CPD submission on setting, tracking, and achieving Australia's emissions reduction targets

Submission to the Climate Change Authority

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CPD submission on setting, tracking, and achieving Australia's emissions reduction targets

The Centre for Policy Development (CPD) welcomes the opportunity to respond to the CCA's consultation on *Setting, tracking and achieving Australia's emissions reduction targets*. The focus of this submission is on the development of CCA guidance to the Federal Government for Australia's next Nationally Determined Contribution. The submission makes recommendations based on the emissions target, development of future decarbonisation scenarios, and the creation of a large clean export sector. To successfully achieve these goals, it is necessary for the Government to ensure its policies are aligned with a just transition for all. Immediate steps should include a greater focus on reducing emissions through the Government's own procurement strategies.

Topic	Our recommendation

2035 NDC (Q8-9)	• As faster decarbonisation is likely to provide a greater benefit to Australians, Australia's NDC for 2035 should include a whole-of-economy emissions target that includes:
	  ○ an upper bound that is as ambitious as possible, and potentially net negative, moderated by clearly articulated constraints on faster action;
	  ○ a lower bound of at least an 80% reduction on 2005 levels by 2035.
	• The pathway should allow for overshoot of the 2030 NDC, and not be limited to only achieving the existing 43% target.
	• Modelling to inform the development of Australia's 2035 NDC should incorporate empirically-grounded technology cost forecasts, and account for Australian contributions to reducing technology costs through accelerated deployment.
	• Modelling should assume a relatively higher cost-of-capital in a scenario where Australia decarbonises more slowly, compared to a more ambitious decarbonisation scenario.
	• Mitigation policies should be assessed using a broad framework that avoids a narrow 'cost-per-tonne' approach, and considers difficult-to-quantify wellbeing benefits.
	• The CCA's NDC advice should provide guidance on the macroeconomic impacts of a rapid global transition.

Beyond borders (Q14-16)	• The CCA should advise the Government to commence planning for a phaseout in fossil fuel production and export. • Advice on the 2035 NDC should include Australia's possible contribution to global emissions reduction through a large clean export sector.
Just transition planning Q2-3	• In reviewing and measuring progress, the CCA should assess the extent to which government policy is improving the "adaptive capacity" of fossil-fuel-exposed regions, including in terms of their economic diversity. • To the extent possible, the CCA's advice about future policy trajectories should recommend measures that prevent (or compensate) any increases in the proportion of income that low-income households spend on energy.
Progress (Q2-7)	• Current Australian government procurement does not systematically incorporate climate-related considerations at all levels, presenting a significant opportunity to drive further decarbonisation and adaptation across the economy.

AUSTRALIA'S 2035 NATIONALLY DETERMINED CONTRIBUTION (NDC)

- *As faster decarbonisation is likely to provide a greater benefit to Australians, Australia's NDC for 2035 should include a whole-of-economy emissions target that includes:*
  - *an upper bound that is as ambitious as possible, and potentially net negative, moderated by clearly articulated constraints on faster action;*
  - *a lower bound of at least an 80% reduction on 2005 levels by 2035.*
- *The pathway should allow for overshoot of the 2030 NDC, and not be limited to only achieving the existing 43% target.*

Debates over the correct emissions reduction target have historically rested upon the implicit assumption that faster decarbonisation will cause economic harm to the country as a whole. There is a growing consensus that this is not the case for Australia, which stands to benefit substantially from global decarbonisation.[1] Globally, the most recent Intergovernmental Panel on Climate Change (IPCC) assessment found the benefits of limiting warming to 2°C exceed the cost of mitigation in most of the literature, even without accounting for the benefit of avoided damages from climate change.[2]

If nations continue on pathways implied by current global NDCs, it is likely the world will exceed 1.5 degrees of warming before 2035.[3] Even small increments of warming beyond 1.5 degrees will expose the world to moderate-to-high risk of large-scale singular events.[4] Partially for these reasons, limiting warming to 1.5 degrees - or as close as possible - has become the organising goal of global decarbonisation efforts, typified in the Glasgow Pact.[5] A 1.5-aligned target for Australia roughly equates to net zero by 2035, assuming all other countries also adopt 1.5-aligned targets.[6] If not all countries did so, achieving 1.5 degrees would require Australia to achieve net zero before 2035.

For these reasons, CPD suggests CCA develop an upper bound target that equates to the fastest possible decarbonisation Australia could achieve. To identify the 'fastest possible' rate of decarbonisation, CPD suggests CCA identify constraints preventing faster action. These might include:

- Lack of existing technologies currently in a proof-of-concept stage that could be scaled by 2035
- Electricity transmission build-out preventing faster renewable connection
- Lack of community approval for transformative projects
- A limited or under-skilled workforce
- Global supply chain constraints on key technologies
- Time lags in land-use change limiting the development of carbon farming

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. Other constraints may be more binding; after accounting for transmission build times, perhaps no more than a 90% reduction may be achievable.

As a lower bound, CPD recommends a target of 80% below 2005 levels by 2035. This target would put Australia on a 1.6 degree budget pathway, a defensible approximation of 'pursuing efforts' to limit warming to 1.5 degrees, as per the Glasgow Pact and Paris Agreement. 80% is also in the range of existing state decarbonisation targets.

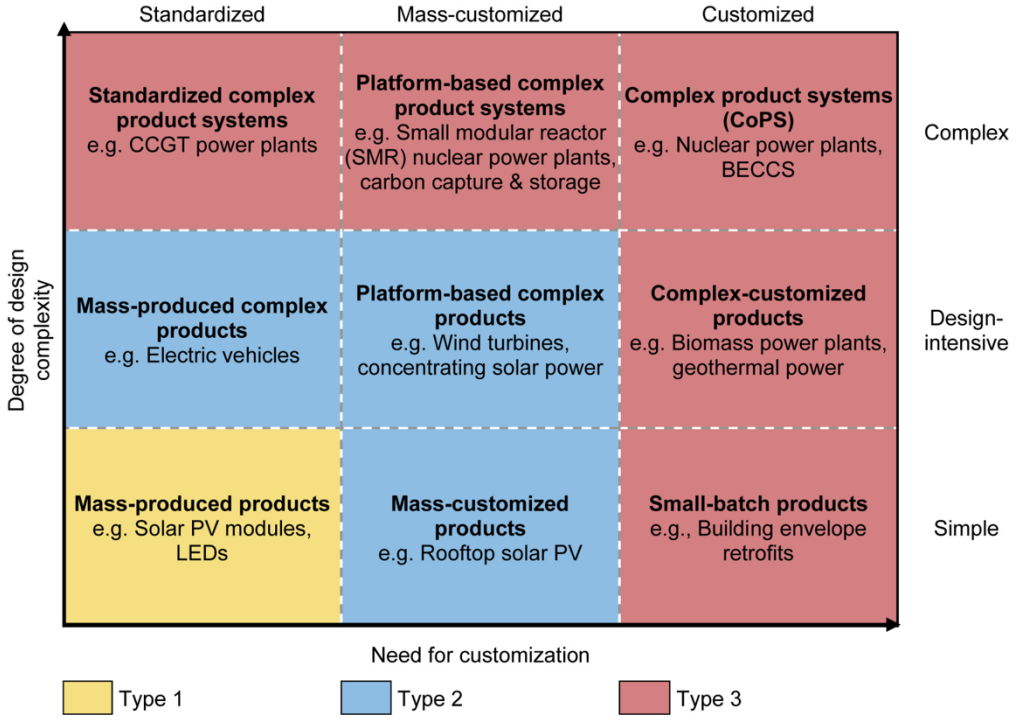
While ambitious, the required emissions reductions per year would be around 27Mt CO_2-e per annum. This is about 40% slower than the reductions required under a 1.5 pathway, and similar to the largest historically achieved reductions (reductions between 2010-11, 2011-12, 2014-15 and 2015-16 were around 20Mt CO_2-e; reductions between 2019-20 were around 31Mt CO_2-e).[7] Under a linear 1.6 pathway, Australia would need to achieve net zero emissions by around 2040.

Critically, any scientifically-informed target will be unachievable if Australia continues on its current trajectory of 43% below 2005 levels by 2030. To allow for an orderly and least-cost transition, modelled pathways should not be limited to only achieve the existing 2030 NDC.

- *Modelling to inform the development of Australia's 2035 NDC should incorporate empirically-grounded technology cost forecasts, and account for Australian contributions to reducing technology costs through accelerated deployment.*

Modelling exercises have consistently overestimated the cost of climate solutions by constraining technological 'learning rates' – the expected declines in cost associated with deploying technologies. This phenomenon is particularly important for technologies that are mass-produced, such as solar PV, which have exhibited extraordinary declines in cost with each doubling of deployment (around 20%).[8] Understanding and incorporating the implications of these learning rates is very consequential. Older modelling exercises have typically suggested a more rapid transition to clean energy would be costlier than a slower one. However, recent research that uses empirically-validated probabilistic forecasts of the costs of energy technologies suggests a large economic *benefit* from rapidly transitioning to an energy system based on solar PV and wind, even before accounting for the avoided damages of climate change.[9] This is because more rapid deployment of these technologies sees their costs fall more quickly, becoming cost-competitive sooner, and reducing the total cost of the renewable energy transition.

Figure 1 - Likely Learning Rates by Technological Complexity and Customisability



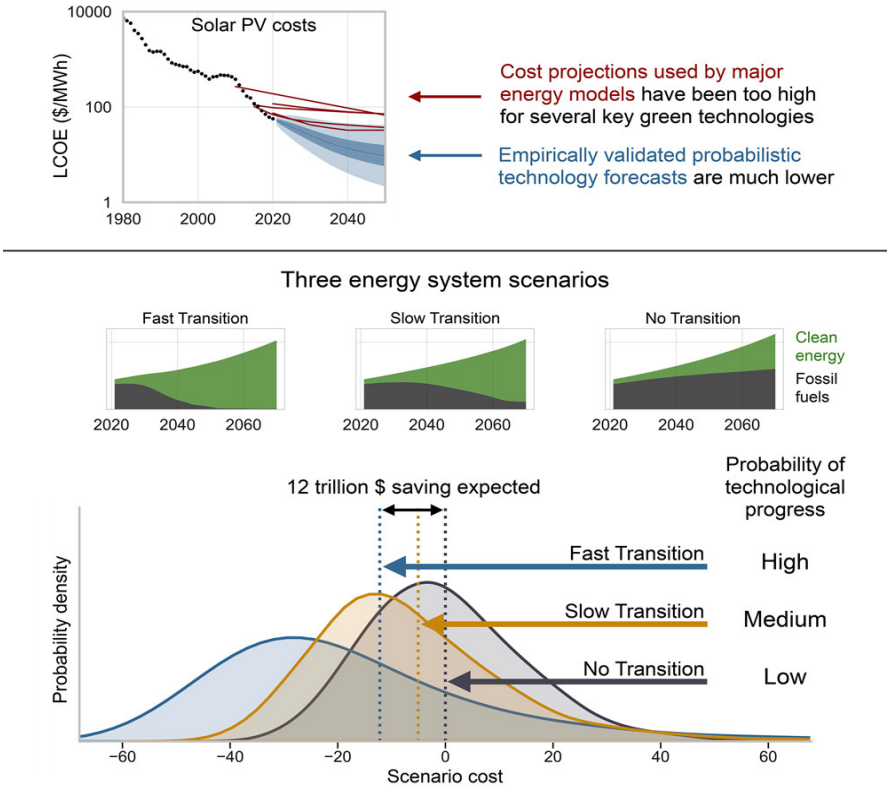
Source and notes: Malhotra & Schmidt (2020). Technologies in the bottom left corner are most likely to experience large cost reductions; those in the upper right are least likely

Modelling to inform Australia's 2035 NDC should take these recent findings into account, and recognise that learning curves are likely to be much steeper than previously expected. A promising way to do this is to make use of probabilistic forecasting methods, which acknowledge that future outcomes are uncertain so there is a range of possible outcomes for the future cost of any given energy technology. [10]

The costs of energy technologies should not be assumed to simply decline over time regardless of Australian action, but instead account for Australian activity. Especially through a

'renewable superpower' pathway, Australia may be able to contribute substantially to further driving down the cost of key technologies by driving rapid deployment at scale. For example, the Australian pipeline of planned hydrogen electrolysis projects to 2030 is around 100 times current global installed capacity.[11] Building around half of these projects could reduce electrolyser costs globally by as much as 70%.[12]

Figure 2 - Graphical summary of recent empirically grounded technology forecast exercises



Source: Way et al. (2022).

- *Modelling should assume a relatively higher cost-of-capital in a scenario where Australia decarbonises more slowly, compared to a more ambitious decarbonisation scenario.*

Global financial systems are rapidly reorienting to internalise and price the costs and risks of climate change, typified by the rapid adoption and standardisation of climate-related financial risk disclosures. In Australia, the Investor Group on Climate Change now represents around $3 trillion of Australia's $4.5 trillion of assets under management.[13]

A 2021 Senate inquiry heard costs-of-capital for fossil-intensive businesses were already increasing, as investors and financial service providers priced in climate-related risks.[14] As a highly carbon intensive economy, Australia faces the prospect of increasing cost of financing across a wider variety of sectors if it fails to decarbonise and adapt to climate impacts.

These impacts were accounted for in the previous Government's modelling of its net zero by 2050 target. Treasury suggested a 100 to 150 basis point capital risk premium would be an appropriate in-model proxy for a global response to Australia remaining a laggard on decarbonisation, with a 300 basis point increase feasible in an extreme case.[15] Australia has subsequently markedly increased its action on climate change, but remains carbon-exposed: over 50% of Australia's export value comes from

either fossil fuels or carbon-intensive products.[16] It is necessary for any economic modelling to include an increased cost-of-capital for substantial segments of Australia's economy in a slower climate action scenario, relative to a more ambitious climate action scenario.

- *Mitigation policies should be assessed using a broad framework that avoids a narrow 'cost-per-tonne' approach, and considers difficult-to-quantify wellbeing benefits.*

The benefits and efficacy of a broad range of climate solutions are often overlooked because modellers are unable to accurately quantify their benefits, or because consumer preferences are assumed to be fixed. This is particularly relevant for behavioural or cultural (rather than technological) solutions acting on the demand-side of the economy, such as an individual shifting from driving to cycling, reducing their meat consumption, or choosing to live in a smaller home.

This is a significant concern, as many of these solutions are associated with very substantial co-benefits, even if these benefits do not appear in income metrics generated by models.[17] They thus represent large opportunities to reduce emissions while improving the lives of a given cohort. CPD supports and encourages the holistic approach suggested by the CCA to understanding the socioeconomic impacts of different emissions pathways, and encourages this approach also be extended to considering the policies that underpin a given pathway. Such an approach would rely more on empirical examples of successful policies from elsewhere – including case studies and qualitative descriptions of holistic benefits – and not only on mechanically choosing policies that optimise abatement cost in theoretical models.

CPD can offer significant expertise in wellbeing economics, and would be happy to work with the CCA on the development of a framework to properly consider the full wellbeing effects of policies.[18]

- *The CCA's NDC advice should provide guidance on the macroeconomic impacts of a rapid global transition.*

A rapid and orderly transition will undoubtedly be difficult. Despite the fact that it will lead to better economic outcomes than a disorderly transition, it will still involve economic disruption over the short-to-medium term (the next 10-15 years). Countermeasures are therefore required to mitigate this disruption.

Ambitious action means significant turnover of capital stock across the economy – requiring something in the order of ~5% of global GDP over a sustained period of time.[19] This level of investment could cause inflationary pressure (even as renewable energy has a long-term disinflationary effect), it could divert resources away from other important parts of the economy, and it may cause supply chain issues that reverberate throughout economic systems.

The CCA's advice should recognise these macroeconomic pressures, and provide broad advice on countermeasures that would reduce the impact in Australia. These could include skilled immigration reform and workforce planning to relieve capacity constraints; significant investments in resource efficiency to reduce demand; or strategic supply chain investments and contracting to secure smooth supply.

AUSTRALIA'S CONTRIBUTION BEYOND ITS BORDERS

- *The CCA should advise the Government to commence planning for a phaseout in fossil fuel production and export.*

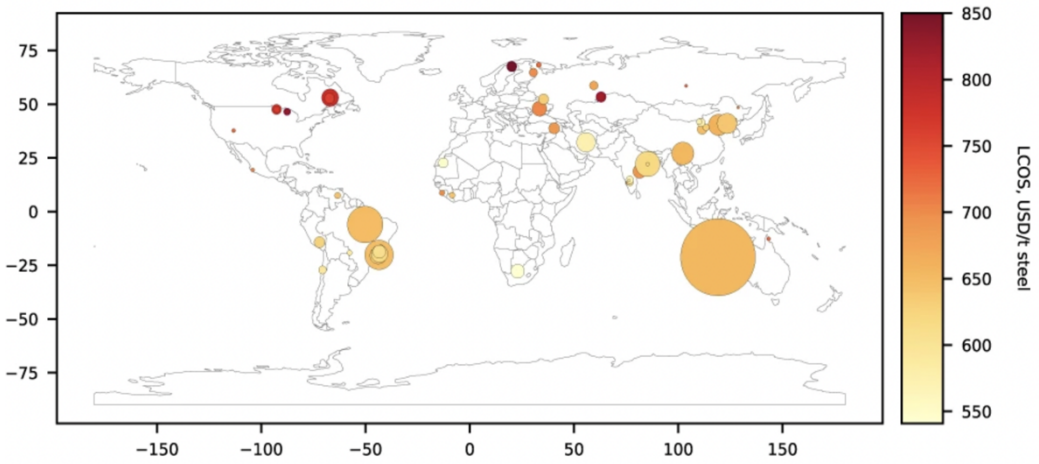
Australia has more opportunities to contribute to global decarbonisation through its exports than through a reduction in its current domestic emissions, as the CCA has identified. A large decline in Australia's fossil exports appears highly likely; a dramatic drop in fossil fuel consumption is forecast in all known net zero scenarios from international modelling exercises.[20] CPD thus welcomes and strongly supports the CCA's suggestion that the Government commence planning for a managed decline in the production and export of these products.

The newly announced Net Zero Authority is well-placed to coordinate the development of transition plans for export dependent communities, as discussed below under "just transition". To provide certainty to businesses, investors, and the community, CPD suggests transition planning include specific expectations for export declines over time informed by reputable, science-based sources (such as the International Energy Agency's Net Zero scenario). For example, a plan could be built around an expected end of thermal coal exports by 2030, and metallurgical coal and fossil gas exports by 2040. These expectations could then inform a clean export strategy (see below), to help to ensure economic impacts are offset by the development of new industries.

- *Advice on the 2035 NDC should include Australia's possible contribution to global emissions reduction through a large clean export sector.*

Australia could contribute very substantially to global emissions reductions by providing clean products to the world, particularly in our region. The decarbonisation opportunities embodied in clean products are very large; for example, the emissions from the processing and transport of Australian iron ore exports are estimated at around 900 million tonnes, near double Australian domestic emissions.[21] The development of a large green iron or green steel industry in Australia could thus substantially contribute to global emissions reductions, while still allowing countries to make use of final products for the purposes of development (see Figure 3).[22] This is particularly critical for major regional partners such as India; whether India is able to grow its economy without greatly increasing global emissions remains a central question for the world's ability to constrain warming. The development of large industries would also provide large benefits to Australian communities, building political support for climate action.

Figure 3 - Forecast cost/tonne and potential size of value-adding opportunity for hydrogen-DRI green steel, 2050



Source and notes: Devlin et al. (2023). Bubbles are sized by relative quantity of ore mined on an annual basis.

The same opportunity is present across a range of other possible Australian export supply chains, including ammonia/fertiliser, alumina/aluminium, and processed energy transition minerals (such as copper, nickel, and lithium). One of the most significant blockers to the development of new clean supply chains for these products is the large upfront capital requirements and risk associated with their scale-up, and the uncertain demand for products if they are meaningfully more expensive than emissions-intensive options. The Australian Government can meaningfully address these barriers by supporting the negotiation and underwriting of offtake agreements with international partners, and providing financial or regulatory support for supply chain development.

A range of studies have now found Australia is likely to possess significant comparative advantages in many of these industries, suggesting their likely development over time.[23] Accelerating their scale-up would represent a meaningful contribution to global emissions reduction, by facilitating access to decarbonised alternatives sooner than otherwise.

It is important to note that, especially in the short-term, 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. In the event there is a clear benefit to emissions reduction on a global scale, it may be reasonable for Australia to propose a somewhat moderated domestic emissions reduction target in its NDC, provided the development of clean exports can be credibly backed by legislated policy mechanisms.

The CCA could consider recommending the Government capture these commitments explicitly in its NDC. For example, a 2035 target could 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 exports. Table 1 provides an example of this approach (figures are demonstrative only).

Table 1 – Indicative scope 3 commitments for 2035 NDC

Commodity	**Scope 3 emissions from Australian exports (current)**	**Commitment (2035)**
Iron ore & metallurgical coal	900Mt CO_2-e per annum (iron ore) 500Mt CO_2-e per annum (met coal) *[note some overlap between these values is assumed]*	Reduction of 150Mt CO_2-e in global supply chain through clean onshore iron and steelmaking, alongside scaling down of export of met coal
Bauxite	100Mt CO_2-e per annum	Reduction of 50Mt CO_2-e through clean onshore alumina and aluminium production
Thermal coal	500Mt CO_2-e per annum	Reduction of 500Mt CO_2-e through scaling down of production and export
	Total	~40% reduction in scope 3 emissions from Australian iron ore, bauxite and coal

MEASUREMENT OF PROGRESS ON JUST TRANSITION

CPD applauds and encourages the broad focus on just transition and using improved wellbeing as cornerstones for progress. A just transition is about the need to ensure that people are not left behind as economies decarbonise. It is vitally important that greenhouse gas emissions are reduced as quickly as possible. However, this should not come at the expense of increased inequality across Australian households.

- *In reviewing and measuring progress, the CCA should assess the extent to which government policy is improving the "adaptive capacity" of fossil-fuel-exposed regions, including in terms of their economic diversity.*

A core focus over recent years has been on regions with high concentrations of fossil fuel industries. This is evident in such initiatives as the Just Transition Mechanism in Europe, as well as the recent announcement of the Net Zero Authority in Australia. These policy frameworks should be used as an entry point to increase the adaptive capacity of affected communities. Adaptive capacity is a multi-dimensional concept, and refers to a region's ability to prosper following the exit of fossil fuel industries.[24] Institutions like the CCA and the Net Zero Authority can measure progress by looking at measures such as economic diversity, innovation, geographic connectedness, social capital and more. We have written on this in detail in a recent report *Making Our Way*.[25]

Communities with higher levels of economic diversity are likely to be more flexible in their ability to reorient their industrial base following changed economic conditions, such as the closure of local coal mines. Industries that are less affected by the changing conditions can absorb excess labour and other resources, reducing negative impacts.[26]

A common way of measuring economic diversity is via the Hachman Index, which compares employment distributions in target regions to a reference region, such as all non-major-city Australian regions.

Other dimensions of adaptive capacity can be measured looking backwards to review progress, but will be difficult to integrate concepts like social capital into modelling of forward scenarios. We recommend the CCA focus on the economic diversity of communities when designing forward-looking policy advice.

- *To the extent possible, the CCA's advice about future policy trajectories should recommend measures that prevent (or compensate) any increases in the proportion of income that low-income households spend on energy.*

To ensure an equitable energy transition in Australia, it is insufficient to simply focus on fossil-fuel-exposed communities. Already, household-level inequalities are increasing because of different rates of access to cost-reducing energy technologies including rooftop solar and energy efficiency improvements. Unable to afford the high upfront costs associated with these home improvements, many low-income households miss out on the benefits.

Confronted with highly competitive rental markets and the split incentive dilemma, renters are considerably less likely to have rooftop solar or live in energy-efficient homes than homeowners. Low-income households also already pay a higher proportion of their incomes towards the carbon transition through their energy bills (as they typically spend a higher proportion of income on energy).[27]

CPD therefore recommends that CCA advice measures the proportion of income spent on energy by low-income households, and includes policy recommendations that alleviate any increases arising from the net zero transition (this could include measures like increased payments through the transfer system).

Beyond household level inequality, there are several other ways that the CCA could integrate a broader view of wellbeing into its advice. One way would be to adopt Net Domestic Product (NDP) as the key measure of economic success. The United Nations Statistics Division is considering several changes to the System of National Accounts (SNA) in 2025 – these include things such as including depletion of environmental capital as part of NDP, as well as counting renewable energy assets in the capital

account (neither of these are part of the current NDP definition).[28] Implementing these ideas today would be difficult; it requires data that are not yet part of ABS statistical releases. But the CCA should consider including changes to natural capital as part of its long-run advice to the government.

CURRENT STATE OF AUSTRALIAN CLIMATE POLICY

Note this section relates to the CCA's role in providing advice to government to inform annual climate change statements to Parliament.

- *Current Australian government procurement does not systematically incorporate climate-related considerations at all levels, presenting a significant opportunity to drive further decarbonisation and adaptation across the economy.*

Australia has made very substantial progress toward more ambitious climate action over the last twelve months. One notable outstanding gap is the lack of a climate-aligned approach to government procurement. Australian government procurement processes relate to more than 15% of GDP.[29] More low- or zero-carbon procurement could also help to build early markets for decarbonised products, such as green steel or low-carbon cement, accelerating the development of those industries in Australia.

The Department of Climate Change, Energy, the Environment and Water (DCCEEW) is consulting on a possible whole-of-government environmentally sustainable procurement policy.[30] CPD supports the development of an ambitious policy, aligned with the Government's stated aim of a net zero public service by 2030, inclusive of scope 3 emissions.

Policy mechanisms could include:

- Internal carbon pricing, with fees charged to the procuring entity and collected by the Department of Finance
  - Microsoft tracks its scope 1, 2 and 3 emissions across its business functions including procurement.[31] The information is aggregated, and internal business groups are charged a certain amount of carbon fees annually based on their emissions in that year.
- Life cycle costing (LCC), to ensure the costs of installation, operation and decommissioning are accounted for
  - According to recent research, 37% of EU member states have implemented some form of guidance on LCC while 40% of EU states have developed either general or product-specific tools to make the relevant calculations.[32]
- Standards to require procurement of low-carbon products where available, or prohibit procurement where minimum requirements are not met
  - In the European Union, Member States must ensure that purchases of new and renovated buildings as well as appliance and electronic products satisfy minimum energy efficiency requirements.[33]

ENDNOTES

[1] For example, see B Comley and S Hatfield-Dodds, *The energy superpower opportunity: Can Australia seize the advantage in a net zero world?*, EY, 2023; *A new choice: Australia's climate for growth*, Deloitte Access Economics, 2020; *Australia's long-term emissions reduction plan*, Australian Government, 2021.

[2] *Synthesis report of the IPCC sixth assessment report (AR6)*, IPCC, 2021.

[3] See reference in endnote 2.

[4] See reference in endnote 2.

[5] *'The Glasgow Climate Pact – Key outcomes from COP26'*, UN Climate Change, n.d.

[6] Using a global carbon budget figure of 853Gt for a 1.5-degrees scenario as per M Meinshausen et al., 'The diminishing carbon budget and Australia's contribution to limit climate change,' in R Garnaut (ed.), *The superpower transformation*, 2022. The global budget is multiplied by 0.93% (the CCA's previously established fair share value for Australia) and 5.1Gt is then subtracted from this figure to account for Australia's historical emissions for 2013-2022 as per 'Quarterly update of Australia's national greenhouse gas inventory: December 2022', DCCEEW, 2023.

[7] '*Quarterly update of Australia's national greenhouse gas inventory: December 2022*', DCCEEW, 2023.

[8] A Malhotra and TS Schmidt, '*Accelerating low-carbon innovation*', *Joule*, 2020.

[9] R Way et al., '*Empirically grounded technology forecasts and the energy transition'*, *Joule*, 2022.

[10] See R Way et al. in endnote 9.

[11] *Global hydrogen review 2022*, IEA, 2022.

[12] Based on a learning rate of 18% from R Detz and M Weeda, *Projections of electrolyzer investment cost reduction through learning curve analysis*, TNO, 2022, and assuming six doublings from 0.5GW to 32GW installed capacity.

[13] Based on analysis of *2022 annual report: The year's work and impact from the Investor Group on Climate Change,* IGCC, 2022 and 'Managed funds, Australia', ABS, 2023.

[14] *The prudential regulation of investment in Australia's export industries,* Parliament of Australia, 2021.

[15] *Australia's long-term emissions reduction plan*, Australian Government, 2021.

[16] *Sunshot: Australia's opportunity to create 395,000 clean export jobs*, Accenture, 2021.

[17] F Creutzig et al., '*Demand-side solutions to climate change mitigation consistent with high levels of well-being*', *Nature Climate Change*, 2021.

[18] See for example our report: C Gaukroger, A Ampofo, F Kitt, T Phillips & W Smith, *Redefining progress: global lessons for an Australian approach to wellbeing*, CPD, 2022.

[19] Recent global estimates are that $3-6 trillion USD per year of capital investment is required to meet climate goals. This equates to approximately 5% of global GDP. See: I Andersen, '*Investment and trade to meet the Paris climate goals*', UN Environment Programme, 2022.

[20] A good summary is provided by BNEF, *Comparing long-term energy outlooks 2022*, 2022.

[21] M Sandiford, 'The net-zero opportunity for Australian minerals,' in R Garnaut (ed.), *The superpower transformation*, 2022.

[22] Devlin et al., '*Global green hydrogen-based steel opportunities surrounding high quality renewable energy and iron ore deposits'*, Nature Communications, 2023.

[23] See, for example, B Comley and S Hatfield-Dodds, *The energy superpower opportunity: Can Australia seize the advantage in a net zero world?*, EY, 2023

[24] M Hammerle and T Phillips, *Understanding adaptive capacity: A tool for economic transition planning*, CPD, 2023.

[25] M Hammerle and T Phillips, *Making our way: Adaptive capacity and climate transition in Australia's regional economies*, CPD, 2023.

[26] H Dinh and L Pearson, '*Specifying community economic resilience - a framework for measurement'*, *Australasian Journal of Regional Studies,* 2015.

[27] F Azpitarte, V Johnson, and D Sullivan, *Fuel poverty, household income and energy spending: An empirical analysis for Australia using HILDA data,* Brotherhood of St Laurence, 2015.

[28] '*Wellbeing and sustainability task team*', UN, 2023.

[29] '*Government at a glance – 2021 edition: Public procurement*', OECD, 2021.

[30] *'Environmentally sustainable procurement policy*', Australian Government, 2023.

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