever possible.

**Recommendation 11:** Governments have a key role to play in ensuring that all households are able to adapt to the growing pressures of climate change.

When comparing mitigation and adaptation, both are important to lessen future impacts of climate change. Mitigation strives to make future climate change as manageable as possible, while adaptation aims to address the climate change that is not prevented. Climate change is already affecting communities, with profound examples in

Australia such as the bushfires of 2019-2020 and ongoing issues with flooding.

Natural disasters often most negatively impact the communities that are least able to adapt by themselves. The most socioeconomically disadvantaged communities were more exposed to the 2019-2020 bushfires in New South Wales and Victoria than relatively advantaged communities for example.<sup>17</sup> Low-income households are also less able to afford home energy technologies, such as air-conditioners, that enable them to adapt to rising temperatures.<sup>18</sup>

## 10. How can governments, businesses and people, including First Nations people, help ensure the benefits and burdens of the net zero transition are equitably shared?

**Recommendation 12:** The CCA should include socioeconomically-disadvantaged households in their list of priority groups to consult under Pillar 2 of the analytical framework.

CPD welcomes the focus of Pillar 2 of the CCA's analytical framework on considering the impacts of the Authority's proposals on different sectors of the Australian economy including households. However, it is unclear why such groups as socioeconomically-disadvantaged households and renters are excluded from the list of priority cohorts. The Issues Paper for the consultation refers to the CCA's 2023 Issues Paper in which concerns were highlighted relating to financial strain, intergenerational inequality, and social discrimination, all issues of direct relevance for socioeconomically-disadvantaged households (including disadvantaged renters).

Governments must work to ensure that households who experience energy poverty and other vulnerable household groups do not pay disproportionately for addressing climate

change. Currently, socioeconomically-disadvantaged households not only pay a higher percentage of their incomes towards environmental programs through energy bills, but they are also less likely to benefit from schemes to increase uptake of rooftop solar.<sup>19</sup> Renters are also considerably less likely to have access to rooftop solar due to various landlord-tenant issues including split incentives.

The Scottish Government has developed a framework around how to reduce fuel (in Australia, energy) poverty. Two major learnings emerge from this. First, there is a need in Australia to better identify who experiences energy poverty so that measures can be targeted at these households. There is currently no consistent understanding of energy poverty and a related lack of data to measure the experience. Second, there is a need for more funding for households in energy poverty to retrofit their homes and ensure they can pay their energy bills, which may rise further due to the introduction of new environmental programs and the build-out of renewable energy systems.

**Recommendation 13:** For the net zero transition to be successful, all Australians must feel that they are sharing in the benefits.

Governments should also more carefully consider how to ensure that everyone benefits from the transition. For too long now, the major household group that has benefited from policies to electrify homes has been people who own their fully-detached homes. A broad-based approach could include steps like mandating rooftop solar for low-rise apartment blocks, an approach that has been taken in California for newly constructed residential buildings.<sup>20</sup>

More generally, all Australians should share in the costs and benefits of government action on climate change. In the CCA Issues Paper, co-benefits for Australians are said to include improvements in air quality, human health and new opportunities (presumably in industries).

Australia could instead think about this more broadly, looking to examples such as the Norwegian sovereign wealth fund for how to capture the important role of governments in creating new low-carbon markets. New policies should be introduced to capture some of the wealth created by future industries that have benefited from public financial support, such as profit-sharing mechanisms, and setting conditionalities for government funding to ensure access and reasonable pricing of new goods and services. Everyone benefiting from the transition will help ensure its success: the alternative scenario may be political unrest as seen through the yellow vest movement in France, and continued community opposition to renewable energy build-out.

## 12. How can Australian governments support the wellbeing of workers, communities and regions as the nation decarbonises, including in relation to cost of living, workforce and industry transition and access to low emissions technologies and services?

**Recommendation 14:** Establish an authority, similar to the Scottish Just Transition Commission, to provide advice to the Australian Government on how to deliver a just transition for all (including but not limited to fossil-fuel-exposed communities).

Pillar 3 of the CCA's analytical framework focuses on sectoral pathways. The Australian Parliament has identified several aspects for the CCA to focus on in guiding the development of these pathways. However, there is no mention of the need for all pathways to ensure that no one – including both workers and households – is left behind in the transition. Including such a focus could improve the likelihood that the transition is

successful and support the wellbeing of different groups across the economy.

The Scottish Just Transition Commission was set up to provide independent advice to the Scottish Government on how to deliver a just transition. The scope of the Commission is broad: rather than focusing on one sector, it focuses on all sectors that require deep cuts in emissions to achieve the Scottish Government's ambitions on climate change, and rather than focusing just on workers and their communities, the focus is on broader social justice concerns and all households.

Several factors inform the Commission's work, which could similarly be integrated in Australia's sectoral decarbonisation plans and pathways. These lessons are based on a research visit to Scotland and meetings with various members of the Just Transition Commission, and will inform a future report by CPD. These are:

- *Ensure independence:* An independent group should be established to provide advice to Australian governments on how to ensure justice for workers, communities and vulnerable households. This group could (but does not need to be) the Net Zero Economy Agency.
  - *Sufficient resources:* Properly resource the group with funding and time. This could involve having an internal group within government to provide support, for example organising events and providing research, to the group of experts.
  - *Broad representation:* The group should be composed of stakeholders from a range of areas, including those working in private companies that will be affected, environmental groups, trade unions, academics, and those representing the voices of socioeconomically-disadvantaged households. While the Net Zero Economy Agency includes some of these groups, there is only one person representing
- socioeconomically-disadvantaged households (through a focus on First Nations groups) and none from an environmental advocacy organisation.
  - *Net zero focus:* Choose people for the group who are known for being able to collaborate with others with different perspectives and come to conclusions on controversial topics. They must be able to keep the focus on the need for decarbonisation in an equitable way.
  - *Lived experience:* Ensure that the group engages with people with lived experience, e.g. those whose jobs have been affected by previous industrial transitions and communities who are being affected by renewable energy build-out. Ideally, the group would travel to different communities and workplaces.
  - *Broad focus:* Ensure that the group covers all areas of relevance in their advice for governments. Although Australia may wish to start with the fossil fuel sector, a transition will ultimately be needed in other sectors as well.



## Endnotes

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<sup>1</sup> M Meinshausen and Z Nicholls, [Updated assessment of Australia's emission reduction targets and 1.5°C pathways](#), Climate Resource, 2023.

<sup>2</sup> Based on values in reference in endnote 1.

<sup>3</sup> [Quarterly update of Australia's national greenhouse gas inventory: September 2023](#), DCCEEW, 2023.

<sup>4</sup> For more on Operation Warp Speed, see J Robertson and A Wu, [How to replicate the success of Operation Warp Speed](#), Federation of American Scientists, 2023, and A D'Souza, [How to reuse the Operation Warp Speed model](#), Institute for Progress, 2023.

<sup>5</sup> [Green public procurement: Guidance for the public sector](#), Environmental Protection Agency, 2021.

<sup>6</sup> S Brown, [How Lithuania fast-tracked green procurement](#), Open Contracting Partnership, 2023.

<sup>7</sup> [Delivering net zero for Scotland's buildings – Heat in Buildings Bill: consultation](#), Scottish Government, 2023; [Energy Efficiency Standard for Social Housing \(EESH\): Guidance for social landlords \(revised February 2019\)](#), Scottish Government, 2019; [Energy standards review – Scottish Passivhaus Equivalent: Working group](#), Scottish Government, n.d.

<sup>8</sup> LV White and ND Sintov, [Varied health and financial impacts of time-of-use energy rates across sociodemographic groups raise equity concerns](#), *Nature Energy*, 2020.

<sup>9</sup> T Phillips and E Koh, [Setting direction: A purposeful approach to modern industry policy](#), CPD, 2024.

<sup>10</sup> T Phillips, [Green gold: A strategy to kickstart Australia's renewable industry future](#), CPD, 2023.

<sup>11</sup> See endnote 9.

<sup>12</sup> We refer here to the IEA Technology Readiness Level scale: [Energy technology perspectives 2020: Special report on clean energy innovation](#), International Energy Agency, 2020.

<sup>13</sup> See endnote 10.

<sup>14</sup> [Transitioning the Safeguard Mechanism to a baseline and credit ETS: Design options for consideration – Discussion paper](#), Carbon Market Institute, 2019.

<sup>15</sup> [The oil and gas industry in net zero transitions](#), International Energy Agency, 2023.

<sup>16</sup> B Robertson, [Carbon capture remains a risky investment for achieving decarbonisation](#), Institute for Energy Economics and Financial Analysis, 2022.

<sup>17</sup> S Akter and RQ Grafton, [Do fires discriminate? Socio-economic disadvantage, wildfire hazard exposure and the Australian 2019-20 'Black Summer' fires](#), *Climatic Change*, 2021.

<sup>18</sup> L Davis et al., [Air conditioning and global inequality](#), *Global Environmental Change*, 2021.

<sup>19</sup> R Best et al., [Equity and effectiveness of Australian small-scale solar schemes](#), *Ecological Economics*, 2021; T Nelson and T Dodd, [Contracts-for-difference: An assessment of social equity considerations in the renewable energy transition](#), *Energy Policy*, 2023.

<sup>20</sup> [Solar PV, solar ready, battery, and electric ready](#), California Energy Commission, 2024.





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