Submission to the review of Tasmania's Climate Act 2008

Submission into the 2021 Review of the Climate Act 2008 by the Tasmanian Government

The Wilderness Society Tasmania pays its respects to the traditional owners of lutruwita/Tasmania, the palaw-pakana peoples and their Elders past and present. We acknowledge lutruwita/Tasmania is sovereign Aboriginal land that was never ceded and that, for land justice to take place, it must be returned to its rightful owners.

 First published June 2021.

Cover photo: Bioluminescence at Eagle Hawkneck, lutruwita/Tasmania, by Mason Clay, with thanks. Increasing presence of bioluminescence around lutruwita/Tasmania is a hallmark of climate change-driven warming seawater.
www.instagram.com/masonclayimagery

Wilderness Society
LUTRUWITA / TASMANIA
Life. Support.

Contents

Lutruwita/Tasmania: Climate & Biodiversity snapshot

Tasmania's greenhouse gas emissions are rising not falling. There are over 650 threatened species and more in decline but not yet threatened. Earlier this year, 19 ecosystems in Australia were identified as in decline, two - native forests and kelp forests - in lutruwita/Tasmania.

A powerful solution to the state's rising emissions and declining species is protected native forests.

To be a true climate and biodiversity leader, governments must work with nature, not against it. Natural capital and thriving, intact biodiversity are key opportunities—economically, socially and for ecosystem and climate restoration. An integrated climate and biodiversity policy framework is vital, and urgent.

Intact natural forests are indispensable for averting climate catastrophe. Reducing deforestation and degradation are one of a handful of response options that offer significant mitigation without high-risk trade-offs.

The global evidence provides options for lutruwita/Tasmania to protect forests and mitigate climate change and species decline. lutruwita/Tasmania's forests must be supported and managed to reach their full ecological potential—proforestation—for climate , biodiversity, social and economic reasons.

We are already on our way, with demonstrable climate and biodiversity outcomes delivered arising from changed forest policies in the last decade. We need to build on this. Managing PTPZ and FPPF forests for their carbon and species values affords multiple benefits—and help tackle climate change, putting Tasmania in a leadership position nationally, and internationally.

Lutruwita/Tasmania: Rising CO2 & greenhouse gas emissions

Rising greenhouse gas emissions

Total GHG emissions 1990: 4,719.18 Gt (1,000 tonnes)

Total GHG emissions 2019: 5,475.28 Gt (1,000 tonnes)

Rising CO2 emissions

Total CO2 emissions 1990: 8261.1 Gt/CO2 equivalent AR5

Total CO2 emissions 2019: 8360.69 Gt/CO2 equivalent AR5

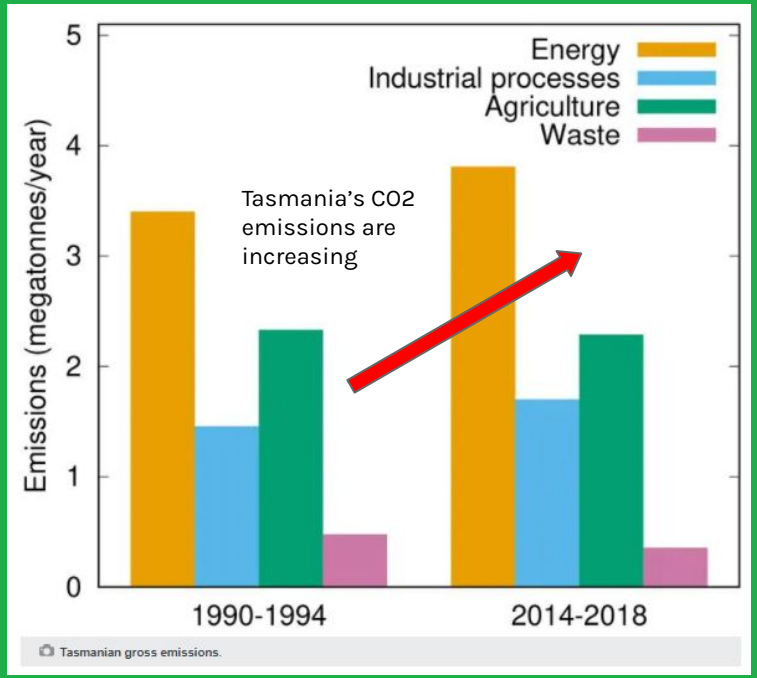
Data sets taken from National Greenhouse Gas Inventory – Paris Agreement Inventory

Tasmania's greenhouse gases compared here are co2, black carbon (soot), carbon monoxide, cf4, c2f6, nitrogen oxides, methane, nitrous oxide, non-methane VOCs, soot (PM2s), soot (PM10s), sulphur dioxide.

Tasmanian Inventory says "no data available" on following greenhouse gases: HFC-32, HFC-41, HFC-43-10mee, HFC-125, HFC-134, HFC-134a, HFC-143, HFC-143a, HFC-152a, HFC-227ea, HFC-236fa, HFC-245ca, HFC-245fa, HFC-365mfc, Unspecified mix of HFCs, C3F8, C4F10, c-C4F8, C5F12, C6F14, Sulphur Hexafluoride

lutruwita/Tasmania's gross emissions (including CO2) continue to rise

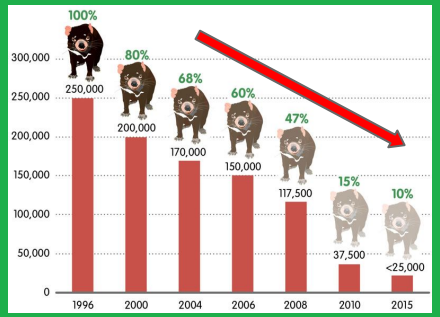
lutruwita/Tasmania's "gross emissions have actually increased about 6 per cent" - "net emissions of about 19 million tonnes a year, which were among the highest per-capita emissions in the world".



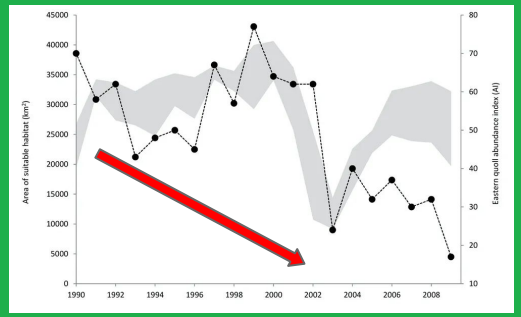
Tasmanian gross emissions.

John Hunter, "Unpicking the climate forest furphy - Is Tasmania really a world leader in climate action? Not so fast, explains John Hunter," The Mercury, July 31, 2020

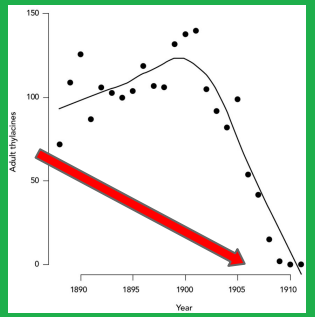
lutruwita/Tasmania: Over 650 threatened species & more in decline



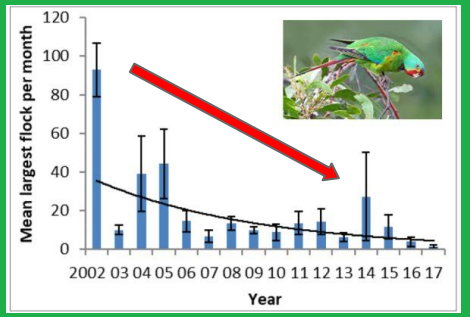
Tasmanian Devil population has suffered dramatic declines since the first incidence of DFTD. Data: DevilArk.



"Eastern quolls edge closer to extinction – but it's not too late to save them", The Conversation



Population of Tasmanian tigers (Thylacines) before their complete extinction in the 1930s (McCallum 2012)



Graph showing decline in the average size of the largest flock between 2002 and 2017, Parrots Daily News

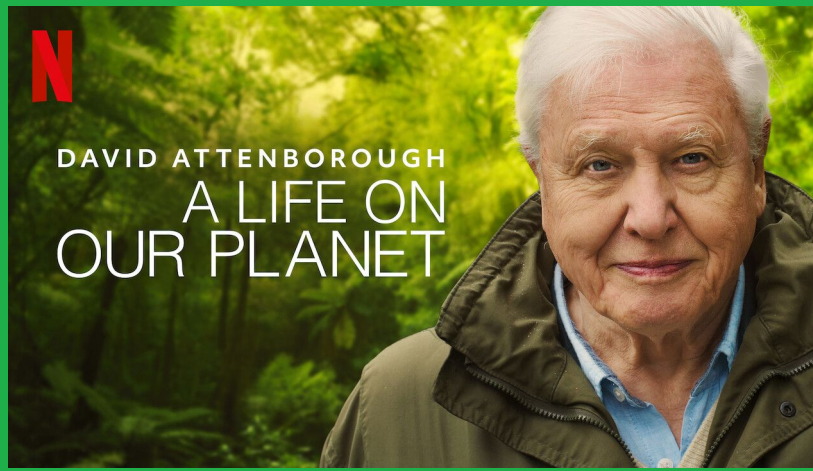
"More than 650 species of plant and animal are currently threatened in Tasmania and are listed on the Schedules of the *Threatened Species Protection Act 1995*, Tasmania's Department of Primary Industries, Parks, Water & Environment

Big picture: global heating & biodiversity collapse

“We are replacing the wild with the tame. Our planet is headed for disaster. We need to learn how to work with nature, not against it. We are facing nothing less than the collapse of the living world. The very thing that gave birth to our civilisation. The thing we rely upon for every element of the lives we lead. No one wants this to happen. None of us can afford for it to happen. So, what do we do?

“It’s quite straightforward. It’s been staring us in the face all along. To restore stability to our planet, we must restore its biodiversity. The very thing that we’ve removed. It’s the only way out of this crisis we have created. We must rewild the world.”

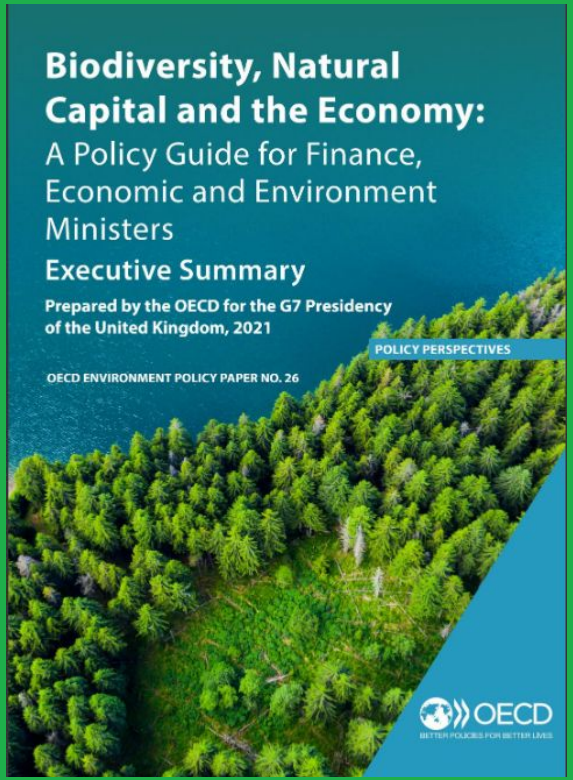
Sir David Attenborough
A Life on This Planet, 2020, Netflix documentary



The big picture: Biodiversity

“Natural capital underpins all economic activities and human well-being; it is the world’s most important asset. However, humanity’s demands on natural capital are unsustainable. The unprecedented and widespread decline of biodiversity is generating significant but largely overlooked risks to the economy, the financial sector and the wellbeing of current and future generations.”

“Biodiversity, natural capital and the economy: A policy guide for finance, economic and environment ministers”, Organisation of Economic Cooperation and Development (OECD), 2021



Biodiversity + Climate Change = Nature Based Solutions

“Nature-based Solutions (NbS) are defined by IUCN [International Union for the Conservation of Nature] as “actions to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits”.

IUCN, “Nature based solutions”

“Urgent need for an integrated policy framework for biodiversity loss and climate change.”

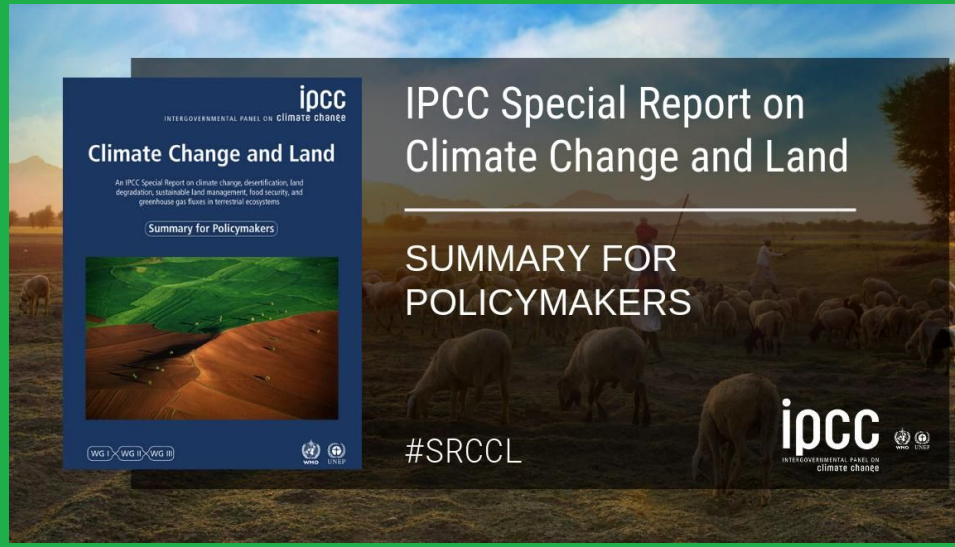
“Discussions among politicians, policy makers and scientists have largely focused on dealing with these [climate and biodiversity] as separate issues. However, there is increasing recognition that these are fundamentally connected and that a more integrated global approach is essential if we are to resolve the apparent impasse.

“As a consequence of the COVID-19 pandemic, the announced one-year delay in the 2020 meetings of the Conference of the Parties (COP) for the United Nations Framework Convention on Climate Change (UNFCCC COP26) and the CBD COP15 provides a unique opportunity to create coherent policy frameworks across the nexus of biodiversity, health, food, water and climate change and align both biodiversity and climate targets.”

Turney, C., Ausseil, AG. & Broadhurst, L. “Urgent need for an integrated policy framework for biodiversity loss and climate change”. Nat Ecol Evol 4, 996 (2020).

IPCC ‘Land Carbon’ Report: Time to Rethink How We Use Forests

“In a new Special Report on Land and Climate Change, the Intergovernmental Panel on Climate Change (IPCC) has underscored the indispensability of the world’s intact forests for averting the most catastrophic impacts of climate change. Forests are the lungs of the earth, each year absorbing nearly a third of all anthropogenic greenhouse gas emissions. Forests also act as massive vaults for carbon, locking away twice as much carbon as is in all currently accessible coal, oil, and gas reserves. However, logging and other industrial activities are rapidly degrading forests.”



Anthony Swift Jennifer Skene, “IPCC Climate Report: Time to Rethink How We Use Forests”, August 08, 2019,, Natural Resources Defense Council

IPCC: Forests Are The Best Nature-Based Solution There Is

“According to the 2019 ‘Land Carbon’ report by the IPCC, “reducing deforestation and forest degradation rates represents one of the most effective and robust options for climate change mitigation, with large mitigation benefits globally.” 1

“And reduced deforestation and degradation is one of only five response options that offer large mitigation potential without risking trade-offs to solving the other challenges. The report also notes that preserving and restoring forests and peatlands and other options that do not require land use change provide almost exclusively positive impacts on sustainable development.

“The IPCC report describes how the health and functioning of individual trees and various forest ecosystems are affected by the increased frequency, severity and duration of extreme weather events such as heat waves, droughts and floods. Forests are also vulnerable to new pests and diseases whose ranges are expanding in warmer temperatures. But the most significant impact of climate change on forests could be increased vulnerability to fire due to longer fire seasons and drought, compounded when combined with deforestation and forest degradation. Fires are already a significant source of global emissions, especially when they take place in carbon-rich tropical forests such as those in Indonesia and Brazil. 2 [And Tasmania.]

1) Shukla, P. R., et al. "IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems." (2019)

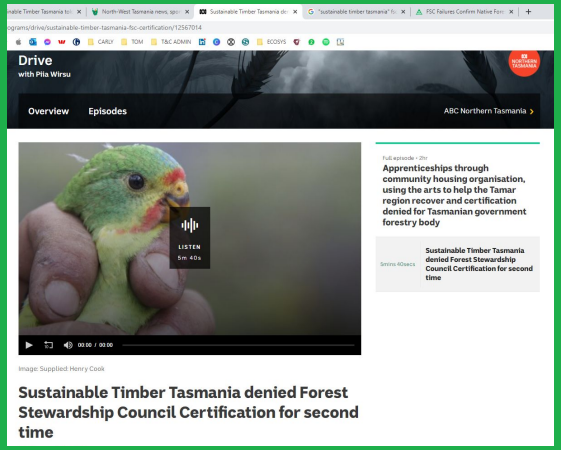
2) Frances Seymour, August 8, 2019, Forests in the IPCC Special Report on Land Use: 7 Things to Know, World Resources Institute

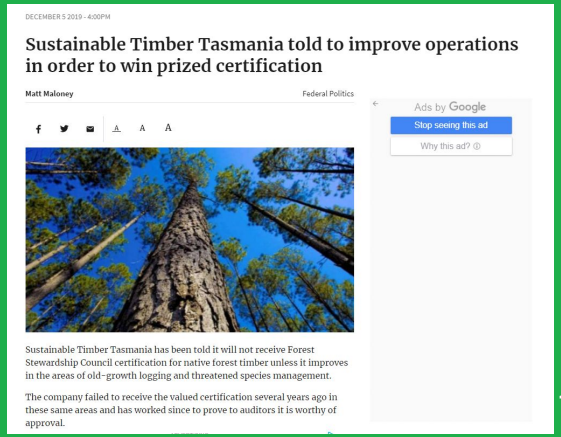
IPCC: What Constitutes Sustainable Forest Management?

Part one

Intergovernmental Panel on Climate Change ‘Land Carbon’ report defines “Sustainable forest management” as

“The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems (Forest Europe, 1993).”





Shukla, P. R., et al. "IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems." (2019).

Wilderness Society

‘Forests are not renewable’: felling of Sweden’s ancient trees similar to Tasmania’s

“Natural forests are not renewable. Trees can be planted, but not forests. If you plant wheat, you get a wheat field, not a meadow. If you plant pine trees, you get a timber field, not a forest. Real forests are complex ecosystems, a bedrock of a multitude of life and home for many species. Biological diversity – a variety of different life forms – is the prerequisite for all living beings, including us humans.

“Due to incoherent EU policies, forests – our natural climate solution – are systematically degraded and turned into environmental and climate-damaging industrial tree stands, plantations and products.

“Standing up for forests and against the Swedish forestry model: A letter to EC policymakers” Letter from 14 Swedish organisations & youth movements, plus 44 indigenous communities, supported by 10 international partners

Logging of forests in Sweden (top) and in Tasmania - equally unsustainable

Forestry Tasmania twice failed FSC audit because of environmental impacts of unsustainable logging

Forest Stewardship Council audit of Forestry Tasmania by SCS Global Services' 2019 report found

"STT [Sustainable Timber Tasmania, legal name: Forestry Tasmania] is negatively impacting swift parrot habitat through harvest of these habitat areas... Expert recommendations against harvesting in these areas were given by a swift parrot expert... but recommendations for no-harvest were not followed."

"STT has not appropriately identified and acted in consideration of threats to the Critically Endangered swift parrot.

"STT has not demonstrated that management approaches sufficiently maintain and/or enhance swift parrot habitat."

"STT has not provided sufficient evidence to support contentions that harvesting old growth within the estate is not a threat at the landscape level... STT has improperly harvested old growth under FSC rules. This includes forest stands containing old growth at less than 25% within coupe. STT has not properly identified old growth as HCV in conformance with this indicator.

"It is important to note that the presence of HCV 3.3 old-growth forest in the management unit does not necessarily exclude harvesting. It is the responsibility of The Organisation to demonstrate that its status at a landscape level will be maintained and not threatened as a result of management activities."

IPCC ‘Land Carbon’ report: There are many strategies for protecting Tasmania’s forests.

The findings of the IPCC report – either explicitly or implicitly -- suggest the following ways forests could be better protected:

“Many countries have already included forest-related targets in their climate plans, known as nationally determined contributions (NDCs); their efforts should be supported, and their success rewarded, with financing consistent with the UNFCCC’s REDD+ framework, which has already stimulated investment in sustainable land use.

“Recognise the role of indigenous peoples as forest stewards. The IPCC identifies indigenous knowledge and practices as important contributions to climate resilience. It concludes that strengthening indigenous communities’ tenure security can lead to better forest management, especially by empowering them to exclude outside actors seeking to appropriate their land and resources. These findings are particularly relevant in light of the recent Global Witness report on environmental defenders, which found that “on average, more than three activists were killed every week in 2018 defending their land from invasion by industries like mining, logging and agribusiness.

“Reduce fossil fuel emissions immediately. Forests themselves are threatened by climate change, so lack of progress in reducing emissions from other sources will increase the demand for forest-based mitigation while simultaneously undermining its potential. Investing in forests and other land sector mitigation options can only be effective as part of a both/and strategy to keep the planet cool.”

Frances Seymour, August 8, 2019, Forests in the IPCC Special Report on Land Use: 7 Things to Know, World Resources Institute

“Keeping trees in the ground where they are already growing is an effective low-tech way to slow climate change.”

“Ending deforestation and allowing mature forests to keep growing could enable forests to take up twice as much carbon.

“Mature trees that have reached full root, bark and canopy development deal with climate variability better than young trees. Older trees also store more carbon. Old-growth trees, which usually are hundreds of years old, store enormous quantities of carbon in their wood, and accumulate more carbon annually.

“The wood products industry releases carbon in many ways, from manufacturing products and burning mill waste to the breakdown of short-lived items like paper towels. It takes decades to centuries for newly planted forests to accumulate the carbon storage levels of mature and old forests, and many planted forests are repeatedly harvested.

In a review that we conducted with colleagues in 2019, we found that overall, U.S. state and federal reporting underestimated wood product-related carbon dioxide emissions by 25% to 55%. We analyzed Oregon carbon emissions from wood that had been harvested over the past century and discovered that 65% of the original carbon returned to the atmosphere as CO2. Landfills retained 16%, while just 19% remained in wood products.

“Keeping trees in the ground where they are already growing is an effective low-tech way to slow climate change”, Beverly Law Professor Emeritus of Global Change Biology and Terrestrial Systems Science & William Moomaw Professor Emeritus of International Environmental Policy, February 23, 2021

“Why Keeping Mature Forests Intact Is Key to the Climate Fight”

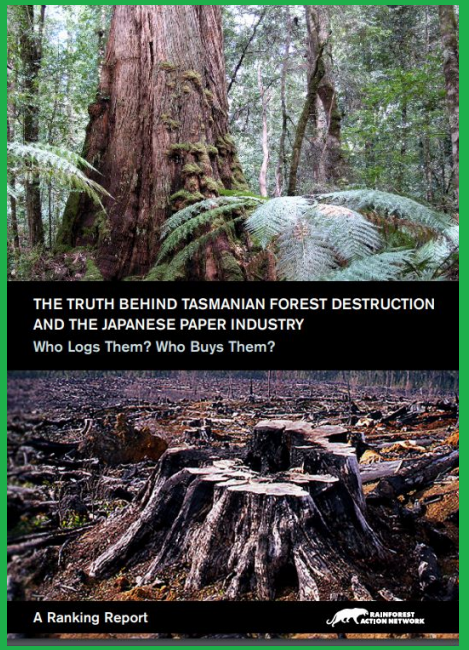
“The most effective thing that we can do is to allow trees that are already planted, that are already growing, to continue growing to reach their full ecological potential, to store carbon, and develop a forest that has its full complement of environmental services.”

Fen Montaigne, “Why Keeping Mature Forests Intact Is Key to the Climate Fight”, October 15 2019, Yale 360

Tasmania is still logging its best climate solution: old-growth forests, rainforests & High Conservation Value forests

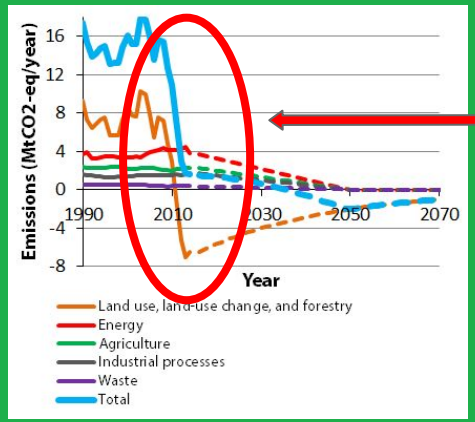
“In 2006, 31.5 percent of Tasmania’s officially defined “old growth” wet eucalypt forest from its 1996 cover and, more critically, 43.7 percent of Eucalyptus regnans officially defined as “old growth” remained unprotected and open for logging. Indeed, every year since the 1997 Tasmanian Regional Forest Agreement (RFA), this precious and irreplaceable ecosystem has been progressively depleted.”

[The Truth Behind Tasmanian Forest Destruction And The Japanese Paper Industry: Who Logs Them? Who Buys Them?]

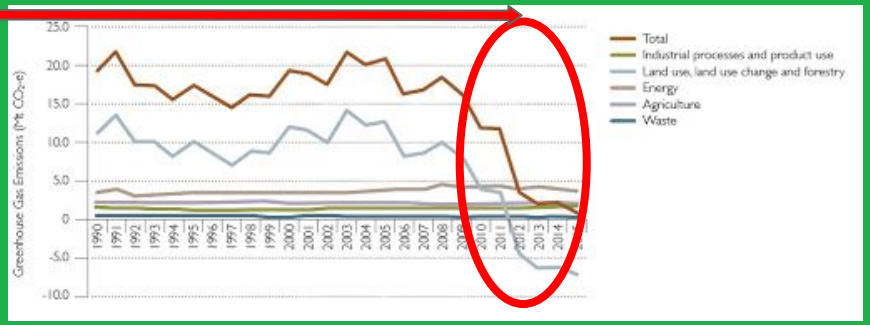


Part two: Wilderness Society Tasmania submission

Increased Forest protection: the only proven way to sequester Tasmania's CO2 emissions AND protect threatened species.



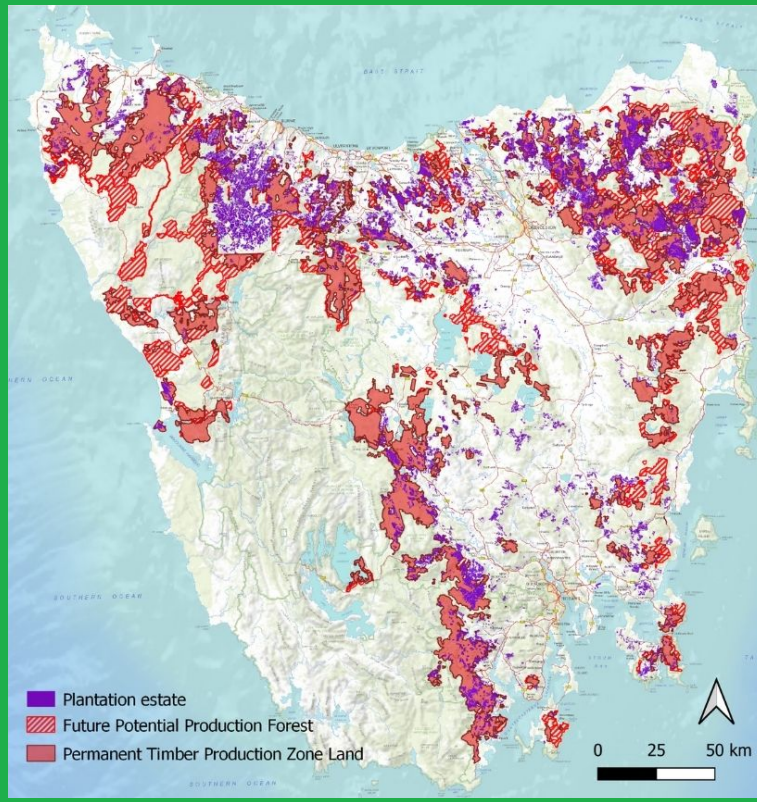
Tasmanian Forest Agreement impact: Legislated reduction in Forestry Tasmania's logging quota, reduction in logging, fewer CO2 emissions, more forests absorbing CO2



$295–$353 million: Potential carbon revenue of ‘Future Potential Production Forests’

The 350,000ha of ‘Future Potential Production Forests’ contain 23-27 1 Mt CO2e (million tonnes of carbon dioxide).

If this carbon abatement could be auctioned through the CSF [Climate Solutions Fund] or sold on the ACCU (Australian Carbon Credit Unit) spot market at a price equivalent to that at the most recent auction ($15.94), then the net present value is estimated to be $295 - $353 million in potential revenue to Tasmania to 2050.



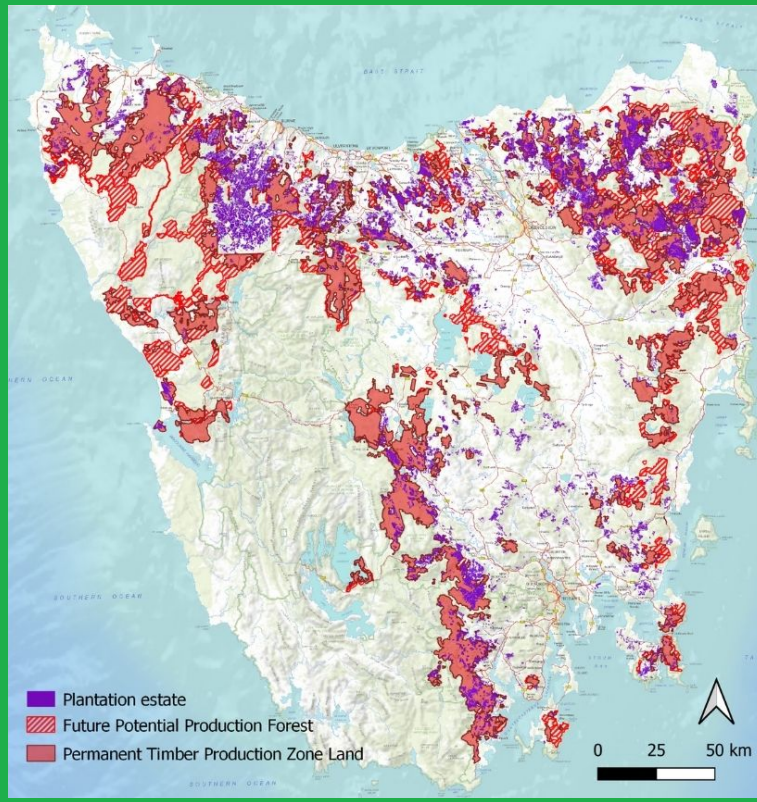
Red-hashed FPP forests could generate millions in income for the state

Report: Climate Protection Opportunities In Tasmanian Forests 2021 Update

$505–$608 million: Potential carbon revenue of Tasmania's State forests

Tasmania's 800,000ha of State Forests - also known as Permanent Timber Production Zone forests - contain 41 - 48 Mt CO2e (million tonnes equivalent of carbon dioxide).

If this carbon abatement could be auctioned through the CSF [Climate Solutions Fund] or sold on the ACCU (Australian Carbon Credit Unit) spot market at a price equivalent to that at the most recent auction ($15.94), then the net present value is estimated to be $505– $608 million in potential revenue to Tasmania to 2050.



Solid-red State forests could generate millions in income for the state

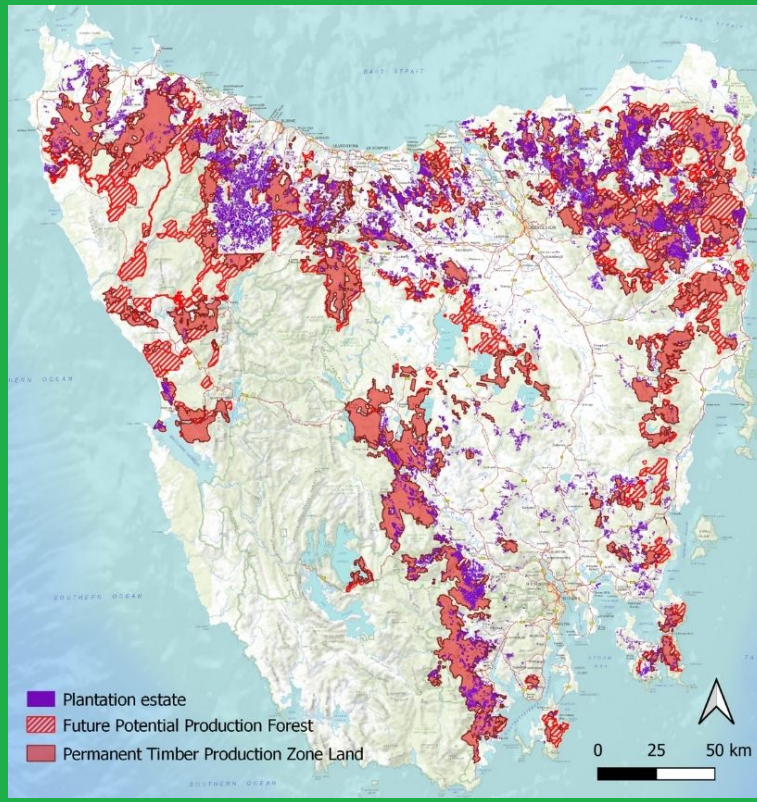
Report: [Climate Protection Opportunities In Tasmanian Forests 2021 Update]

Billion-dollar revenues if Tasmania's public forests protected for carbon

Tasmania's 580,000ha of State Forests AND the Future Potential Production Forests - containing a combined c.70 Mt CO2e.

Therefore, the combined net present value of continuing the moratorium on harvesting the FPPF and cessation of harvest in the PTPZ is estimated to be $822–$939 million.

If this carbon abatement could be auctioned through the CSF [Climate Solutions Fund] or sold on the ACCU (Australian Carbon Credit Unit) spot market at a price equivalent to that at the most recent auction ($15.94), then the net present value is estimated to be $505– $608 million in potential revenue to Tasmania to 2050.



Solid-red State forests could generate millions in income for the state

Report: [Climate Protection Opportunities In Tasmanian Forests 2021 Update]

Report: Climate Protection Opportunities in Tasmania's Forests - 2021 update.

The Wilderness Society Tasmania has commissioned a 2021 update of its 2015 report, Climate Opportunities in Tasmania's Forests.

This report shows that the amount of carbon Tasmania's forests could sequester are huge and nationally-significant.

This carbon could earn the state millions and help the country sequester millions of tonnes of carbon. However, the climate solutions fund needs to be adjusted to allow existing native forests to qualify for funding.

Currently, a landowner can flatten native forest on their land and qualify for climate funding IF they regrow the logged forest.

This funding should be expanded to cover the best solution - existing native forests - which should haven't to be felled first to qualify for carbon funding.

This adjustment could unlock millions of dollars in carbon value for Tasmania.

Report: Climate Protection Opportunities In Tasmanian Forests 2021 Update

Carbon in Tasmania's forests - almost double what Australia nationally has offset so far

The carbon absorbed by Tasmania's forests - 760 - 1080 Mt CO2e in debris (dead stems, branches, leaves and bark) is equivalent to 3 - 4 times Australia's total annual emissions of 537 Mt CO2e in 2018.

"The potential magnitude of carbon abatement from reserving areas of Tasmania's native forests from logging is very large.

For comparison, the magnitude of the potential abatement (62 - 70 Mt CO2e) is almost double that purchased by the [Federal] Government under the ERF [Emissions Reduction Fund] over the past four years (38 Mt CO2e) for a total cost of $510 million."

Native forests could readily be made eligible for climate solutions funding

“Currently, there is no methodology covering cessation of logging in native forests in the Climate Solutions Fund, meaning that some of Australia’s largest potential land-based carbon sinks are effectively excluded.

“However, there appears to be no real technical impediment to developing such a methodology. This would open the way for projects involving protection of Tasmania’s native forests as well as forests in other regions to participate in CSF auctions, allowing the value of the associated carbon abatement to be realised.

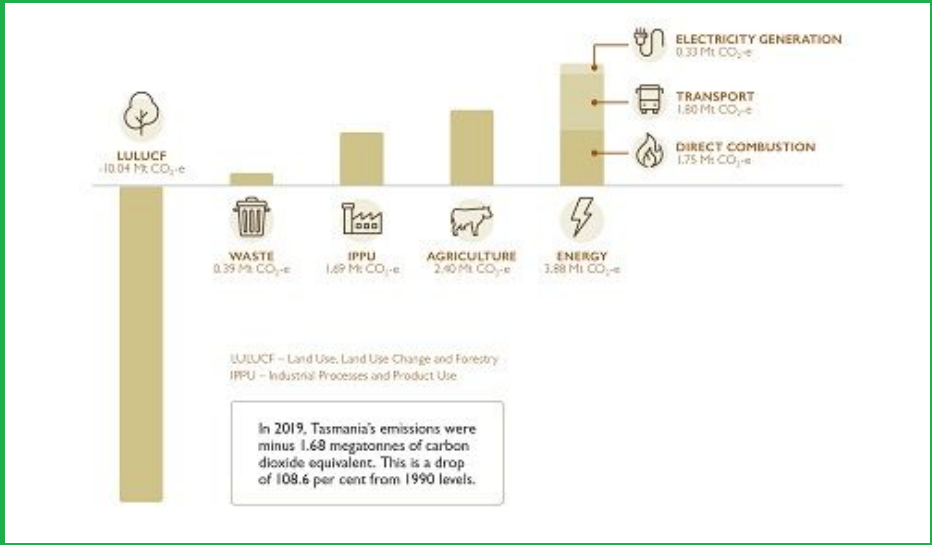
“Allowing the participation of native forest management projects within the CSF would not be setting a precedent. The CSF Method (Carbon Credits (Carbon Farming Initiative—Designated Verified Carbon Standard Projects) Methodology Determination) already allows for the registration of projects, and the issue of ACCUs, in relation to activities wherein harvesting ceases in forests previously subject to logging.”

Recommendations

1. **lutruwita/Tasmania: True Zero emissions & truly unique**

Lutruwita/Tasmania should set a target to be one of the world's first gross zero / true zero / absolute zero emissions jurisdictions. This is achievable given the island's most intensive gross emissions are in transport and energy generation sectors, which are now readily substitutable with low/now carbon alternatives. Becoming a 'true zero' jurisdiction would also represent an immeasurably valuable investment in 'Brand Tasmania'.

Recommendations



A focus on zero net emissions will allow the island's greenhouse gas emission to continue to increase.

For the island to be a true climate leader, it could aim to get energy, agriculture and industrial emissions to true zero emissions, which unlike most other jurisdictions, is feasible.

This ambitious target would not just set the island above and beyond, it would honour brand Tasmania like nothing else.

Recommendations

2. Demand carbon sequestration funding from the Federal Government's Climate Solutions Fund

The Tasmanian Government should adopt the position to that of seeking to change the legislation that currently prevents the island's forests from receiving carbon abatement funding from Climate Solutions Fund revenues to protect existing High Conservation Value native forests.

Recommendations

3. Convert Sustainable Timber Tasmania to become Australia's first State owned carbon farming agency

Sustainable Timber Tasmania could realistically expect to earn more from carbon farming the State's public forests than from logging them for a loss. As part of transitioning native forest logging out of native forests, the agency's role needs to be fundamentally reimagined. Like fossil fuel workers, native forestry worker need to be helped to find new roles, whether in forestry plantations or in other sectors.

Recommendations

3. Complete the transition of native forest logging so that Tasmania becomes a plantation-forestry based state

As part of transitioning native forest logging out of native forests, the agency's role needs to be fundamentally reimagined. New Zealand ended native forest logging in 2002 and its industry, while not environmentally faultless, is economically robust. There is no longer an economic, social or moral case to continue logging High Conservation Value native forests, especially if Tasmania is serious about being a 'climate leader'.