

To whom it may concern

Re: Productivity Commission's draft Low –Emission Economy paper.

On behalf of nature's Flame I would like to make a submission to the Productivity Commission in regard to the recently published draft Low Emission Economy paper.

As a long established supplier of sustainable, renewable and carbon neutral energy to many New Zealand Government departments, large companies and small to medium organisations, we find many of the views of biomass options (as a fossil fuel replacement) as presented in the draft Productivity Commissions report on transitioning to a Low Emission Economy to be very outdated and misinformed.

Nature's Flame Limited has produced and supplied compressed sawdust wood pellets for domestic, commercial and industrial use for over seven years using long established technology. Our product uses waste wood product (that would otherwise be disposed of – causing methane release), is Forest Stewardship Council and Biogro certified offering carbon neutral solutions for New Zealand. The end product is a 100% Pinus Radiata energy dense product that can be used as a direct coal replacement, or used as a fuel in dedicated pellet or biomass heat plant. Wood pellets can also be co-fired with coal which can assist use of existing plant as part of a transition to full use of carbon neutral fuel. Wood pellets produce substantially lower CO₂ and other noxious gas and particulate emissions than fossil fuels. In some instances wood pellet fuel has kept businesses in operation where they otherwise could not be used due to resource consent issues.

We have long term supply arrangements and history with:

- New Zealand Defence Force – supplying Waiouru Camp (heat), Wigram Museum (heat) and Devonport Navy Base (waste digester)
- New Zealand Department of Corrections – Rangipo Prison – heat plant
- Kapiti Coast District Council (waste water treatment plant)
- Christchurch City Council (school and pool heating)
- Department of Education – supplying over 25 schools nationwide allowing for low capital changeover, ease and safe operation and reliable heat to our children
- We also supply other organisations like Air New Zealand, Silver Fern Farms and many other organisations to continue to ensure the future of these businesses and the continued health of our families and country.

These organisations have been impressed with our state of the art production plant, our long term strategic supply (from an almost endless supply of biomass). We have close relationships with forestry companies, wood fibre processors for continued and secure raw material. We also have an established logistics network with supply depots (Taupo, Nelson, Christchurch and Dunedin).

As an industry leading organisation we have been actively involved in the Bioenergy Association of New Zealand (and the Wood Energy Interest Group) and well as an active part in working with organisations across the country including the successful Wood Energy South project and recently looking to expand this across the lower South Island – all with the aim of displacing fossil fuel and providing a truly renewable energy source for the future. We have in the last seven years provided fuel which has displaced over 250,000t of CO₂ and we continue to expand. This is the equivalent of 30,000 cars being removed from the road. We have run successful trials in large milk drying operations and worked with plans on large heat plant there is no operation to big to require the long term use of fossil fuels especially coal. We wood supply pellet fuel throughout New Zealand and for export.

We know that with leadership from central and local government an accelerated rollout of our solution to emissions can be achieved even faster. By insisting Government Departments review biomass solutions (did you know there are current LPG heat plant tenders out from a Government department that would be more cost and environmentally effective to use wood pellet boilers instead?), ensuring full life-cycle costing is built in (change the five year capital payback Government model), not just capital or installation cost and not just fuel price.

Currently the price of the Emission Trading Scheme (ETS) is not a disincentive for the intended low emission behaviour. ETS is a slow device to change and the feedback we receive is the uncertainty of future pricing is one of the challenges – this then allows for organisations to then work through the best energy solution.

The global market for wood pellets for carbon neutral energy and electricity generation is well established – across Europe (including United Kingdom), South Korea is moving to 20% of power generation and Japan is moving their nuclear power generation to Biomass – this is not developing technology or logistics. Wood Pellets are shipped from North America, Asia and New Zealand.

Moving forward and to unlock further acceleration of biomass development in New Zealand would benefit from:

1. Leadership and insistence of Government operations
 - a. Establishment of targets for switching away from fossil fuel to biomass
 - b. Adopting and communication the New Zealand Energy Efficiency and Conversation Strategy (NZECS) 2017-2022 and the acceptance of the established wood energy industry and how it is a credible and cost effective alternative to fossil fuels – this would help the fossil fuel industry to be held to account.
2. Change to the way energy systems are accounted for
 - a. Life Cycle costing – not just capital or fuel costs
 - b. Review the current five year payback period on energy systems for Crown loans – the benefits for all come on a longer view.
3. Allow an accelerated depreciation to allow for the faster replacement and upgrade of plant to allow for sooner movement to renewable and sustainable energy generation.
4. Emissions Trading Scheme (ETS) – Building in the true cost of carbon emissions into the scheme and establishing a consistent increase
5. Local government – reduced building and resource consents to enable accelerated replacement of small heat plant and domestic heating installation further driving clean air and reliable heat sources

For the ongoing future for our communities we request a catching up in opinion and policy that addresses what is actually already happening (although considerably slower) across New Zealand. Biomass is the original renewable, sustainable and carbon neutral energy source that is an alternative to coal, diesel and gas and is in use and available for wider use now.

Thank you for your consideration and we look forward to working together for a better future for New Zealand and the energy of our country!

Kind regards

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