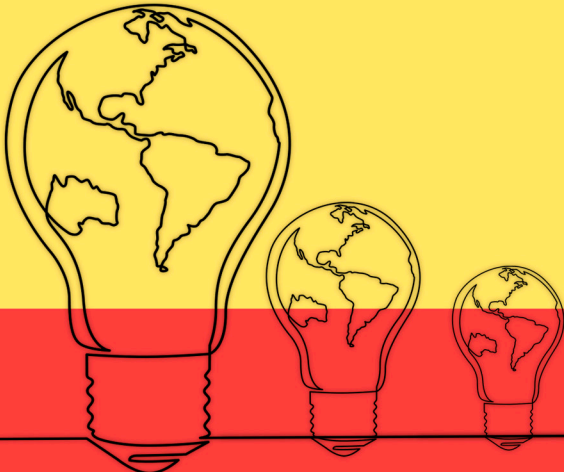


# CPSU Climate Action Network Policy Paper



**CPSU**

**CLIMATE  
ACTION  
NETWORK**



## Recommendations

1. Australia adopts a mission-oriented research and innovation policy towards carbon neutrality.
2. Additional funds and staff for climate-related agencies including BOM, CSIRO, Department of Industry, Science, Energy and Resources (DISER) and Department of Agriculture, Water and the Environment (DAWE).
3. Removing the ASL cap from agencies and immediately shifting from a partial to a full exemption from the efficiency dividend for CSIRO.
4. Expanded Department of Industry, Science, Energy and Resources R&D programs that partner and work with industry, greater funding for CRCs and CSIRO due to likely declining private investment in R&D.
5. Increasing funding levels and expanded remit of existing institutions such as CCA, ARENA and the CEFC with an explicit aim of increasing the uptake of renewable energy.
6. Expand the remit of the CEFC to include investments in land use to help reduce emissions.
7. Governments receive a democratic stake in the form of equity in return for providing support to private companies that can be reinvested in innovation.
8. Properly resource agencies such as DFAT and DISER for an international climate strategy and a supporting a trade and investment strategy
9. Greater funding for international environment and climate programs, including as part of Australia's aid program with an explicit focus on energy.
10. A policy of new agencies and programs being established in regional centres with carbon intensive industries unless other location required.
11. Increased public sector employment including the conversion of insecure contractors and labour hire to permanent APS employees and the creation of more entry-level positions.
12. Increased funding for publicly funded caring roles tied to improved pay, conditions and job security.
13. Establishment of a Working for Australia fund to support the creation of jobs in local communities with high unemployment for those in casual or semi-skilled work.
14. Expanded federally funded energy efficiency, climate adaptation and emergency management programs with program roles based in regional Australia.
15. Creation of just transition authorities to oversee "regional deals" that involve all tiers of government with strategic oversight provided by local democratic processes.

16. Employment services being brought back under public provision with a greater focus on shaping labour market demand.
17. All tiers of government work together to create public sector job hubs in regional communities.
18. Redesigning procurement policies to enable more procurement from locally owned SMEs in regional communities.
19. Design procurement policies that create incentives for early demand and encourage the uptake of climate solutions.
20. Adopt investment strategies for the Future Fund and Commonwealth superannuation funds that reduce exposure to risky carbon-intensive industries and actively leverages ownership via its funds to encourage companies to act on climate change.
21. Commit to net zero operations emissions by 2040 with agency level targets.
22. Commonwealth adopts a legislated climate change framework with binding net zero by 2050 targets.
23. Commonwealth adopts policy measures that promote the uptake of solutions that reduce emissions including higher standards and targets, and requirements to provide information to consumers.
24. Amending Infrastructure Australia and other cost-benefit analysis frameworks to incorporate the social cost of carbon.
25. Enabling Commonwealth financing mechanisms that regions, state and local governments can use for infrastructure projects that reduce carbon emissions.
26. EPBC Act is amended to include a climate change trigger.
27. APS employees have workplace rights related to the environment.

# Introduction

Climate change is the pre-eminent policy challenge of our time. Its impacts are not only environmental but social and political. The impacts will differ across sectors of the economy and geographic regions.

The IPCC Climate Report 2018 states that to limit average temperature rises to 1.5 degrees, emissions need to fall by 45% by 2030 from 2010 levels. Australia can still meet the Paris Agreement goal of limiting global temperature rises to below 2 degrees and close to 1.5 degrees through the use of existing technologies and supporting the rapid development and deployment of emerging technologies.<sup>1</sup> A level of adaptation is necessary but it is not feasible to adapt to a rise of 4 degrees.

Achieving net zero emissions in Australia across all sectors of the economy will rely on four pillars of decarbonisation: energy waste reduction, 100% renewable electricity, electrification and a shift away from and reducing non-energy emissions and offsetting residual emissions.<sup>2</sup>

A reliance solely on market mechanisms will not meet the challenge we face in achieving these four pillars. The Commonwealth Government needs to play a leading role, working with the private sector, and a co-ordinating role in action if we are to meet that rapid, far reaching target. It needs the capacity to be both an enabler but also provide support to communities who will be detrimentally affected.

It requires the Commonwealth to be a:

- risk mitigator,
- enabler of innovation,
- anchor of support for regional communities during transitions, and
- leader through its own actions.

The principle of justice for First Nations must also underpin and be central to action by the Commonwealth on climate change. It requires the genuine participation of Aboriginal and Torres Strait Islander peoples in decisions and working with their communities for the deep, systemic change needed.

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1 “ClimateWorks.” ClimateWorks, <https://www.climateworksaustralia.org/resource/decarbonisation-futures-solutions-actions-and-benchmarks-for-a-net-zero-emissions-australia>. Accessed 21 May 2020.

2 “ClimateWorks.” ClimateWorks, <https://www.climateworksaustralia.org/resource/pathways-to-deep-decarbonisation-in-2050-how-australia-can-prosper-in-a-low-carbon-world>. Accessed 21 May 2020.

## Mitigating risks

The Government's role needs to be that of a mitigator of risk by spreading it and ensuring no one is left behind.<sup>3</sup> Climate related risks include damage to infrastructure, increased adaptation costs, operational disruption, employee safety, increased weather volatility and macroeconomic risks.

Risk mitigation is not the sole function of government but a key role that citizens expect.

Climate change is a risk multiplier and while business and civil society will play important roles, only government can lead the structural changes needed to make Australia more resilience and reduce risk.

Mitigating risks involves both emissions reductions and adaptation. It takes 20 years for emissions to stop rising meaning higher temperatures are locked in. A range of changes to our climate are already happening that require adaptation but the extent of changes can be reduced. These include:

- increased frequency of large-scale heatwaves and record-high temperatures,
- longer fire seasons with more extreme fire danger dangers,
- prolonged high ocean temperatures,
- reduced average rainfall and more time spent in drought,
- an increase in heavy rainfall, and
- increased frequencies of coastal storm surge inundation.

Many areas of government, including CSIRO, Bureau of Meteorology, Australian Antarctic Division, the Department of Agriculture, Water and Environment, the Department of Industry, Science, Energy and Resources and Department of Foreign Affairs and Trade are already directly involved in research, service provision and formulating government policy on climate change.

Nearly nine in ten Australians live within 50 kilometres of the coast and are vulnerable to sea-level rise and storm surges. Climate change exacerbates inherent risks in the Australian climate, making heatwaves, droughts, bushfires, floods and tropical cyclones worse and more frequent. The cost of natural disasters, many climate-related, is projected to increase to \$39.3b per annum in 2050 from \$13.2 billion per annum in 2017.<sup>4</sup>

Even "moderate" climate change will have implications for both Australia's terrestrial and marine biodiversity. Australia is one of 17 megadiverse countries, a group that harbours more than 70% of species and rates of extinction are likely to increase as temperatures rise. It is already affecting kelp forests off the coast of Tasmania, the Great

<sup>3</sup> David Moss, *When All Else Fails: Government as the Ultimate Risk Manager*, Harvard University Press, Cambridge, MA, 2002. See also Nicholas Barr, *The Welfare State as Piggy Bank: Information, Risk, Uncertainty and the Role of the State*, Oxford University Press, Oxford, 2001; Bruce Chapman (ed.) *Government Managing Risk: Income Contingent Loans for Social and Economic Progress*, Oxford University Press, Oxford, 2006

<sup>4</sup> Deloitte Access Economics 2017 *Building Resilience in our States and Territories*. 120pp. \$39AUD billion in present value terms, 2017.

Barrier Reef and reefs off the West Coast and further increases will only add additional stresses.<sup>5</sup>

Changing climates will affect Australia’s agricultural, mining, fisheries and other industries, which are all vulnerable to increasing frequency of severe heat and intensity of drought, floods and storms. Changing rainfall patterns, ocean temperatures and acidification will impact on our water management. To put this into perspective, for each 1 degree of temperature increase, grain yields decline by about 5 per cent.<sup>6</sup> Water, food and rising sea levels will also have geopolitical implications. It may lead to conflict and further mass migration.

Climate change will exacerbate existing inequalities. Climate pressures will affect weather patterns affecting the price of food and water as well as increasing energy costs associated with heating and cooling, let alone having the resources if natural disasters strike.

Governments need the capability to respond and plan for these scenarios. We need to invest in the policy capability to work through a global challenge but we also need to be able to protect the community from the likely impacts of the changes needed to tackle the climate crisis. It requires a social security system and also an employment services system that is fit for the reality of modern Australia, that is liveable and provides the support needed. It requires government to have a physical geographic footprint across the country.

To manage the risks and prepare for the future, Government needs to invest in science and innovation, support regional communities during the transitions that are necessary and show leadership on climate as an institution by using every policy lever available.

There are a range of actions that government can take to help achieve net zero emissions and mitigate climate risks through legislation, regulation, standards or incentives. These include (but are not limited to):

- Setting standards and targets
- Taxes and incentives
- Infrastructure investment
- Stimulating private investment
- Providing information and access
- Procurement
- Direct investment

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5 Biodiversity and Climate Change Expert Advisory Group (2013). Australia’s biodiversity and climate change - A strategic assessment of the vulnerability of Australia’s biodiversity to climate change. Retrieved from <https://www.environment.gov.au/climate-change/adaptation/publications/australias-biodiversity-climate-change>

6 “Climate Change.” United Nations Sustainable Development, <https://www.un.org/sustainabledevelopment/climate-change>. Accessed 21 May 2020.

# Funding science and innovation

## Science

To be able to manage and minimise these climate risks, it is fundamental that we understand the processes that have driven climate change to predict its impact and make evidence-based policy decisions. Governments have an essential role in supporting that research that provides vital information that is a public good.

It requires sustained funding for the six components that underpin Australia's national climate science effort:

1. Observations, data, analysis and infrastructure
2. Climate process studies
3. Climate modelling and projections
4. Climate risk, adaptation and services
5. International engagement and dependencies
6. Research coordination and funding

A recent report by the National Climate Advisory Committee has found that Australia is in danger of losing critical expertise.<sup>7</sup> Australia has historically been a world leader on climate science but is falling behind in some areas because of a lack of co-ordination and insufficient computational power and data storage. It has affected our capabilities in atmosphere physics that enable the understanding of heatwaves and El Niño and La Nina cycles, the dynamics of oceans and ice-covered regions. Furthermore, our weather modelling system was a "small fraction of the size of groups building equivalent models for their regions in other countries".

The impact of past cuts continues to be felt. The Coalition Government's total budgeted expenses for public sector agencies and departments that deal with climate change have been cut by over \$3 billion per annum since 2013-14.<sup>8</sup> The institutional infrastructure has been degraded with cuts to ARENA and the CEFC, the abolition of the Climate Commission, the defunding of the Climate Change Authority and the axing of programs such as the Energy Efficiency Opportunities program.

Less high profile cuts have had an impact. The discontinuation of funding to the National Climate Change Adaptation Research Facility had a big impact on climate adaptation research projects, leading to the axing of conferences for researchers and community workshops that informed business, local government and citizens about their exposure to climate risk.<sup>9</sup> Within CSIRO, the Australian Climate Change Science

7 Readfearn, Graham. "Scientists Warn of 'critical Gaps' in Australia's Climate Science Capability." The Guardian, 10 Mar. 2020. [www.theguardian.com, https://www.theguardian.com/environment/2020/mar/11/scientists-warn-of-critical-gaps-in-australias-climate-science-capability](https://www.theguardian.com/environment/2020/mar/11/scientists-warn-of-critical-gaps-in-australias-climate-science-capability).

8 CPSU calculation

9 Karp, Paul. "Coalition's Axing of Funding to Climate Change Adaptation Body Condemned." The Guardian, 15 Jan. 2020. [www.theguardian.com, https://www.theguardian.com/australia-news/2020/jan/16/coalitions-axing-of-of-funding-to-climate-change-adaptation-body-condemned](https://www.theguardian.com/australia-news/2020/jan/16/coalitions-axing-of-of-funding-to-climate-change-adaptation-body-condemned).

Program was dissolved and merged into a new National Environmental Science scheme, to save \$22 million.

Despite the Commonwealth Government's stated focus on climate adaptation and resilience, budgeted expenses for the Climate Change Adaption program in the Department of Agriculture, Water and the Environment fell from \$23,576,000 in 2013-14 to \$4,297,000 in 2018-19, a decline of \$19,279,000 or 81.8%. It is projected to fall further to \$2,330,000 in 2022-23.<sup>10</sup> These funding cuts have particular implications for Indigenous land management.

We need to restore funding to these climate science agencies and programs and eliminate the ASL cap so the capacity needed to tackle complex challenges can be rebuilt. Agencies such as the Climate Change Authority that provided independent advice on emissions reductions targets should be restored. This should extend to the transfer of climate statistics from DISER to an independent statutory agency to ensure confidence. The independent advice and recommendations provided needs to be accepted. For example, the Commonwealth should implement the strategic actions in the National Climate Science Advisory Committee's Climate science for Australia's future report.

## Innovation

Public investment in innovation has to play a role and the CSIRO's role is pivotal. Not only technology but also the basic science as not all science can be immediately commercialised.

The big breakthroughs in technological change have happened because of publicly funded research and development. Public investment in research pays substantial dividends with a return on investment of 20 to 67%.<sup>11</sup> International studies show one dollar of increased applied R&D spending increases national income by 6 to 25 dollars and that one dollar of increased basic research spending increases national income by 20 to 100 dollars.<sup>12,13</sup>

While the \$110m in funding cuts to CSIRO from 2014 have been reversed, they have left a lasting impact with the loss of senior staff and corporate knowledge. The ASL cap and precarious financing in the current economic situation risks further losses.

The financing of research and development leaves it open to risk particularly with the risk of a global recession. CSIRO's reliance on external revenue (40%) means that an economic downturn could have massive implications for research that needs to take place.

10 Calculations from relevant agency Portfolio Budget Statements

11 National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. 2007. *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/11463>.

12 Bochove, C.A. van, 2012 *Basic Research and Prosperity: Sampling and Selection of Technological Possibilities and of Scientific Hypotheses as an Alternative Engine of Endogenous Growth*; Centre for Science and Technology Studies, 2012 Working Paper Series, <http://www.cwts.nl/pdf/CWTS-WP-2012-003.pdf>.

13 Department of Industry, Science. "Climate science for Australia's future." Department of Industry, Science, Energy and Resources, 7 Nov. 2019, <https://www.industry.gov.au/data-and-publications/climate-science-for-australias-future>.



Providing financial support for innovation through expanded Department of Industry, Science, Energy and Resource programs and more funding for CSIRO is essential. Large publicly listed firms are investing less in innovation as a proportion of their revenues than they did 30 or 40 years ago. The incentives to attract investors has meant a focus on short-term returns to maintain share value at the expense of high-risk research and technology development. Many large firms now outsource high-risk innovation to public institutions and small and medium (SME) players in global value chains.<sup>14</sup>

Economist Marianna Mazzucato has pointed out that it is the public sector that often supplies the long-term patient finance required for high-risk innovation to get off the ground, such as for ICT or biotech. It socialises risk and enables ‘innovation’.<sup>15</sup>

The public sector will play an essential role in providing the support and create the incentives for a net zero economy. Business will not invest unless it sees the opportunity for growth. A siloed approach will not work. The Commonwealth can do a lot through industrial strategies, providing investment and also more innovative solutions such as challenge prizes to see solutions to problems such as low-cost emissions reductions for high intensity industries. We need a shift away from the cost of public spending to see it as investment.

We urgently need to increase Australia’s total spending on research and development. Australia’s total spending on research and development is now just 1.88% of GDP, from 2.11% five years ago. The government contribution (0.57%) is where it was in the 1980s. Meanwhile Japan and Sweden are committing more than 3%, and Korea and Israel more than 4%<sup>16</sup>. Public investment in R&D towards zero emissions solutions will be key.

The Department of Industry, Science, Energy and Resources can also play a larger role in partnering with industry to identify where R&D support is needed, significantly expanding Cooperative Research Centres (CRC) Grants. Cooperative Research Centres (CRC) Grants provide funding for medium to long-term, industry-led research collaboration.

The Commonwealth should also provide assistance through the Department of Industry, Science, Energy and Resources to scale-up Australian firms that commercialise low emissions technology and engineering capabilities funded and developed by Australian citizens. Programs should support these firms to diversify across industry sectors and to participate in international markets so they grow big enough to have sufficient bargaining power in these markets to capture returns on Australia-funded innovation.<sup>17</sup> There should be a particular focus on funding support for innovation in emissions reduction towards harder-to-abate and emissions-intensive, trade-exposed industries and towards industries with well-defined low-emissions goals, targets and pathways.

14 Parker, Rachel. “Profiting from the Innovation of Others? Why Governments Must Manage the Spoils of New Ideas.” *The Conversation*, <http://theconversation.com/profitting-from-the-innovation-of-others-why-governments-must-manage-the-spoils-of-new-ideas-51189>. Accessed 21 May 2020.

15 Mazzucato, Mariana. *The Green Entrepreneurial State*. SSRN Scholarly Paper, ID 2744602, Social Science Research Network, 20 Oct. 2015. [papers.ssrn.com](https://papers.ssrn.com/abstract=2744602), <https://papers.ssrn.com/abstract=2744602>.

16 Green, Roy. “It’s the Only Way to Save Australia from a Deep Hole, but Innovation Policy Is Missing in Action.” *The Conversation*, <http://theconversation.com/its-the-only-way-to-save-australia-from-a-deep-hole-but-innovation-policy-is-missing-in-action-116966>. Accessed 21 May 2020.

17 Parker, Rachel. “Profiting from the Innovation of Others? Why Governments Must Manage the Spoils of New Ideas.” *The Conversation*, <http://theconversation.com/profitting-from-the-innovation-of-others-why-governments-must-manage-the-spoils-of-new-ideas-51189>. Accessed 21 May 2020.

Technology will play an important role in emissions reductions, however, a technology agnostic approach should not be taken when there is an existing viable decarbonisation pathway that does not require supporting fossil fuel technologies that will continue to produce emissions.

We should also take advantage of the existing institutional infrastructure and corporate knowledge to overcome challenges in technology research and development and accelerate the uptake of renewable energy with the goal of reaching 100% renewables by the early 2030s.<sup>18</sup> The Coalition cut half a billion dollars from the Australian Renewable Energy Agency (ARENA), and the Clean Energy Finance Corporation (CEFC) had funds redirected. The ARENA is expected to fund out of funding in the middle of 2020.<sup>19</sup> The funding cuts need to be reversed. Both agencies need more funding and a greater remit.

The Australian Renewable Energy Agency (ARENA) can play a greater role in incentivizing the reduction of emissions beyond the electricity sector to encourage innovation in the new low-emission and land management technologies. Public funding through ARENA should be provided for research and development, with a strong focus on low-cost carbon measurement technologies. Funding needs to be made available for the sequestration of carbon in soils, pastures, woodlands, forests and plantations, along with the promotion of hydrogen and biomass-based chemical industries.

The Clean Energy Finance Corporation (CEFC) has played an important role in correcting that market failure for renewable energy, especially for debt. Additional funding could be provided, and its role could be extended to emissions reduction technologies in all sectors to help overcome barriers to finance.

In addition to energy and transport, land use has the potential to reduce emissions. The Commonwealth should allocate additional funds for research on low-emissions agriculture and carbon farming and investigate and implement the most effective incentives to encourage actions that reduce emissions. This could involve extending the remit of the CEFC to investments in land use to support low-emissions and climate-smart agriculture and associated environmental services.<sup>20</sup> Forestry plantations, which have not received funding under the Emissions Reduction Fund rules, could be supported but it will be important to avoid replicated problems associated with forestry managed investment schemes.

Given the role of the state as an innovator and risk-taker, it should receive a democratic stake where it provides finance. The socialisation of risk through public investment in innovation should be matched by the sharing of rewards.<sup>21</sup> It would allow the public to benefit from any successes it funds, help cover costs and enable the financing of

18 Parkinson, Giles. Australia can be powered 100% by renewables by early 2030s, says Garnaut. RenewEconomy. 29 April 2019. <https://reneweconomy.com.au/australia-can-be-powered-100-by-renewables-by-early-2030s-says-garnaut-16846/>

19 Hannam, Peter. "Morrison Government Mulls ARENA's Future as Funding Starts to Run Out." The Sydney Morning Herald, 26 Feb. 2020, <https://www.smh.com.au/politics/federal/morrison-government-mulls-arena-s-future-as-funding-starts-to-run-out-20200226-p544o2.html>.

20 "Prospering in a low-emissions world: An updated climate policy toolkit for Australia" Climate Change Authority, <http://climatechangeauthority.gov.au/prospering-low-emissions-world-updated-climate-policy-toolkit-australia>

21 Mariana Mazzucato, *Wealth Creation and the Entrepreneurial State: building symbiotic public-private partnerships*, October 2017. <https://www.ineteconomics.org/uploads/papers/Mazzucato-Value-Creation-and-the-Entrepreneurial-State-INET-version.pdf>

the next round of investments. This is far from a radical idea, for example, CSIRO has received nearly half a billion dollars from wi-fi licencing.<sup>22</sup>

## Global strategy

There also needs to be a global strategy to ensure Australia gets the most out of innovation. Providing agencies like DFAT and Environment with resources and staffing to support an international climate strategy and supporting a trade and investment strategy to maximise opportunities in emissions reductions.

As part of its global strategy, Australia needs to invest much more in international environment and climate programs. This has to extend beyond trade and investment to include increasing Australia's aid programs which should include a robust and explicit decarbonised energy policy. Funding for climate change adaption in the Pacific has come from existing funding.<sup>23</sup>

## Recommendations

- Australia adopts a mission-oriented research and innovation policy towards carbon neutrality.
- Additional funds and staff for climate-related agencies including BOM, CSIRO, Department of Industry, Science, Energy and Resources (DISER) and Department of Agriculture, Water and the Environment (DAWE).
- Removing the ASL cap from CSIRO and shifting from a partial to a full exemption from the efficiency dividend.
- Expanded Department of Industry, Science, Energy and Resources R&D programs that partner and work with industry, greater funding for CRCs and CSIRO due to likely declining private investment in R&D.
- Increasing funding levels and expanded remit of existing institutions such as CCA, ARENA and the CEFC with an explicit aim of increasing the uptake of renewable energy.
- Expand the remit of the CEFC to include investments in land use to help reduce emissions.
- Governments receive a democratic stake in the form of equity in return for providing support to private companies that can be reinvested in innovation.
- Properly resource agencies such as DFAT and DISER for an international climate strategy and a supporting a trade and investment strategy.
- Greater funding for international environment and climate programs, including as part of Australia's aid program with an explicit focus on energy.

22 ABCCSIRO wins legal battle over wi-fi patent, 1 April 2012. <https://www.abc.net.au/news/2012-04-01/csiro-receives-payment-for-wifi-technology/3925814>

23 "ACFID Welcomes Publication of DFAT's Climate Change Action Strategy." ACFID, 21 Nov. 2019, <https://acfid.asn.au/media-releases/acfid-welcomes-publication-dfat%E2%80%99s-climate-change-action-strategy>.

## Managing transitions

Communities will be facing massive transitions in response to climate change. We will need to ensure ongoing support for low-income households to be able to access affordable electricity and transport.

Regional communities that have a large carbon intensive industry will be significantly affected. We need to learn the positive and negative lessons from the transitions in the LaTrobe Valley and the automotive industry in South Australia to provide a secure future with good jobs people can rely on.

The current employment services arrangements are not fit for purpose and will be unable to address increased unemployment. A profit driven model that relies on churn and low costs cannot cope with the expected increase in unemployment. It requires a shift to focusing on long-term skills development and working with employers to shape labour market demand. A much larger role for the Department of Education, Skills and Employment will also be needed to assist with transitions for those employed in carbon intensive industries.

There should be the prioritising the creation of new public sector jobs in regional communities with place-based approaches where all levels of government work together to create jobs hubs. These can be underpinned by “regional deals” that provide a structure for intergovernmental co-operation and economic co-ordination, enabling place-based experimentation.

Part of it involves decentralisation through actively placing new jobs in communities. Public sector jobs and other publicly funded care roles such as early childhood education and disability support can form an anchor of low carbon jobs to encourage investment in local regional economies.

To respond to the recession, there is a need for more direct public sector employment to manage its impact. There are almost 20,000 less APS jobs than there were in 2013 and we conservatively estimate over 35,000 non-APS staff doing core public sector work. The reversal of job cuts and conversion of contract and labour hire work to permanent public sector jobs that people can rely on is needed. It is even more important in regional areas. There should be a specific focus on providing entry-level positions through expanding graduate programs and alternative pathways such as traineeships, apprenticeships and cadetships for targeted cohorts such as mature age workers, high school graduates, those in rural and regional areas and Aboriginal and Torres Strait Islander people.

Improved pay and conditions must extend beyond directly employed public sector staff. Many of these low-carbon publicly funded care roles are low-paid and insecure despite being skilled. Funding needs to be provided and tied to guaranteeing improved conditions for these occupations.

Federal funds could also be provided to other tiers of government and community groups to support unfunded work in local communities with high unemployment, focused on guaranteeing work that could be done by those in casual or semi-skilled

work. The Working for Victoria Fund provides an example of how this could be done.<sup>24</sup> An expanded public employment service could provide oversight of such a place-based program and work with communities to identify the work needed to be funded.

Public sector employment can be an anchor for investment in regional communities in transition. The certainty that public sector jobs and investment provides gives the confidence to local businesses and other organisations to invest for the future.

There also needs to be an active effort to encourage a diversity of work, not simply service delivery. New program areas could be established based on work as part of the National Energy Productivity Plan and responsibilities related to energy efficiency as well as other emergency management, climate change-related program management and ICT work that does not need to be located in Sydney, Melbourne or Canberra.

A range of programs will be needed that involve working across tiers of government to increase mitigation, build resilience to drought and climate impacts, enhance biodiversity and provide benefits for Indigenous communities such as an expanded Indigenous Rangers program, including through interjurisdictional partnerships and program linkages. Programs run by the NIAA in remote and regional communities may provide templates for other programs.

This would be assisted by working with other tiers of government to help create regional hubs of public sector work and co-location to benefit from agglomeration. The APS Review has indicated that there needs to be a significant investment in ICT and digital skills.

Communities need to feel they are being listened to and have genuine democratic input into any just transition. There needs to be particular consideration for Indigenous communities, ensuring their voices are heard in the process. For a just transition to work, it requires democratic engagement, a geographical presence in communities and a long-term commitment to any “regional deal”. A temporary authority is insufficient and budget cuts often result in centralisation. An ongoing, regionally based local democratic processes that provides strategic oversight of the “regional deal” and can shape the form the just transition takes may be an option.

All policy levers should be used. Public sector jobs are only one part of a local economic ecosystem. Leveraging government spending to develop and strengthen local supply chains by locally owned firms, creates more jobs. Every dollar that stays in a local community has a multiplier effect. It will require breaking contracts into more manageable sizes and having procurement staff in local communities that can work with local supply chains. The social benefits need to be part of any decision.

## Recommendations

- A policy of new agencies and programs being established in regional centres unless co-location required.

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24 Victorian Government. Working for Victoria, 18 May 2020. <https://www.vic.gov.au/workingforvictoria>

- Increased public sector employment including the conversion of insecure contractors and labour hire to permanent APS employees and the creation of more entry-level positions.
- Increased funding for publicly funded caring roles tied to improved pay, conditions and job security.
- Establishment of a federally funded Working for Australia fund to support the creation of jobs in local communities with high unemployment for those in casual or semi-skilled work.
- Expanded federally funded energy efficiency, climate adaptation and emergency management programs with program roles based in regional Australia.
- Creation of just transition authorities to oversee “regional deals” that involve all tiers of government with strategic oversight provided by local democratic processes.
- Employment services being brought back under public provision with a greater focus on shaping labour market demand.
- All tiers of government work together to create public sector job hubs in regional communities.
- Redesigning procurement policies to enable more procurement by locally owned SMEs in regional communities.

## Governments leading

The Commonwealth can show leadership as an organisation by setting its own targets and driving changes as a major procurer of goods and services. Just as the Commonwealth was an employer of choice and lifted standards across the board on maternity leave, it can do so when it comes to standards of goods and services purchased and actions in its operations. Government procurement can provide incentives for early demand and encourage the uptake of climate solutions.

In 2018-19, Austender reported contract notices for the Commonwealth worth \$64.5 billion. This only accounted for nearly two thirds of procurement by government entities.<sup>25</sup>

In addition to a focus on helping to develop local supply chains, tenderers for government contracts should include carbon offsets, and a factor in deciding options will be the least emissions. For example, it could use government procurement to drive retrofitting and energy improvements in government-owned and leased buildings to further reduce emissions.

The Commonwealth should redesign all instruments, including those used by the Reserve Bank, financial regulators, finance mechanisms and funds to consider and prioritise climate change. Changes should include how agencies assessed grants and

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25 Australian National Audit Office. Australian Government Procurement Contract Reporting Update, 28 May 2019 <https://www.anao.gov.au/work/information/australian-government-procurement-contract-reporting-update-2019>.



funding for state government infrastructure projects by including the social cost of carbon in cost-benefit analyses. 70% of greenhouse gas emissions in Australia are directly attributable or influenced by infrastructure. There should be mechanisms to use the Commonwealth's ability to fund that state and local governments can use for supporting infrastructure that reduces carbon emissions like investments in electricity transmission, rail transport projects, electric vehicle charging networks and retrofitting public housing. It could also mandate requirement for infrastructure, for example, housing built in remote Indigenous communities, to ensure it is well-built and insulated to reduce energy costs and ongoing carbon emissions are offset. These actions can provide incentives for early deployment and stimulate private investment. The creation of publicly-owned regional development banks, modelled on the Clean Energy Finance Corporation, could be one option that is tied in with regional deals.

The Commonwealth could also use the financial leverage it has to encourage companies to act to reduce emissions. It could adopt investment policies for the Future Fund and superannuation funds managed by Comsuper that reduce climate-related risk exposures via strategic divestments. For example, Norway's sovereign wealth fund divested from companies solely dedicated to oil and gas exploration.<sup>26</sup> It could also use its institutional ownership to pressure companies to take greater action on climate change and reduce emissions.

The Commonwealth can also adopt other policy measures to promote the uptake of solutions such as higher renewable energy targets, vehicle greenhouse gas emission standards, providing consumers with information and requiring companies to disclose climate strategies and actions.

The Commonwealth can learn from state and territory governments who are taking action. Every state and territory has committed to net zero emissions by 2050 with some legislating these targets. The ACT Government has a target of zero emissions from Government operations by 2040.<sup>27</sup> The Commonwealth should seek to adopt similar targets. In Victoria, each department is required to outline its emissions reduction target in a Low Carbon Growth Plan.<sup>28</sup> Even the NSW Coalition Government has created a climate change policy framework that aims to embed climate change decisions in government decision making across operations including service delivery, infrastructure, purchasing decisions and regulatory frameworks.<sup>29</sup>

The Commonwealth should legislate a Climate Change Policy Framework that has binding net zero by 2050 targets and requires the publication of associated five yearly plans to meet these targets. The framework must fully integrate consideration of emissions and climate change risks in decision making about government programs, assets and services. This could include a strengthened Climate Change Authority that mandates that the Government considers the advice and recommendations on climate

26 Terje Solsvik. "Norway sovereign wealth fund to divest oil explorers, keep refiners". Reuters, 2 October 2019. <https://www.reuters.com/article/us-norway-swf-oil/norway-sovereign-wealth-fund-to-divest-oil-explorers-keep-refiners-idUSKBN1WG4R9>

27 ACT Government. "Zero Emissions Government." Environment, Planning and Sustainable Development Directorate - Environment, 12 July 2019, <https://www.environment.act.gov.au/cc/zero-emissions-government>.

28 Victorian Government. "Victoria's Climate Change Framework." Climate Change, 4 Oct. 2018, <https://www.climatechange.vic.gov.au/victorias-climate-change-framework>

29 NSW Government. "Climate Change Policy Framework." NSW Environment, Energy and Science, <http://www.environment.nsw.gov.au/topics/climate-change/policy-framework>. Accessed 21 May 2020.

and independently reports and reviews Government policy without requiring Ministerial referral.

Existing legislation that assesses environment impacts should also be amended to include the impact of climate change. The EPBC Act should be amended to include a climate change trigger to regulate the assessment of projects with high carbon emissions within the EPBC Act, linked to an economy-wide legally binding emissions reduction target. A trigger would broadly require decision-makers to consider climate change in assessment and planning processes and require the Commonwealth to assess projects with major emissions footprints and enable the rejection or application of conditions and limits on projects.

CPSU members should also be able to work within agencies to help create strategies and set targets. It is important to give employees rights in the workplace to enforce this, giving employees who assist buy-in. It should include:

- *Right to participate:* workers have the right to participate in decision making related to environmental concerns in their workplace, exercised through the joint health and safety committee or workplace safety and health representatives, or through new environmental committees.
- *Right-to-know:* workers have the right to be aware about the environmental hazards in the workplace. i.e. the right to know about workplace emissions, technological choices, plans for energy saving, use and efficiency.
- *Whistleblower protection:* A worker may not be held liable or be disciplined for reporting workplace practices that are honestly believed to pose an environmental risk.
- *Right to refuse work which harms the environment:* A worker may not be held liable or be disciplined for refusing to do work that they honestly believes may pose an immediate or serious threat to the environment.

A number of Commonwealth agencies have established staff-led networks focused on environmental concerns such as recycling and compost. These networks could provide an existing avenue to involve staff in developing agency plans to meet net zero targets.

## Recommendations

- The Commonwealth designs procurement policies that create incentives for early demand and encourage the uptake of climate solutions.
- The Commonwealth adopts investment strategies for the Future Fund and Commonwealth superannuation funds that reduce exposure to risky carbon-intensive industries and actively leverages ownership via its funds to encourage companies to act on climate change.
- The Commonwealth should commit to net zero operations emissions by 2040 with agency level targets.
- The Commonwealth legislates a climate change framework with binding net zero by 2050 targets.



- The Commonwealth adopts policy measures that promote the uptake of solutions that reduce emissions including higher standards and targets, and requirements to provide information to consumers.
- Amending Infrastructure Australia and other cost-benefit analysis frameworks to incorporate the social cost of carbon.
- Enabling Commonwealth financing mechanisms that regions, state and local governments can use for infrastructure projects that reduce carbon emissions.
- EPBC Act is amended to include a climate change trigger.
- APS employees have workplace rights related to climate and environment.