WWF AUSTRALIA

SUBMISSION

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Submission to the Climate Change Authority Issues Paper on the 2026 Annual Progress Advice

The World Wide Fund for Nature-Australia (WWF-Australia) welcomes the opportunity to make a submission to the Climate Change Authority's (CCA) Issues Paper on the 2026 Annual Progress Advice.

WWF-Australia is part of the WWF International Network, the world's largest independent conservation organisation. WWF's global mission is to 'stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature'. WWF-Australia has approximately 1.2 million supporters.

Climate change and biodiversity collapse are the two greatest threats facing both humans and nature today. These crises are intertwined, compound global inequalities, and must be addressed together. WWF-Australia supports a fast, ecologically sound and just transition to a net zero future.

WWF considers that the transition to a net zero economy needs to be "fast, best, and just". This means it is now time to build faster to keep stabilising global average temperatures to 1.5°C in reach, more ecologically sound to reverse the trend of biodiversity loss, and fairer to achieve a just and resilient transition for local communities, First Nations peoples and the broader region. There can be no fast transition if it does not work for people and nature.

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Overview

Section	Q	*Question (summary)*	WWF-Australia response	Page
2.1 Reference pathways	**1**	*What are your views on the proposed approach for setting reference pathways to assess progress, including strengths, limitations and any alternative approaches that should be considered?*	Support science-based, 1.5°C-aligned reference pathways, expanded beyond emissions to include measurable indicators of transition readiness (e.g. committed decarbonisation capex, green-project FID conversion, renewable build and connection rates, and equitable electrification uptake).	4
2.2 Major drivers of progress	**2**	*What signs are you seeing of emissions reductions across industries, businesses, households or investors? What barriers or delays to abatement are you observing?*	Renewables and household electrification are driving emissions reductions. Medium-sized businesses and transport represent the next major opportunity for low-cost electrification. Mixed policy signals and slow renewable deployment are constraining industrial decarbonisation.	5
2.3 Priority policy opportunities	**3**	*What do you see as the top priorities for climate policy reform and why?*	Prioritise fossil fuel transition planning, faster renewable and electrification deployment, and reform of distorting policies to support net-zero industries.	6
	4	*What actions could help households adopt solar, batteries, electric vehicles and home electrification?*	Treat electrification as an equity and cost-of-living agenda. Design options by tenure type, because the barriers differ for rental/landlords versus owner occupiers.	7
	5	*What are the key barriers to the growth of low-emissions industries in Australia? What government policies or initiatives could most effectively strengthen demand for Australian low-emissions products and services, including low-carbon liquid fuels? Please provide evidence or analysis to support your views.*	Unlock low-cost renewable energy, create demand for green products at home and abroad, and deploy concessional finance to scale low-emissions industries. Provide long-term policy certainty to investors through legislated targets and durable signals.	7
3.3 Safeguard Mechanism	**6**	*6A) Advantages/disadvantages of continuing the proportional-share baseline decline rate beyond 2030, and how it*	Decline rates should be set higher than current levels to ensure Australia has a higher chance of	10

contribution to targets		*should account for the 2035 target range. 6B) If a different approach should be used, what and why.*	reaching the upper end of its 2035 target	
	7	*Should decline rates differ across facilities or sectors beyond existing arrangements for trade exposed, baseline adjusted (TEBA) facilities? What evidence would support differentiation, and what principles should guide how any differentiation is applied?*	Differentiation already occurs under the Safeguard Mechanism. Differentiation should be more explicit to address the different longer term economic futures that different sectors have, with more stringent limits placed on coal, oil and gas production and processing.	10
3.4 Onsite abatement	**8**	*How should we assess the extent to which the Safeguard Mechanism is driving onsite abatement? What metrics, data sources or methods should we use, and how should we account for changes in production, operational conditions and emissions variability?*	Incentivise on-site abatement over offset use, with ACCUs used to complement, not replace, genuine emissions reductions.	11
	9	*What evidence is available on onsite abatement activities at Safeguard facilities, including for activities planned, underway or completed since the reforms commenced? Where possible, please provide information on emissions impacts, timing, costs and barriers.*		
	10	*Should the Safeguard Mechanism play a stronger role in encouraging onsite abatement, relative to allowing flexibility through Australian Carbon Credit Unit Scheme (ACCU) use? • What objectives should guide this assessment? • Are additional incentives or constraints warranted? • If so, what options should be considered and why?*		

Q1: Views on proposed approach for setting reference pathways

WWF-Australia supports the proposed reference pathway approach as a pragmatic method for assessing whether Australia remains on track towards its emissions reduction and broader economic objectives. We welcome the Authority's intention to assess economic transformation through green industry development, alongside emissions outcomes.

Reference pathways for emissions should be grounded in independent, science-based transition pathways.

Reference pathways should be grounded in independent, science-based transition pathways**.** One option would be to use internationally recognised 1.5°C-aligned scenario literature to establish indicative sectoral emissions-intensity trajectories for Australian industry. These trajectories could then serve as an external reference point against which the adequacy of Safeguard benchmarks and decline rates can be assessed.

This approach would provide transparency about whether the emissions reductions are consistent with the rate of industrial transformation required under credible global 1.5°C pathways. It would also help bridge the disconnect between long-term climate scenario analysis and facility-level regulatory settings.

A science-based reference pathway would not need to determine compliance obligations directly, but it could provide an objective benchmark for evaluating whether current settings are driving sufficient physical emissions reductions or relying disproportionately on flexibility mechanisms such as offsets. Such an approach could also inform future calibration of post-2030 benchmarks as new scientific evidence and scenario datasets become available.

Metrics for economic transformation should measure the enabling conditions for a green export economy and, critically, Australia's preparedness for the decline of its fossil fuel exports.

As this aspect of the framework matures, consideration should be given to complementary indicators that capture industrial competitiveness of Australia’s green export opportunities and economic risks associated to fossil fuel export decline. Given the emerging nature of the green economy and non-linear progress in first-of-a-kind industries, metrics will likely be qualitative and directional and must be regularly reviewed.

- **Green export industries:** It will be important to monitor the investment environment and Australia’s attractiveness compared to other markets. This includes investment indicators (pipeline, investor sentiment, projects reaching FID, total green commodity production), and enabling infrastructure indicators (e.g. transmission delivery, annual renewables deployment and total project pipeline, project approval timeframes, industrial precinct infrastructure, etc.).
- **Fossil fuel export decline**: WWF-Australia’s latest report, *Energy Crossroads*[1], highlights the risks of being unprepared for the global energy transition. Australia should monitor indicators of transition preparedness with regards to its exports. This could include monitoring exposure to changing international demand for fossil fuel exports, regional economic diversification, workforce transition outcomes, and the preparedness of communities and industries affected by structural economic change. Together, these indicators would provide a more complete picture of whether Australia is progressing towards a prosperous and resilient net zero future.

[1] WWF-Australia (2026), Energy Crossroads - why managing fossil fuel decline is key to Australia’s green export future

- **Social equity and nature outcomes**: Similarly, WWF-Australia believes that a fast energy transition is one that is fair and just, protects and restores nature, and works for local communities, First Nations peoples and households that currently face barriers to participation. First Nations peoples should be recognised not only as stakeholders in the transition, but as rights-holders whose self-determination, cultural governance, free, prior and informed consent, cultural heritage protection and equitable benefit-sharing must be embedded in transition planning and project assessment. We would recommend future pathway developments include indicators that monitor community acceptance and participation, workforce transition, First Nations rights and benefit-sharing, and nature-positive outcomes and environmental safeguards associated with the transition. For example, this could include the share of new clean-energy and transmission projects meeting strong biodiversity, First Nations governance and community-benefit standards. A renewable export economy will only be politically durable if Australians can see tangible benefits at home: this includes lower bills, better homes, cleaner transport, good jobs and more resilient communities. Progress indicators on social equity should reflect whether these benefits are reaching everyone, not only those already best placed to participate.

Recommendation: As the framework matures, the Authority should continue to broaden its metrics to include indicators of industrial transformation, investment, transition preparedness and the enabling conditions required for emerging low-emissions industries. This would help ensure the framework captures both the opportunities and risks associated with Australia's net zero transition. Future pathway development should also consider indicators that track social equity, workforce transition, community participation and nature-positive outcomes, recognising that a successful transition must be economically prosperous, socially just and environmentally sustainable.

Q2: Major drivers of progress and barriers to acceleration

Renewable energy and households are doing the heavy lifting of Australia's emissions progress.

WWF-Australia acknowledges and celebrates the progress Australia has made towards its emission reduction targets, particularly in electricity, household energy and increasingly passenger transport. The National Electricity Market (NEM) reached a record 46.5% renewables penetration in the first quarter of 2026, with rapid growth in renewables and storage weakening the link between Australia's electricity markets and volatile global fossil fuel markets[2,3]. Australian households are world-leading in the uptake of rooftop solar, and a global frontrunner in household batteries per capita, with more than 400,000 systems and 11.2GWh of storage installed through the federal Home Batteries Program[4]. On an industrial scale, Australia is also pulling ahead: strong investment has made it the world's third-largest market for utility-scale batteries, behind only China and the United States[5]. Australians are increasingly turning to electric and hybrid options when purchasing a new vehicle (~49% of new sales in Q2 2026)[6]. Continued acceleration in transport electrification will depend on ensuring charging infrastructure investment is ahead of the pace of EV uptake.

Drivers behind this progress are increasingly energy security and cost-of-living concerns, combined with falling technology prices and favourable policy settings (e.g. the federal Home Batteries program, the New Vehicle Efficiency Standard, the Capacity Investment Scheme).

[2] AEMO (2026), Quarterly Energy Dynamics Q1 2026
[3] DCCEEW (2026), Record renewables drive down bills
[4] PV Magazine (2026), Australia installs 400,000 home batteries in 10 months for 11.2 GWh
[5] ABC News (2026), How the west charged ahead in the mega battery race
[6] Australian Automobile Association (2026), Electric Vehicle Index

Mixed policy signals are surfacing as urgent barriers to address, particularly for industrial decarbonisation and capital allocation decisions.

Australian households have shown that fast, decentralised electrification is possible when economics and policy settings align. There is a real opportunity to make the benefits more equitable (e.g. for renters) and to match that speed and agility at the small-to-medium business level, where many of the same low-cost, quick-to-deploy technologies apply. Provided the barriers currently holding back these groups, including limited and inconsistent policy incentives and mandates, are addressed.

Mining, agriculture, heavy industry and heavy transport show little progress in comparison to households and electricity[7]. Emissions reductions depend on capital-intensive assets with long investment cycles. Policy clarity is therefore decisive in shifting investment decisions. WWF-Australia's latest report, *Energy Crossroads,* has identified Australia's contradictory policy settings as a driver of stagnation. Several legacy mechanisms continue to incentivise investment in existing industries over emerging ones, or lack the financial signal needed to favour green solutions over continued fossil fuel use. Striking examples of this are the diesel Fuel Tax Credit (FTC) - costing $10.8 billion in FY26, the Safeguard Mechanism's reliance on offsets over on-site abatement (see other sections), and Your Future Your Super (YFYS)[8]. These effects compound the challenge of mobilising the substantial upfront capital that large-scale decarbonisation and renewable projects require.

While large-scale renewable energy deployment is advancing, it is not at pace to meet the 82% renewables target by 2030[9]. It also falls short of the rate required to become a competitive green export superpower and support decarbonisation of trading partners. Only 2.3GW of large-scale renewable generation reached financial close in 2025, one of the lowest levels in a decade[10]. Investors and developers highlight transmission, approvals, community engagement and collapsing investor confidence as binding constraints. A related cited contradiction is the repeated extension of ageing coal plants, which sends conflicting signals to developers, investors and drives up power bills.

Further adding to risks is the rapid growth of data centres and AI infrastructure. While they can provide firmed offtake for renewable energy developers and potentially support the grid, it is critical that the evolving national standards ensure data centres energy needs are met with truly additional 100% renewable energy.

Q3-5: Priority policy opportunities

Australia must prioritise the acceleration of the renewables and electrification, prepare for the decline of fossil fuel exports, and realign policy settings so they support, rather than undermine, the transition.

WWF-Australia has identified the following critical priorities:

1) **Plan for the decline of fossil fuels:** Australian governments should develop a national fossil fuel export transition plan, supported by place-based regional diversification strategies, workforce transition planning, public disclosure of transition exposure and stranded asset risks, and clear managed-decline principles for coal, oil and gas production and processing. This planning should begin now, while export revenues and public capacity can still be directed towards building replacement industries and supporting communities through structural change.

[7] DCCEEW (2026), Quarterly Update of Australia's National Greenhouse Gas Inventory: December 2025
[8] WWF-Australia (2026), Energy Crossroads - why managing fossil fuel decline is key to Australia's green export future
[9] Renew Economy (2026), Australia will not hit 82 pct renewables by 2030, BNEF says, despite record solar and battery investment
[10] Clean Energy Council (2026), Clean Energy Australia 2026

2) **Build the system that replaces fossils:** Cheap renewable power is the foundation of Australia's economic future, but getting there requires faster deployment, wider access to the benefits, and development that protects nature and strengthens community trust. Households, small to medium businesses and local governments should be harnessed to accelerate electrification and renewable energy.
3) **Redirect policy and capital towards the transition:** Policy should clearly signal to investors and partners what future Australia wants to build. This requires rewiring policy settings that still favour fossil fuels, strategically deploying finite fossil revenues into the industries of the future, and ensuring public support is conditional on genuine decarbonisation. Public funding, concessional finance and industrial support should be tied to credible, science-based transition plans, delivery of onsite emissions reductions, community and First Nations benefit-sharing, and nature-positive project design, rather than providing blanket or open-ended subsidies that reward business-as-usual.

Other priorities are outlined on p.19-21 of our report[11].

Electrification and renewable energy must be treated as an equity and cost-of-living agenda to drive greater adoption across households.

The benefits of electrification are substantial: bill savings, higher comfort, greater resilience against energy shocks, and lower emissions. These advantages must reach renters, apartment residents and lower-income households too, not just those who already own their roof. Without deliberate policy, they flow first to households with capital, while renters, apartment residents and lower-income households are left behind and left paying more for longer. Policy support must distinguish and account for these realities. Rather than treating households as a single group, support should be distinct for owner-occupiers, renters and landlords, and apartment residents.

Australia should focus on bridging the green premiums faced by low-emissions industries across three fronts: unlocking low-cost renewable energy at speed and scale, creating lead markets and trade partnerships to build bankable demand, and mobilising concessional finance to close the capital gap facing first-of-a-kind projects.

Key barriers to the growth of low-emissions industries include:

1) **Availability of firmed low-cost renewable energy at scale:** As mentioned earlier, Australia's energy transition is not at the pace required for to support the creation of internationally competitive new industries and make Australia a priority investment destination for low-emission industries. The strain this places on energy-intensive industry is already visible in refinery closures and industrial rescue packages[12,13]. These cases illustrate a broader risk: without firmed renewable capacity delivered at the pace and price industry needs, Australia risks losing existing energy-intensive industries even as it seeks to build new green ones. The biggest opportunities for large-scale renewables acceleration lie in building community support, delivering win-win climate and nature outcomes, reforming the EPBC Act, and accelerating transmission upgrades. Regional communities and First Nations must be empowered through inclusive engagement, coordinated benefit-sharing, and targeted support to ensure lasting benefits.

2) **Lack of bankable demand for green products:** Government policy has focused heavily on increasing domestic supply of low-emissions products. However, a complementary focus is needed

[11] WWF-Australia (2026), Energy Crossroads - why managing fossil fuel decline is key to Australia's green export future
[12] Australian Financial Review (2025), Alcoa to take $1.35b hit from WA refinery closure, 220 jobs axed
[13] Renew Economy (2025), Australia's biggest aluminium smelter in closure talks, needs more renewables, faster

on understanding demand-side requirements in export markets. WWF-Australia's *The New Energy Security* work highlights that Australia's success in emerging green export industries will depend on a deep understanding of how key trading partners are decarbonising and where future demand for green commodities and services is likely to emerge[14]. A key risk is that investment decisions are made based on assumptions about future export demand that do not align with the policy settings, industrial strategies or import requirements of Australia's major trading partners. Continued engagement with trading partners and monitoring of evolving international demand should therefore be considered a critical component of Australia's transition planning and industrial strategy.

The lack of bankable demand for Australia's emerging green industries, such as green iron and steel, or green fuels, has consistently been a major barrier to reaching final investment decisions. WWF-Australia's recent report in partnership with Deloitte, *Creating the Pull*, examines the issue for green iron[15]. Our report flags that Australia has multiple green iron projects in the pipeline, yet none has reached a final investment decision due to a lack of confirmed buyers. **Governments should move from broad ambition to practical demand creation by using a sequenced package of procurement, product standards, disclosure requirements, time-limited offtake support and green trade partnerships. It calls for a "Green Trade Statecraft" approach built around three demand-side levers:**

- providing time-limited offtake support to help first-mover projects reach final investment decision
- creating lead markets by directing demand toward early adopter sectors such as vehicles, infrastructure and data centres, which could absorb early green steel supply and help bring down costs
- and strengthening green trade corridors with priority partners such as Japan, Korea and China, where Australia would export green iron in exchange for products manufactured using green steel.

Without these measures, the report warns Australia risks losing its first-mover advantage to competitors in the Middle East, who are already securing long-term offtake agreements with Asian steelmakers. The report identifies policy priorities for government for the industry to succeed in Australia.. These measures help de-risk investment and improve project bankability and internationally have been key to building lead markets and getting first-of-a-kind projects to commercial scale.

3) **Access to concessional finance:** First-of-a-kind, capital-intensive projects such as green iron and green steel carry a higher risk premium than proven technologies, pushing up the cost of capital at precisely the stage where projects are least able to absorb it**.** They often fall between venture capital and infrastructure finance, too capital-intensive and high-risk for the former, not yet proven enough for the latter. The Climate Capital Forum has highlighted that the binding constraint is execution: as of December 2025, only $1.3 billion of the $47 billion in announced Future Made in Australia funds had been deployed, with many funds announced over four years ago[16]. The Forum calls for accelerating deployment of already-committed capital by increasing delivery speed, risk appetite, and co-investment flexibility across ARENA, the CEFC and the NRF, alongside closing the early-stage cleantech financing gap through more flexible grant matching requirements. Targeted, time-limited concessional finance, paired with faster deployment and aggregator platforms that pool smaller projects into investment-ready portfolios, can help close this residual capital gap.

[14] WWF-Australia (2026), The New Energy Security: Australia's strategic choice from fossil exports to renewable partnerships
[15] WWF-Australia (2026), Creating the Pull: demand-side levers for green iron and steel
[16] Climate Capital Forum (2026), Getting clean energy capital moving

Summary:

- WWF-Australia urges Australian governments to focus on the following policy priorities
  1) plan for the decline of fossil fuels,
  2) build and accelerate renewables and electrification, and
  3) redirect policy settings towards the transition.

- To accelerate household electrification, policy must close the gap between households that can already access its benefits and those currently left behind

- To unlock green export industries, government must focus on
  1) unlocking low-cost renewable energy at speed and scale while delivering positive outcomes for nature, communities and First Nations
  2) creating bankable demand for green commodities at home and abroad, through procurement, mandates and mutually beneficial trade relationships
  3) mobilising concessional finance to close the capital gap facing first-of-a-kind projects

Q6-7: Safeguard Mechanism's contribution to targets

The Safeguard Mechanism should maintain a proportional contribution to Australia's climate targets, with post-2030 decline rates aligned to the upper end of the 2035 target range.

The Safeguard Mechanism is currently Australia's most substantive climate policy lever to address large industrial and resource emissions. As such it must play a significant and proportionate role in helping to meet Australia's 2030 and 2035 emissions reduction targets.

Decline rates should be calibrated to achieve the higher end of the target to ensure Australia moves towards a target aligned with 1.5 degrees. Previous analysis commissioned by WWF found that in order for Australia's 2035 emissions reduction target to support global efforts to limit temperatures to 1.5°C, it must be at least 90% below 2005 levels by 2035 and net zero by 2038[17]. Australia's current 2035 target falls well short of this, as such it is critical that policy ambition strives for the higher end of the 2035 range.

Modelling by the Australian Conservation Foundation and Reputex indicates that higher decline rates will help reach the higher end of the target range, with a decline rate of 6.8% from 2030 to 2035 reflecting a 70% by 2035 target[18]. Maintaining the current 4.9% decline rate to 2035 reflects a 66% by 2035 target.

The Safeguard Mechanism should apply stronger and differentiated treatment to coal, oil and gas facilities to reflect their role in Australia's emissions profile and transition pathway.

It is critical that greater differentiation is applied in the Safeguard Mechanism towards the fossil fuel sector. Specifically, decline rates should differentiate for the coal, oil and gas sectors. Differentiation already occurs within the scheme in numerous ways, such as Shell's Prelude LNG facility and the Northern Territory's Beetaloo Basin[19].

The share of emissions from fossil fuel production and processing is likely to increase under the SM in coming years due to the inclusion of 30 million tonnes worth of coal and gas project expansions between now and 2030[20].

Unlike other industries such as iron ore, the future of coal, oil and gas production in Australia must be managed into decline in order to align with global climate goals. Our recent Energy Crossroads report points out the risk to Australia from an unmanaged decline of its fossil fuel production, and how policies are currently pulling in two different directions at once[21]. Moreover, modelling by Climate Resource shows that based on countries current climate commitments, Australia's fossil fuel exports are in terminal decline[22].

WWF-Australia supports differentiation for this sector and consideration of options to do so such as:

- Different baseline decline rates increasing the rate at which coal and gas facilities must drop their emissions-intensity over time to zero
- Penalties for excessive reliance on offset credits: a fee, or lowering the value of an offset in certain circumstances
- The creation of new zero baselines for certain activities (e.g. coal mine expansions).

[17] WWF (2025), https://assets.wwf.org.au/image/upload/f_pdf/WWF_Australia_Brief_2035_Climate_Target_July_2025
[18] Climate Council (2026), https://www.climatecouncil.org.au/resources/modelling-fossil-fuels-and-the-safeguard-mechanism/
[19] Naru Research (2026), https://naruresearch.com.au/prelude-and-the-underseved-smcs/
[20] Climate Council (2026), https://www.climatecouncil.org.au/resources/modelling-fossil-fuels-and-the-safeguard-mechanism/
[21] WWF (2026), https://assets.wwf.org.au/image/upload/f_pdf/2307_Energy_Crossroads_-_final_1
[22] Climate Resource (2026), Australia's coal outlook in a warming world

- Options that sit alongside the scheme (e.g. removal of Fuel Tax Credits for coal miners, electrification requirements, etc.)

Q8-10: On-site abatement

Based on the historical data, compliance under the Safeguard Mechanism has been achieved primarily through the purchase and surrender of offset units, chiefly Australian Carbon Credit Units (ACCUs), rather than through on-site emissions reduction measures. Government projections indicate that offsetting will remain the primary means of reducing net emissions until at least 2035, outpacing on-site abatement[23].

WWF-Australia considers that more efforts need to be undertaken to ensure the Safeguard Mechanism prioritises onsite abatement options and minimises the use of ACCUs, particularly for a differentiated fossil fuel sector. Facilities relying heavily on ACCUs should be required to demonstrate credible, science-based onsite abatement plans so offsets don't substitute for structural decarbonisation. Conditionality is the mechanism that keeps flexibility from becoming a loophole.

[23] DCCEEW (2025), https://www.dcceew.gov.au/climate-change/publications/australias-emissions-projections-2025

A future made *with* Australia

A successful transition to net zero is not a zero-sum game, and it is not a simple quick fix. Australians, along with our key Asia-Pacific trading partners, must be assured that the transformation is a collaborative and mutually beneficial process, undertaken with them, not imposed upon them. Done right, the transition to net zero can strengthen Australia's economic competitiveness, create good jobs, and enhance energy security nationally and regionally.

Australia has the technical expertise, culture of innovation, and abundant renewable energy resources needed to power a fast, ecologically sound, and socially just energy transition. We can support our communities, our neighbouring countries, and our economies to adapt and build resilience to the unavoidable impacts of climate change, and we can do it in ways that protect nature and ensure that everyone shares in a prosperous and healthy, net zero future.

For more information

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