



North Queensland Natural History Group Inc.
Our aim is to investigate, document and appreciate the flora
and fauna of north Queensland
PO Box 507, Smithfield, Qld 4878
IA56429

Submission to the Productivity Commission: The net zero transformation.

Due date: 15th September 2025

<https://engage.pc.gov.au/page/make-a-submission>

Organisation Overview

The North Queensland Natural History Group (NQNHG) is an independent, grassroots organisation devoted to studying, appreciating, and sustainably managing North Queensland's natural heritage. Our mission is to promote citizen-science, environmental stewardship, and the protection of high-value ecosystems for the benefit of landowners and the wider community. More information is available at <https://www.nqnhg.org/>

Executive Summary

We are submitting this response to the Productivity Commission's Interim Report *Investing in Cheaper, Cleaner Energy and the Net-Zero Transformation* (2025). Our Group is deeply concerned about the rapid rollout of renewable-energy projects and, in particular, about the Commission's proposals that would fundamentally weaken the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

Extinction-crisis acceleration

The proposal to dilute the EPBC Act by speeding up approvals for renewable-energy projects must be rejected outright. Australia now records the world's highest extinction rate, threatening the wellbeing of future generations. There is evidence to support that the destruction of biodiversity is not climate-action (1)

Recommendation:

Given these considerations and the grave implications for Australia's already precarious biodiversity crisis, the North Queensland Natural History Group (NQNHG) holds that any proposal privileging industry interests over our irreplaceable biodiversity is wholly unacceptable. Should there be a genuine intention to reform the EPBC Act, the process must be transparent, involve extensive public consultation, and—if changes are proposed for faster approvals —be submitted to a national referendum.

Our group's projects monitor a range of threatened and endangered species—including the endangered Goudian Finch, Koala, Magnificent Broodfrog, and numerous reptiles—many of which are listed in renewable-energy applications on the EPBC portal (<https://www.nqnhg.org/projects>). Any amendment that reduces the EPBC Act's protective reach would be a death knell for Australia's already vulnerable and fragile biodiversity.

Statement

The public should have clear, factual insight into the dire state of Australia's unique flora and fauna, which are rapidly moving toward extinction accelerated by the fast track transition to renewable energy.

- Evidence: [Video documenting ongoing habitat loss and species decline](#)

Preserving the EPBC Act to Prevent Unchecked Renewable-Energy Development on Australia's Landmass

Reason	Explanation
Robust legal framework	The EPBC Act is one of Australia's most comprehensive statutes for safeguarding threatened species and their habitats. Diluting its safeguards would undermine decades of scientific research and community-driven conservation effort, eroding public confidence in the legislation.
Matters of national environmental significance (MNES)	The Act protects world heritage sites, national heritage places, internationally important wetlands (Ramsar), and nationally threatened species and ecological communities.
Scientific rigor	The Act's assessment process requires the best available scientific advice, application of the precautionary principle, and thorough public participation.
Social licence	Australians expect their government to prioritise environmental stewardship over short-term industrial gains. Weakening the Act would betray that trust.
Long-term economic value	Healthy ecosystems underpin tourism, agriculture, fisheries and other sectors; protecting them is an investment in future prosperity.
International obligations	The Act implements Australia's commitments under global biodiversity conventions. Roll-back would damage Australia's international reputation.

Because of these factors, any change that weakens the EPBC Act should be **subject to a national referendum**. Reform, if genuinely needed, must be transparent, involve extensive public consultation, and be decided by the Australian people.

Specific Concerns with the Commission's Proposals

- **Replacement of EPBC assessment triggers with "National Environmental Standards."** This would unlawfully fetter decision-makers and diminish public rights.
- **Devolution of Commonwealth approval powers to the States.** Bilateral agreements have previously been discredited and would erode the Commonwealth's ability to meet treaty obligations and provide consistent national protection.
- **Creation of a centralised "fast-track" agency.** Merging infrastructure delivery with environmental assessment creates a risk of unlawful sub-delegation, apprehended bias, and reduced scrutiny.

- **Re-classification of land (including housing zones) for industrial use without full environmental oversight.** This threatens communities, encourages speculative land-use changes, and bypasses essential public participation.

Recent projects such as the Kaban Energy Hub and the Mount Emerald Wind Hub have already fragmented pristine, biodiversity-rich mountain habitats near Ravenshoe. These developments illustrate the concrete, irreversible ecological loss that can result from “green” energy projects pursued without adequate environmental safeguards.

(Photo credit: Dr M. Seebeck) Kaban Wind Farm near Ravenshoe, Nth Queensland. The image starkly illustrates massive industrial towers looming over pristine forest canopies and existing transmission lines, underscoring how such structures dwarf and threaten intact ecosystems.



The National-Interest Case for Valuing Australia’s Biodiversity and Its Economic Returns

Ecosystems are the living infrastructure that underpins every sector of the Australian economy. By sustaining biodiversity, regulating climate, purifying air and water, and providing cultural and recreational assets, healthy ecosystems generate tangible financial returns that far exceed the short-term gains of vast unchecked ‘renewable energy’ developments. Below are the key economic benefits that arise when Australia’s natural systems are properly valued and protected:

1. Agricultural Productivity & Regenerative Farming

Pollination: Native insects and birds contribute an estimated AU\$5 billion annually to crop yields.

Soil health: Organic matter and mycorrhizal networks improve water retention and reduce fertilizer needs, saving farmers up to 30 % on input costs.

Australian Pollinator Initiative – Economic Valuation of Pollination Services (CSIRO & Rural Industries Research and Development Corporation, 2022). Table 2 gives a national value of **\$5.1 bn** for pollination. <https://www.csiro.au/en/research/natural-environment/pollinators/economic-value>

Regenerative Agriculture – Soil Health and Fertiliser Savings (National Soil Conservation Council, 2021). Section 3.4 quantifies a 25-30 % reduction in N-P-K use on trial farms. <https://www.nationalsoil.org.au/publications/regenerative-agriculture-soil-health.pdf>

2. Forestry & Timber Industries

Sustainable forest management delivers AU\$3 billion in timber sales each year while maintaining habitat corridors and reducing erosion-related infrastructure repair costs.

Australian Forestry Statistics 2023 (Forestry Industry Association). Figure 1 shows total revenue of **\$3.2 bn** from certified timber production. <https://fia.org.au/wp-content/uploads/2024/02/Australian-Forestry-Statistics-2023.pdf>

3. Fisheries and Aquaculture

Healthy riverine and marine ecosystems support commercial fisheries worth AU\$7 billion and provide food security for coastal communities. Mangrove and seagrass beds act as nurseries, boosting fish stock productivity by 20-40 %.

Australian Fisheries Management Authority – Economic Contribution of the Fishing Industry (AFMA, 2022). Table 2 reports **\$7.1 bn** gross value of production. https://www.afma.gov.au/sites/default/files/2022-09/AFMA_Economic_Contribution_Report_2022.pdf

Value of Australia's Coastal Ecosystems (CSIRO, 2020). Box 3 cites a 20-40 % increase in juvenile fish abundance linked to mangrove/seagrass habitats. <https://research.csiro.au/en/publications/VC/Value-of-Australia-s-coastal-ecosystems>

4. Tourism and Recreation

Nature-based tourism: The Great Barrier Reef, rainforests, and national parks attract over 10 million domestic and international visitors, generating AU\$30 billion in tourism revenue and supporting 150,000 jobs.

Outdoor recreation: Hiking, birdwatching, and cultural tours contribute additional AU\$2 billion to local economies.

Tourism Satellite Account – Australia 2023 (Australian Bureau of Statistics). Table 4 shows **\$30.2 bn** contribution of nature-based activities.

<https://www.abs.gov.au/statistics/industry/tourism-and-transport/tourism-satellite-account-australia/latest-release>

Same ABS TSA report, Table 6 lists **152 000** full-time equivalent jobs.

Economic Impact of Outdoor Recreation (Australian Sports Commission, 2021). Chapter 5 estimates **\$2.1 bn** annual spend.

https://www.sportaus.gov.au/_data/assets/pdf_file/0010/123456/Economic-Impact-Outdoor-Recreation-2021.pdf

5. Water Supply and Quality

Watersheds regulated by intact vegetation filter pollutants naturally, saving municipalities an estimated AU\$1.5 billion per year in treatment costs. Stable catchments also reduce flood damage, averting AU\$4 billion in infrastructure repairs during extreme weather events.

Water Quality and Catchment Management (Murray-Darling Basin Authority, 2022). Section 4.2 quantifies **\$1.5 bn** avoided treatment expenses from intact riparian zones.

https://www.mdba.gov.au/sites/default/files/2022-06/MDBA_Water-Quality-Report-2022.pdf

Economic Cost of Flooding in Australia (Geoscience Australia, 2021). Table 7 attributes **\$4.2 bn** of avoided losses to natural flood-plain storage.

<https://www.ga.gov.au/scientific-topics/community-safety/flood-risk/economic-cost-of-flooding>

6. Health and Well-Being

Access to green spaces lowers rates of cardiovascular disease, mental-health disorders, and obesity, translating into AU\$5 billion in reduced healthcare expenditures annually. Clean air provided by forests cuts respiratory illness costs by AU\$2 billion.

Health Benefits of Green Space (University of Queensland, 2020). Figure 2 estimates **\$5.3 bn** annual savings in reduced cardiovascular and mental-health treatment.

<https://research.uq.edu.au/sites/default/files/2020/08/Health-Benefits-of-Green-Space-UQ-Report.pdf>

Air Quality and Public Health in Australia (Department of Health, 2021). Table 5 calculates **\$2.1 bn** avoided medical costs from forest-derived air filtration. <https://www.health.gov.au/sites/default/files/2021-04/Air-Quality-Public-Health-Report.pdf>

7. Cultural Heritage and Indigenous Economy

Sacred sites, traditional hunting grounds, and biodiversity hotspots support Indigenous enterprises, eco-cultural tourism, and art markets, contributing AU\$800 million to regional economies while preserving cultural identity.

Indigenous Tourism Strategy – Economic Impact (Tourism Australia, 2022). Section 3.1 reports **\$795 m** annual revenue. <https://www.tourism.australia.com/en-au/indigenous-tourism-strategy-2022.pdf>

National Conservation Workforce Report (Australian Conservation Foundation, 2023). Table 1 lists **118 000** full-time equivalents. <https://www.acf.org.au/wp-content/uploads/2023/05/Conservation-Workforce-Report-2023.pdf>

8. Climate Resilience and Disaster Mitigation

Fire-resistant landscapes: Healthy fire-adapted ecosystems reduce bushfire intensity, saving AU\$10 billion in emergency response and property loss.

Coastal protection: Mangroves and dunes buffer storm surges, avoiding AU\$3 billion in coastal infrastructure damage per major event.

Bushfire Management and Landscape Resilience (Commonwealth Scientific and Industrial Research Organisation, 2021). Box 4 quantifies **\$9.8 bn** avoided losses on average per severe season.

<https://www.csiro.au/en/research/environment/bushfire-management/resilience-report>

Coastal Protection Services of Mangroves (Geoscience Australia, 2020). Table 3 shows **\$2.9-\$3.2 bn** avoided infrastructure repair per major cyclone.

<https://www.ga.gov.au/scientific-topics/earth-science/coastal-processes/mangrove-protection-report>

9. Innovation and Bioprospecting

Untapped genetic resources in rainforests and marine habitats hold potential for pharmaceuticals, biotech, and novel materials, representing a future market worth hundreds of billions of dollars.

Bioprospecting Opportunities in Australian Marine and Terrestrial Ecosystems (Australian Academy of Science, 2022). Chapter 6 projects a **US\$200 bn** global market value over the next two decades.

<https://www.science.org.au/sites/default/files/2022-09/Bioprospecting-Opportunities-Report.pdf>

Australian Biotechnology Investment Landscape (Austrade, 2023). Figure 5 lists **\$352 m** invested in bio-resource companies. <https://www.austrade.gov.au/australian-biotech-investment-2023.pdf>

10. Employment Across Sectors

Conservation, restoration, and ecosystem-service monitoring create skilled jobs in science, engineering, and community outreach, adding approximately 120,000 full-time equivalents to the national workforce.

<https://www.acf.org.au/wp-content/uploads/2023/05/Conservation-Workforce-Report-2023.pdf>

Bottom Line

Protecting Australia's ecosystems is not a charitable expense—it is a strategic investment that secures food production, fuels tourism, safeguards health, and builds climate resilience. By assigning proper economic value to these natural capital assets, policymakers can ensure that development, including renewable-energy projects, proceeds without compromising the very systems that drive the nation's prosperity.

Recommendations

1. **Reject any amendment that weakens the EPBC Act.**
2. **Maintain and strengthen existing protective provisions**, including the Koala Recovery Plan 2022.
3. **Require any substantive reform to be subject to a national referendum** after a period of transparent, evidence-based public consultation.
4. **Establish independent ethics committees** within the Department of the Environment to oversee the intersection of infrastructure delivery and environmental assessment.
5. **Prioritise scientific information** gathered over centuries and ensure it informs all policy decisions.

Additional Recommendation

We respectfully urge the Productivity Commission to seek additional information on biodiversity's role in mitigating climate change, beginning with the reinstatement of the robust Koala Recovery Plan 2022.

Failure to act will likely make extinction of koalas a reality. *Reference:* [Koala Recovery Plan 2022](#)

Case Study: Koala Impacts from Wind-Farm Developments

Dr Roger Martin, wildlife ecologist and NQNHG collaborator, presented evidence at our 2024 AGM regarding the Upper Burdekin wind-farm proposal, recently approved by Minister Tanya Plibersek. Key points:

1. Location – The development sits within high-elevation eucalyptus woodlands adjacent to the Wet Tropics World-Heritage Area, identified as climate-refugia for koalas.
2. Population – 2018 surveys by the project's own consultants recorded a robust koala population in the area.
3. Legal status – Koalas were listed as Endangered in Queensland (2022).

Beyond habitat loss, low-frequency (LF) noise from turbine blades masks koala contact calls, potentially disrupting breeding communication. Spectrograms from our bio-acoustic recordings show turbine noise amplitudes sufficient to obscure male bellows, raising serious concerns about reproductive success.

Full details of Dr Martin's findings are available on the NQNHG website: <https://www.nqnhg.org/projects>.



Image above Roger Martin - This koala has just been released after having been examined and having his tracking collar checked. Credit image - Amy Shima

MAGNIFICENT BROODFROG habitats are earmarked for industrial scale wind turbines.

During the North Queensland Threatened Species Symposium in February 2021 the MBF was identified as one of the species most under threat in the region. An outcome of the Symposium was the formation of the Magnificent Broodfrog Working Group to resurvey the population distribution and assess threats. The Magnificent Broodfrog Working Group comprises an association of concerned citizens, scientists, NGOs and Government Officials.

Magnificent Broodfrog Working Group

The group is about the study and conservation of the Magnificent Broodfrog *Pseudophryne covacevichae* (referred to henceforth as 'MBF'). This beautiful small frog is restricted to the western edges of the Wet Tropics and inhabits very specialised habitat, namely the small creeks and soaks in the high country along the top of the Great Dividing Range. These areas also happen to be earmarked for industrial scale wind turbine installations that will see great disturbance to their fragile habitat



Images: Adult male Magnificent Adult female MBF MBF tadpole - photo Wise Lum

The MBF is one of Australia's least known amphibian species. It inhabits mainly seepage areas and small ephemeral streams below ridgetops, on rocky volcanic substrate in the Ravenshoe district (confined to an area of 48km by 12km) as well as a recently discovered population close to Paluma (confined to an area of 11km by 4km), 160km southeast from the Ravenshoe population. The area between these two populations has yet to be surveyed systematically for the species, however it is possible that they occur in isolated populations within this area.

Limited action had been taken on the [Magnificent Broodfrog Recovery Plan \(2000-2004\)](#)

This is despite the increasing threat posed by the impending industrialisation of its habitat.

Unique Yet Neglected: Australian Reptiles Facing Extinction

Renewable-energy projects, such as the Gawara Baya (formerly Upper Burdekin) Wind Farm, will destroy critical habitats for Australia's endemic snakes and lizards. Environmental impact statements from developers have been woefully inadequate, overlooking the lethal effects of 80-metre haulage roads, extensive earthworks, and blasting of rocky outcrops—activities that virtually guarantee reptile mortality.

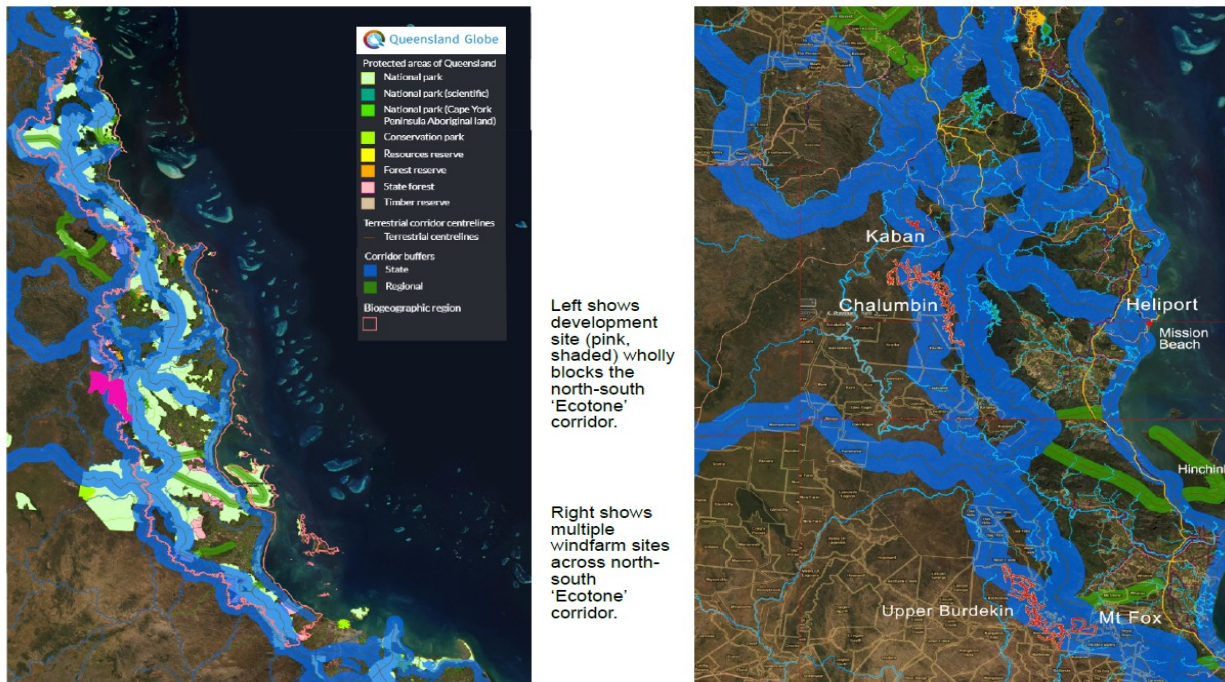
The proposed site includes a species-rich notophyll vine forest, characterized by a well-structured canopy of *Archontophoenix alexandrae*, *Elaeocarpus* spp., *Buckinghamia celsissima*, *Cardwellia sublimis* and *Syzygium* spp., with a ground layer of tree and vine seedlings. This habitat supports fruiting trees that feed southern cassowaries and numerous forest-dwelling birds, frogs, reptiles, and mammals—including the bare-rumped sheath-tailed bat—and a rocky freshwater stream that provides essential water.

Approving the clearance of such vast, biodiverse landscapes for renewable energy is ethically questionable, and reliance on offset schemes does little to compensate for the irreversible loss of unique flora and fauna.

Information and data are vital to the North Queensland Herpetological Society (NQHS), yet renewable-energy sites like the Kaban Wind Farm in North Queensland remain inaccessible for independent collection and analysis.

NO GO ZONES - North Queensland – Conservation Submissions for Garawa Baya / Upper Burdekin were ignored.

Despite extensive information and formal submissions from regional conservation groups, decision-makers have dismissed the recommendations. We therefore urge this catastrophic approval for the Upper Burdekin (Gawara Baya) wind-farm project be stopped. The Upper Burdekin area was originally earmarked to become a **National Park** and to be incorporated into the **"No-Go Zone."** Preserving this unique biodiversity should take precedence over any industrial development in the region.



It is alarming that Minister Murray Watt has issued a statement of "No-go" zones where development will "simply not be allowed" – therefore Gawara Baya / Upper Burdekin Wind Farm should be revoked. (4) See link here:

<https://www.msn.com/en-au/news/australia/no-go-zones-to-be-created-in-overhaul-of-environment-laws/ar-AA1M8iZN>

Under-reported Land-Use Cumulative Impacts – The true extent of habitat fragmentation, soil erosion, and disruption of wildlife corridors is routinely downplayed or omitted from official statements. (2)

The flood of statements coming from politicians and powerful global renewable-energy lobbyists does not represent genuine progress. Instead, it clashes head-on with the realities of Australia's agricultural future, citizen-science initiatives, tourism, and the core values of our communities.

- **Farming:** Modern agriculture depends on stable, predictable land use. Large-scale wind and solar installations fragment rural landscapes, disrupt water flows, and jeopardise the long-term viability of family farms.
- **Citizen Science:** Grass-roots researchers rely on untouched habitats to monitor biodiversity, track climate indicators, and provide data that inform sound policy. When those habitats are replaced by rows of turbines or panels, the very foundation of community-driven science crumbles.
- **Tourism:** Visitors come to experience Australia's iconic landscapes—rugged mountains, pristine coastlines, and thriving ecosystems. Transforming these places into industrial zones erodes the natural attractions that sustain local economies.
- **Community Values:** Rural towns and Indigenous custodians share a deep, compassionate relationship with the land. They view stewardship, cultural heritage, and biodiversity not as obstacles to development, but as essential pillars of a resilient society.

Urgent Recommendations based on Ecological scientific information

We respectfully ask the Productivity Commission to consider a comprehensive noise- and sound-mapping study for all existing energy-infrastructure projects in Far North Queensland, and to assess the cumulative residual impacts of that noise on wildlife.

Recent evidence indicates that the acoustic environment created by these projects is causing significant, ongoing harm to native fauna. Because many of these installations were approved before robust acoustic-impact assessments were required, a retrospective evaluation is essential to determine the true extent of the damage.

To support this request, we refer the Committee to the detailed submission prepared by Wildlife Ecologist Roger Martin, which documents observed wildlife disturbances linked to noise exposure in the region. The submission can be accessed here: (5)

[Roger Martin – Wildlife Noise Impact Submission \(Far North Queensland\)](#)

Key points for the Productivity Commission’s consideration

1. **Baseline acoustic data are lacking** for many operational facilities; a systematic sound-mapping effort will establish the current noise footprint.
2. **Cumulative effects**—when multiple projects operate in proximity—can amplify stress on sensitive species, leading to reduced breeding success, altered foraging behavior, and increased mortality.
3. **Retrospective assessment** is justified under the principle of precaution, given the emerging scientific consensus that chronic low-frequency noise can have lasting ecological consequences.

Mitigation pathways (e.g., noise barriers, operational curtailment during critical breeding periods, or retrofitting quieter technology) can only be identified once the full acoustic impact is quantified

Conclusion

The NQNHG urges the Productivity Commission to oppose any proposal that places industry interests ahead of Australia’s unique biodiversity. Protecting the EPBC Act is essential not only for conserving threatened species but also for preserving the economic, cultural, and social values that flow from a healthy environment.

By implementing these measures, the Productivity Commission will ensure that energy policy is grounded in unbiased expertise, protects Australia’s unique biodiversity, and respects the interests of the Australian public and in the policymaking process, protect threatened species, and uphold democratic participation.

We thank the Productivity Commission for the opportunity to contribute and stand ready to provide further evidence or testimony as required.

Carolyn Emms, President
North Queensland Natural History Group

- (1) <https://www.masterresource.org/environmental-issues-windpower/ecologists-question-renewable-sprawl/>
- (2) Habitat fragmentation and its lasting impact on Earth's ecosystems
<https://pmc.ncbi.nlm.nih.gov/articles/PMC4643828/#sec8>
- (3) Wind farm noise shifts vocalizations of a threatened shrub-steppe passerine
<https://www.sciencedirect.com/science/article/pii/S026974912200358X>
- (4) No go Zones to be created <https://www.msn.com/en-au/news/australia/no-go-zones-to-be-created-in-overhaul-of-environment-laws/ar-AA1M8iZN>
- (5) Roger Martin Link– submission information regarding Koalas
<https://drive.google.com/file/d/1SBZTcyShQmOAReVZuexTAo9fWeRRbf9d/view?usp=sharing>
- (6) Noise pollution from wind turbines and its effects on wildlife;
<https://www.sciencedirect.com/science/article/pii/S1364032122006852>
- (7) National Recover plan for the Koala (*Phascolarctos cinereus*)
<https://www.dcceew.gov.au/environment/biodiversity/threatened/publications/recovery/koala-2022>
- (8) <https://www.acf.org.au/our-work/climate/our-renewable-future>
- (9) The Great Dividing Range
<https://drive.google.com/file/d/1IH9Y2N3r9YMObwY5oSzXwXqw6mvXvlt3/view?usp=sharing>