



<b>Title</b>	Ms
<b>First name</b>	Eve
<b>Last name</b>	Lamb
<b>I am making this submission as</b>	General public
<b>Submission type</b>	Personal
<b>Organisation making the submission (if applicable)</b>	N/A
<b>Your position in the organisation (if applicable)</b>	N/A
<b>Consent to make submission public</b>	Public
<b>Your story</b>	As a tertiary educated, professional Australian resident, voter and taxpayer I listened with horror to the impacts of the 2019-20 bushfires along the nation's east coast states and also at Kangaroo Island. As someone who cares deeply for the sort of world we are creating for tomorrow I see these unprecedented fire events as clear illustration of the sorts of impacts directly resulting from climate change and our failure thus far to take adequate action to address this global challenge - particularly also of our continued destructive addiction to fossil fuels.
<b>1.1 Causes and contributing factors</b>	<p>Climate Change</p> <p>The unprecedented fire activity and devastation occurring this 2019-2020 fire season has been clearly linked to anthropogenic climate change by the world's leading science agencies. This submission aims to highlight this fact as the most significant factor contributing to the unprecedented fire activity this season</p>

while noting that there is no shortage of first rate documentation available to support this internationally-accepted premise.

The unprecedented bushfires we have witnessed this season in both NSW and Victoria demonstrate that Australia is right in the line of fire in terms of potential for future such severe and detrimental impacts of climate change. Unless we address this obvious, fundamental underlying cause we will undoubtedly continue to suffer extreme, and probably increasingly devastating, impacts into the future including repeated horrific fire seasons and the associated enormous economic and social fallout.

As an Australian resident it is extremely frustrating and deeply concerning to have to continue to witness clearly ineffectual policy settings around addressing the fundamental cause of the problem – anthropogenic climate change.

This season's devastating bushfire activity along Australia's eastern seaboard states demonstrates that as a nation, Australia clearly has irrefutable reason to take a leading international role in setting new and genuinely effective benchmarks in addressing the critically urgent global issue of climate change.

#### Fuel Loads

The (to some extent hysterical) focus on "fuel loads", from some quarters, in the wake of this season's devastating bushfires, to a significant degree represents an unhelpful distraction from the fundamental cause of this season's unprecedented fires. To a significant degree this focus on "fuel loads" and "hazard reduction" appears to be ideologically driven and not founded in sound science or fact.

The unprecedented 2019-2020 fire season has highlighted a tendency in some sectors of the community to seek quick-fix solutions and to scapegoat perceived easy targets at the expense of addressing the underlying, and more complex, actual driver of the fire devastation – namely anthropogenic climate change.

Responsible investigation of the facts swiftly demonstrates that the knee-jerk response to suggest "hazard reduction" may be a realistic solution is not only ineffectual and impractical – notably because of the ever-reducing window of opportunity to safely or effectively conduct such "fuel reduction" exercises (due to climate change) – but may also exacerbate both the fundamental problem and trigger the very disasters it seeks to avoid.

The incidence of "fuel reduction" burns escaping "control" and causing destructive bushfires is well documented.

\* <https://www.abc.net.au/news/2015-11-19/lancefield-fire-poorly-planned-under-staffed-report-finds/6952528>

The shortening window of opportunity for controlled burns of any kind to be safely conducted, represents an increased risk of such burns escaping containment and becoming uncontrolled burns.

"Hazard reduction" burning is ineffectual under severe conditions.

While "fuel reduction" burning as a practice may have some limited application, it is not a panacea and in fact has been observed to have very little effect under severe or extreme conditions of the sort observed this 2019-20 fire season. These are precisely the sort of conditions which we can increasingly expect into the future.

Significantly, RFS NSW Commissioner Shane Fitzsimmons has publicly stated that "when you're running fires under severe,

extreme or worse conditions hazard reduction has very little effect”  
\* <https://www.climatecouncil.org.au/facts-about-hazard-reduction/>

---

## **1.2 Preparation and planning**

The main risk factor for recurrent severe and catastrophic bushfire events in NSW and other Australian states into the future is unchecked, run-away climate change. Failure to adequately acknowledge and respond to this threat and to place it front and centre is effectively failing to prepare, or plan, for future severe bushfire threats and risks.

### **Fossil fuel subsidies**

Climate change is being largely driven by the continued global reliance on fossil fuels. Massive global subsidisation of fossil fuels is an intrinsic and extremely significant part of the problem. It is undeniably upping the risk and threat of future bushfire disasters in Australia. In order to adequately address the underlying issue these massive fossil fuel subsidies need to rapidly diminish and, ideally, end.

Instead, the sort of massive subsidisation we currently see going to fueling the problem needs to switch to the rapid uptake of clean renewables.

Decarbonising economies globally - including Australia's - is key.

As a developed first world economy, and one that sits right in the line of fire in terms of forecast impacts of climate change, Australia has significant reasons to take a lead role by:

A. setting an effective price on carbon – for example bringing back the carbon tax as espoused by the International Monetary Fund, and, B. ending subsidies to fossil fuels in all their forms, while simultaneously switching this degree of subsidization/support to the rapid uptake of clean renewables.

The International Monetary Fund periodically assesses global subsidies for fossil fuels as part of its work on climate, and it found in a recent working paper that the fossil fuel industry received \$5.2 trillion in subsidies in 2017. This amounts to 6.4 percent of the global gross domestic product.  
<https://www.vox.com/2019/5/17/18624740/fossil-fuel-subsidies-climate-imf>

The IMF estimates that annual energy subsidies in Australia total \$29 billion, representing 2.3 per cent of Australian GDP. On a per capita basis, Australian fossil fuel subsidies amount to \$1,198 per person. (May 13, 2019)

<https://reneweconomy.com.au/global-fossil-fuel-subsidies-reach-5-2-trillion-and-29-billion-in-australia-91592/>

We are effectively fueling climate change and with it, myriad associated catastrophic fallout impacts – including increasing incidence of severe bushfire activity like that witnessed in NSW this 2019-20 season.

Through fossil fuel subsidisation in all its forms we are effectively subsidising disaster.

---

## **1.3 Response to bushfires**

Logging/forest clearing exacerbates bushfire impacts, significantly impedes recovery and increases the likelihood for

---

more severe fire destruction into the future.

A global review published in 2009 showed that links between logging and elevated fire risk is a problem seen in wet types of forests worldwide.

Research has clearly shown forests that are logged post-fire and then regenerated have an increased risk of burning in high-severity crown-scorching fires.

<https://www.abc.net.au/news/2014-08-04/logging-greatly-increases-fire-risk-black-saturday:-study/5646220>

This extra fire risk lasts for about 40 years after logging. That is, a burnt forest which is logged tomorrow will still carry an elevated fire risk in 2060.

In 2016, an Australian study published by the Ecological Society of America found tree fern populations crashed by 94 per cent after post-fire logging.

Logging is notably counterproductive in bushfire recovery efforts.

A major body of scientific research spanning hundreds of studies from Australia and around the world over the past 20 years shows that so-called post-fire "salvage logging" is the most damaging form of logging in native forests.

Its impacts can last for decades or centuries and seriously impair the recovery of animal, bird and insect populations. With so little intact forest left, this will spell disaster for native wildlife.

Studies following the logging after the tragic Black Saturday bushfires in Victoria in 2009 found post-fire logging had profound negative impacts on birds, soils, and plants.

Hiring helicopters to drop food to surviving animals while logging what remains of their habitat seems counterproductive to say the least.

<https://www.abc.net.au/news/2020-01-29/logging-bushfire-affected-areas-australia-increases-fire-risk/11903662>

Recovering trees are essential for animal survival. Long-term monitoring shows that most burned areas recover well if we leave them alone. This has been documented countless times since the birth of the discipline of ecology in the 1920s.

Heavy logging machinery will kill many of the plants that germinate in the nutrient-rich bed of ashes on the forest floor. Animals that have miraculously survived in burnt areas can also be killed in logging operations.

Pioneering research from southern Australia has shown that fungi and nutrients in soils can take up to a century or even longer to recover from salvage logging. Mass movement of soils in areas logged post-burn can choke rivers and streams and trigger fish kills as well as kill many other kinds of animals.

<https://www.abc.net.au/news/2020-01-29/logging-bushfire-affected-areas-australia-increases-fire-risk/11903662>

While claims that increased "fuel loads" are to blame for the unprecedented fire activity of 2019-20, that fact is that our forests and natural vegetation have continued, since European settlement, to be cleared at a staggering rate. Globally, some 177,000 square kilometres are lost each year, which is equivalent to 50 football fields every minute. Australia has been identified as one of the world's "hot spots" for deforestation

<https://www.wwf.org.au/what-we-do/species/tree-clearing#gs.y7a493>

This is particularly alarming given our forests' extremely valuable role as natural carbon sinks which serve to help mitigate the underlying driver of unprecedented severe bushfire activity.

The Co-operative Research Centre for Greenhouse Accounting has estimated that Australian forests store about 10.5 billion tonnes of carbon (excluding soil carbon)[iii]. This store of solid carbon has accumulated over an assumed life of 100 years for native eucalypt regrowth. That translates to our forests storing an amount of carbon equivalent to almost 38.5 billion tonnes of gaseous carbon dioxide from the atmosphere, about 70 times Australia's annual net greenhouse gas emission.  
<https://www.chiefscientist.gov.au/2009/12/which-plants-store-more-carbon-in-australia-forests-or-grasses>)

---

#### **1.4 Any other matters**

The recent unprecedented intergovernmental response aimed at curbing the spread of COVID-19 demonstrates that we do have the capacity for unprecedented societal change and action in order to address unprecedented threat.

While COVID-19 is clearly an unprecedented threat in our time, the unpalatable fact is that unchecked climate change will likely produce far greater devastation than the virus. Inability to access and produce food and/or water and ongoing unprecedented fire activity of precisely the sort recorded this 2019-20 season are just some of the impacts we can expect if we fail to take the actions so clearly required - but as yet wanting - to address climate change.

---

#### **Upload files**

---