

[REDACTED]

To: Bio Energy
Subject: RE: Submission on Bioenergy Vision - Alistair Graham - February 2022

Alistair Graham
[REDACTED]

14 February 2022

Dear Sir/Madam,

Thankyou for the invitation to contribute comments on your 'Draft Bioenergy Vision for Tasmania'. I have organised my comments around the first of your suggested questions. In essence, the current vision is so perversely misguided that addressing other questions is beside the point.

Questions to consider

1. What changes, if any, would you suggest to the draft Bioenergy Vision?

The first thing to remember about bioenergy is that, like coal, oil or gas, it involves burning pre-existing organic material and releasing greenhouse gas pollutants, principally carbon dioxide, to the atmosphere. Mere observation of the reality that plants absorb carbon dioxide does not make burning plant material 'renewable' or non-polluting. Or to put it another way, to call such exacerbation of greenhouse gas pollution in these days of urgent climate change mitigation by burning things renewable is a somewhat misleading and perverse application of the concept of 'renewable'.

Rather than seek to create a deceptive, misleading and misguided vision that burning pre-existing, non-fossilised plant material is good when it is obviously unhelpful, I would suggest that the vision restricts itself to teasing out those few situations where burning plant material can make a useful contribution to Tasmanian economic, social and environmental life. I have not elaborated on what these might be given the overall flawed nature of your current thinking – but they do exist – building a credible and useful bioenergy vision is possible but, as the old Irish joke goes, 'if it's Dublin you're wanting to get to, I wouldn't be starting from here.'

The two key principles that need to drive an honest vision are:

1. Recognition that carbon dioxide released to the atmosphere from burning biological materials is as much a greenhouse gas pollutant as the same carbon dioxide from burning peat, coal, oil or gas. The key concept is 'save the climate by decarbonising energy production'. This can readily be done in Tasmania simply because of our historical investment in hydro-electricity production.

From this standpoint, it then becomes necessary to make sure that any burning of organic material for bioenergy purposes is only as part of a real, credible, measurable and reportable 'offset'. That is to say, don't burn stuff unless more harm would be done if it wasn't burnt (where considerable cost-benefit analysis is needed to tease out where the balance might lie across a complex mix of uses and values). Failure to take an offsetting approach to use of bioenergy risks facilitating perverse behaviour. In Tasmania, the great risk is that 'pulpwood' grade or lower grade wood from integrated, clearfell logging of native forests can be simple labelled as 'waste' from 'sustainable' forest management without an offset test.

As our native forests are currently managed, it is sadly true to say that the wood involved is not 'waste', the operations are not 'sustainable' and the energy should not be regarded as 'renewable'. Two of the key factors that render native forest wood unfit for inclusion within an honest bioenergy vision are:

- (i) Time – burning biological materials can only be considered as potentially 'climate change neutral' if it involves burning material that has previously been grown – as an agricultural energy crop (as in 2. below, as much as possible that's not recovered as a crop should be retained as soil organic matter). If you plant before you burn, there is some chance of a neutral/net-zero outcome. The problem with burning native forests is that the emissions occur when the original standing forest that the Good Lord put there is cleared on the promise that maybe, sometime in the future, wood will grow back – some decades or centuries later – and restore atmospheric health. Obviously, a positive outcome is never achieved if the future management involves repeated harvesting on rotation lengths shorter than the recovery time – and, all that time the net negative carbon dioxide loads in the atmosphere have been exacerbating greenhouse gas pollution levels.
- (ii) Value – native forests have other uses and values such that the opportunity cost of logging and burning native forests is very high – and getting higher as a changing community sets ever greater value on those other uses. Merely because current policy settings are so perverse as to write off vast sums of public money subsidising a native forest logging industry that could be making the goods the community wants from plantations is no justification for the outrageously misleading assertion that burning wood from such operations is 'renewable' and thus appropriate for inclusion in a 'bioenergy' vision. It is not. Burning wood from native forests should simply be excluded from any honest and honourable bioenergy vision.

2. Biological material, surplus to or waste products from principal uses should be returned to the soil. Improving levels of organic matter in soils is almost always a good thing. It is an unutterably perverse thing to do to burn organic material rather than use it to ameliorate soil organic matter levels. As an agricultural and forest science graduate, I find it amusingly silly that public policy can promote both 'biochar' and 'bioenergy' when a better environmental, social and economic result would be achieved by simply using available organic material to make more soil organic matter.

It is important to remember that the potential to integrate wind, solar and hydro power into an electricity grid capable of flexibly meeting current and likely future demand profiles puts Tasmania in a somewhat different place than the rest of Australia. Rather than perversely seeking to recarbonize our electricity system, Tasmania would be much better served by accelerating conversion of energy uses that involve burning stuff to uses of energy that does not involve burning stuff.

It is also important to remember that Tasmania is also different from many other parts of Australia in that many relatively poor and/or isolated households traditionally rely on burning wood – often in horrendously inefficient devices – for space heating, warmth, hot water and cooking. You note this reliance in your introduction but make no contribution to the issue in the vision. I think it would be useful to develop a specific part of the vision that recognises that continued access to wood is an important social benefit for many households in Tasmania and that public policy development has to be careful not to perversely impact the more vulnerable among us. Having said that, there is much that could be done to reduce the use of wood by having a broad home improvement support programme aimed at low income households and low quality houses.

Overall, it would be somewhat ironic if a 21st Century 'bioenergy vision' for Tasmania were to encourage a return to Georgian energy policies. Some years ago, I had the privilege of taking a tour round the famous Lipizzaner Spanish riding school in Vienna and one of the features pointed out by the guide was the

extraordinary number of chimneys on the buildings, many of which were false – Regency era households in Central Europe had their own version of ‘keeping up with the Joneses’ – the more chimneys you had, the more fireplaces you were assumed to have, and the more wood you burnt and so must be very rich. I’m pleased to note that the Austrians appear to have moved on from dependency on burning wood and it’s about time that Australia – and Tasmania in particular – moved on from its obsession with burning stuff. Just because a number of OECD States with obsessive forestry agencies managed to introduce some perverse ‘LULUCF’ accounting rules into the UNFCCC’s Kyoto Protocol allowing them to merely assert that their forest management was ‘sustainable’ and thence their wood was ‘renewable’ does not make those accounting rules any less perverse and does not make those assertions any less of a bunch of misleading mistruths. A bioenergy vision built on such foundations deserves to founder.

Yours faithfully,

Alistair Graham