

**INQUIRY INTO INTEGRITY OF THE NSW
BIODIVERSITY OFFSETS SCHEME**

Name: Name suppressed

Date Received: 10 August 2021

Partially
Confidential

Dear Committee Members,

As a climate scientist and practicing environmental consultant I am deeply concerned by the absolute lack of knowledge around the impacts of climate change on the long term viability of biodiversity offsets. There are no published literature specifically on this subject in Australia. The risks that climate change poses to existing and intact threatened ecological communities are still barely understood. The risks that climate change poses to the offsets used to justify and permit destruction of any threatened, endangered and critically endangered ecological community have not been systematically and comprehensively assessed. This presents critical risks to the viability of many species and ecological communities as they now face rapid and accelerating climate change.

The biodiversity offsets scheme in combination with climate change impact drivers will increase the likelihood of extinction, the combination likely already has. The resilience of any ecological community will be significantly impaired through further fragmentation. If we continue to allow the fragmentation of the remaining relics of threatened, endangered and critically endangered communities without considering climate change impacts then we are increasing the risk of degradation and extinction. To illustrate my point, I use the following example; if a threatened community at the centre of its range is offset by a community from a more marginal climate closer to the fringe of its range then the risk of significant aggregated loss is already relatively high. Climate shifts could however quickly render this offset unviable and result in the loss of a threatened community that on paper has long term protection but in reality now has minimal ecological value. This is a likely scenario that will play out across the state over the coming decade and beyond.

Threatened communities should be excluded from the offsets scheme altogether to reduce the real risk of extinction due to the combined threatening process of fragmentation and climate change. The risk climate change poses to the assets and instruments of the biodiversity offset scheme have not been assessed, reviewed and adequately incorporated. This is alarming considering the zealous use of offsets to allow development across the state, particularly for state significant infrastructure projects.

Biodiversity offsets should be used as an absolute last resort when threatened ecological communities are to be impacted. I know that this is not the case. Biodiversity offsets are being used for social licence and regulatory compliance for developments which have economically and environmentally viable alternatives. These are alternatives that would not impact threatened communities at all yet are not been adequately explored because the offsets schemes permit the destructive development despite the presence of ecologically sustainable and far less ecologically threatening options.

Profiteering from trading in threatened ecological communities which results in incremental loss of habitat and increased risk of extinction is scientifically and ethically unacceptable. Australia

already has the highest rate of mammalian extinction in the world. Without adequate review and adaptation the biodiversity offset scheme has the potential to increase the fragility and extinction rate over the coming decade and beyond because of the combined impact of climate change.

I implore you to exclude threatened ecological communities from any biodiversity offset and trading schemes. It is essential that the impacts of climate change on biodiversity offsets are immediately assessed. It would be prudent to halt the offset scheme until such a review is conducted, the risks are understood and the findings rightly incorporated.

Thank you for your attention and for enabling this very important forum.