Hon Anthony Albanese MHR Minister for Regional Development 334A Marrickville Road, Marrickville NSW 2204

## NATIVE FOREST WOOD-FIRED POWER IN AUSTRALIA

Dear Minister Albanese,

We are seeking a meeting with you at your earliest availability to discuss proposals for power plants in regional areas around Australia that are fuelled by native forest wood. As a member of Federal Cabinet and the Minister for Regional Development, your responsibility covers both the RET legislation which makes these plants economically viable, and the development of these plants themselves, which are all in regional areas.

As you would know, a wood-fired power plant at Eden NSW, now being considered by the NSW government, is the first of a number of projects around Australia to go through the application process. Others are proposed in Tasmania, NSW, Victoria and Western Australia. These power plants have been made economically attractive propositions because of the federal government's expanded RET legislation that includes native forest biomass as a 'renewable' source of fuel and allows companies to generate Renewable Energy certificates through the burning of native forest wood for power.

We oppose the inclusion of native forest biomass as a renewable energy source in the RET. The Commonwealth government's RET legislation does not take into account the latest scientific information, nor does it take into account the social, political and economic factors in Australia that make these proposals untenable as 'renewable' energy projects, as outlined in the accompanying document.

We urge you to show real leadership on this issue and give Australia a genuine clean energy future by amending this legislation. As minister for Regional Development you also have another important role. You can meet with your state colleagues to discuss other ways of securing a renewable energy future for our regions that does not include burning native forest wood for power.

Could you let us know when you are available to meet with us and discuss this matter?

Yours sincerely,

#### Lorraine Bower

In conjunction with The Wilderness Society NSW, The Wilderness Society Victoria, The Wilderness Society Tasmania, the Humane Society International, the South East Region Conservation Alliance, The National Parks Association- South Coast NSW, Chipstop, Chipbusters, the Colong Foundation for Wilderness, Naturenet.org, Coastwatchers Inc., ConsACT, Environment East Gippsland, The Goongerah Environment Centre Victoria, The Huon Valley Environment Centre, Still Wild, Still Threatened, Conservation Council of Western Australia

## NATIVE FOREST WOOD-FIRED POWER IN AUSTRALIA

The time is now right for Australia to stop logging all of its native forests. We need to move to preserving our native forests for the sake of our natural heritage, for biodiversity, for water and for climate. Seventy seven percent of Australians oppose the continued logging of their native forests<sup>1</sup>. New Zealand stopped native forest logging over 10 years ago and the economy in those areas most affected, like the west coast of the south island has not looked back since.

If these power plants go ahead, with their high capital outlay, they will lock in decades more woodchipping of our native forests, way beyond the life of the Regional Forest Agreements. This means decades more of near clear-felling larger and larger areas of already degraded native forests to meet supply demands. There will be huge loss of plants, wildlife and soils, loss of diverse forest types already seriously damaged, loss of valuable carbon, water and biodiversity stocks, and siltation of waterways. There is also concomitant damage to unique Aboriginal cultural traditions and heritage sites.

## Carbon Accounting and Renewable Energy

There are two inter-related reasons that native forest biomass has been considered a 'renewable' energy source by the Australian Government.

The first is that the logging, burning and woodchipping of native forests that provide its fuel source is given a zero emissions value by the Commonwealth government. Australia's international policy settings on Land Use, Land Use Change and Forestry (LULUCF) do not account for any greenhouse gas emissions from logging. This is naturally very misleading, as logging is a highly emissions intensive industry. Australia currently manages to evade accounting for 50 mega tones of carbon emissions created by logging every year. No account is taken by the government of the source of the fuel when judging biomass a renewable energy source.

The second related reason and the argument that the logging industry uses and the Commonwealth Government supports is that since trees regrow they will re-sequester carbon released by burning biomass. However, carbon sequestration takes decades to centuries to fully bind – in the case of Australian native trees it takes 150-180 years for the trees and the ecosystems that support them to be re-established. The Australian logging industry works on 50 year rotations, in many cases 15-25 years, so the amount of carbon stored in regrowth can never equal the amount lost in logging and burning. By some accounts, biomass energy emits 4-6 times more carbon dioxide than burning coal. <sup>2</sup>

Perhaps that is one reason why most of the electricity retailers in Australia do not want to touch it. Eleven Australian electricity retailers have come out and stated that they will not purchase RECs from the burning of native forest biomass.

<sup>&</sup>lt;sup>1</sup> http://greens.org.au/content/public-industry-politics-agree-time-permanent-fix-forests-crisis

<sup>&</sup>lt;sup>2</sup> <a href="http://www.johnkaye.org.au/media/adjournment-speech-eden-chipmill-and-green-power">http://www.johnkaye.org.au/media/adjournment-speech-eden-chipmill-and-green-power</a>
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<a href="http://www.johnkaye.org.au/media/adjournment-speech-eden-chipmill-and-green-power">http://www.johnkaye.org.au/media/adjournment-speech-eden-chipmill-and-green-power</a>
<a href="http://www.newwest.net/topic/article/biomass">http://www.newwest.net/topic/article/biomass</a> energy juggernaut threatens human and forest health/C564/L564/</a>

# **International Opposition**

Overseas there is now fierce opposition in many places to the use of biomass for energy production. So concerned are some of the scientists in the US that a consortium of 90 leading US biologists and climate scientists recently sent a letter to the US House of Representatives expressing their concern over carbon accounting procedures.

"clearing or cutting forests for energy, either to burn trees directly in power plants or to replace forests with bioenergy crops, has the net effect of releasing otherwise sequestered carbon into the atmosphere, just like the extraction and burning of fossil fuels. ....any legal measure to reduce greenhouse gas emissions must include a system to differentiate emissions from bioenergy based on the source of the biomass." [copy of letter attached]

The US Manomet *Biomass Sustainability and Carbon Policy Study* (2010)<sup>3</sup> found that using wood for energy results in a "carbon debt" because burning wood releases more CO<sup>2</sup> into the atmosphere per unit of energy than fossil fuels (oil, coal, or natural gas). The study demonstrates that for at least fifty years, burning wood to generate an equivalent amount of energy would create more emissions than burning coal.

The latest European study "Bioenergy: A Carbon Accounting Time Bomb (2010)<sup>4</sup> concluded that "The carbon debt created when woody biomass is burned takes centuries to pay off. The result is that biomass can be more harmful to the climate than the fossil fuels it replaces."

Community opposition to biomass plants is also growing. A number of biomass power projects planned in the US have been abandoned or postponed. In Massachusetts, officials have ordered a moratorium on new permits and commissioned a scientific review of the environmental credentials of biomass power.

## Health Risks

Particulates produced by wood-fired power plants are very toxic and dangerous to human health. Using the latest technologies is no guarantee that the health risks will be negated. The McNeil Biomass energy plant in Vermont, USA, features the latest pollution control technologies yet is the largest single source of air pollution in the state.

The American Lung Association has voiced serious concerns about wood-fired power. "The health effects of ozone and particle pollution include wheezing, shortness of breath, increased risk of asthma attacks, pulmonary inflammation, and premature mortality." 5

These plants also produce a very unpleasant odour.

# Genuine Renewables are Disadvantaged

There are only so many Rnewable Energy Certificates issued, and allowing REC's to be generated from native forest wood-fired power will reduce support for genuinely renewable

<sup>&</sup>lt;sup>3</sup> http://www.manomet.org/node/322

<sup>&</sup>lt;sup>4</sup> http://www.eeb.org/EEB/index.cfm?LinkServID=8481F382-A488-5532-533788C21A65D484&showMeta=0

<sup>&</sup>lt;sup>5</sup> http://floridiansagainstincineratorsindisguise.com/2009/12/15/american-lung-association-of-massachussets-voices-concerns-over-biomass-power-plant/

alternative energy like solar, geothermal and wind power. Wood-fired power therefore deprives genuine renewables of much needed government subsidies.

A recent initiative by Clean Energy for Eternity on the Far South Coast has generated over 50 jobs installing solar panelling on homes through the region and has provided additional benefits of free solar power for community centres and schools. Isn't this the kind of regional development project that the Australian Government should be supporting? The biomass plant at Eden will provide 6 full time jobs. Perhaps more than that will be lost to the tourist industry when the health risks and smell of the plant become apparent. It is difficult to see how this can be considered an important regional infrastructure project.

## **International Precedents**

Another argument that the logging industry uses for inclusion of wood fired power as renewable energy is based on the example of biomass power in parts of Europe such as Scandinavia, where it has been used for decades.

As often happens, the European context is not suitable for Australia. European trees have faster regrowth rates, soils are generally deeper and more fertile and abundant rainfall/snow melt helps to protect the soils.

In Europe there are no native forests which support the kinds of native ecosystems and biodiversity that Australian forests do, except in the very far north of Scandinavia. These northern European forests are logged on 130 year rotations. Most forests in Europe are plantations and even these are logged on rotations of around 70 years. In comparison, Australian forests are sometimes logged on 50 year rotations, but more often on 15-40 year rotations.

There is a vast amount of agricultural waste in Europe which is used as biomass to fuel generators. With few exceptions this kind of fuel is not available in Australia in large quantities. Even so, in parts of Europe there are now huge problems with supply of biomass as fuel and Sweden has expressed interest in buying biomass from Tasmania. These power plants are also problematic in their European environments and they have their own emissions, odour and health problems.

The most overwhelming reason though, is that we do not need to follow these precedents. There may be a strong argument for such plants in Europe, where there is abundant agricultural waste, less access to sunlight, higher population density, fewer areas where wind farms may be established, and often restricted access to geothermal sites. With Australia's ability to generate vast amounts of genuinely renewable energy from solar, wind and geothermal, there is no need for wood-fired plants to be built here.

# Fuel Source for Wood-fired power Plants

The National Association of Forest Industries is already campaigning to broaden the access of the industry to native forests for biofuels. There is no doubt that it wants to be able to use any wood from any forest managed under State or Commonwealth auspices, for generation of electricity.

"wherever forests are managed under Commonwealth and/or State forest management regulations, the products of any harvesting operation should be

eligible to produce renewable energy under the Expanded National Renewable Energy Target Scheme." [my emphasis]<sup>6</sup>

We are thankful that the Labor Party, combined with The Greens voted in the Senate to reject Liberal Party amendments to the RET Bill which would have made this possible.

However, the Federal Government's expanded RET legislation and Renewable Energy Certificates mean that native forest woodchips may eventually be more valuable as energy than for pulp and paper. When demand for woodchips from the paper and pulp industry is reduced, burning native forest wood for energy becomes an attractive proposition, especially given the inclusion of native forest biomass as a renewable energy source in the expanded RET. It is difficult to avoid the conclusion that companies that operate biomass power stations will structure the fluctuations of the market into their strategies and make decisions about the use of forest resources accordingly.

During the economic downturn the woodchip mill at Eden, NSW was unable to remain in operation continually during 2009 and for many periods it was not operating. Yet it has made an application for a wood-fired power plant that it will operate 24/7 and provide 'year round reliable supply of electricity'. If there are periods when there is no 'waste' to burn, it is difficult to understand how it could provide this reliable supply unless it plans to use sources other than milling and woodchip 'waste'. We already know that it has promulgated the misinformation for decades that it only uses the 'waste' from milling operations for woodchips. It has only ever used whole logs.

#### **Plantations**

In fact there is no need to either log or burn any native forests. Australia now has enough plantation wood online to supply all of its timber needs. One of the main reasons that native forest logging for the pulp and paper industry has continued for so long is that plantations cannot compete on price with native forest logging. Plantation logs are sold at \$35 or \$40 a tonne in order for commercial plantations to make a profit. Native forest logs are sold for \$12 - \$20 a tonne, sometimes as little as \$6 a tonne. A large logging truck laden with huge logs is typically carrying around \$200 worth of timber – the price of a good pair of shoes.

While the logging industry typically operates at a loss – in NSW taxpayers subsidize it by around \$14 million a year – plantations are going out of business because the state logging agencies will not raise the price of native forest logs to an economically responsible level.

## Healthy Forests and 'Waste'

The logging industry has long used the rationale for logging that thinning and clearing of forests is actually healthy and that 'cleaning' up the 'waste' from logging for wood-fired power will make them healthier. However, the woody 'waste' products on the forest floor are essential for the maintenance of healthy soils and survival of any wildlife that remain after logging. They encourage the growth of bacteria that healthy soils need. They draw

<sup>&</sup>lt;sup>6</sup> Extract from National Association of Forest Industries Submission to Department of Resources, Energy and Tourism on the Strategic Directions Paper for National Energy Policy – Framework 2030, June 2009

<sup>&</sup>lt;sup>7</sup> Dr Judith Ajani, ANU - Fenner School Seminar Series 6 May 2010.

down CO<sup>2</sup> into the earth. They also help store moisture in the soils and prevent them from drying out.

A similar argument is used that clearing and thinning of forests prevent bushfires. In fact, thinning and removal of trees can increase the intensity of fires. Large-scale logging could increase bushfire risk for forests in South Eastern Australia, creating bigger fuel loads and drier, more combustible conditions, new research says. A world-first study led by Australian National University fire ecologist Professor David Lindenmayer (2009) <sup>8</sup>has found that gaps in the forest canopy allow the forest floor to dry out, increasing flammability by as much as 50 per cent in some cases.

These are all compelling reasons to change the RET legislation to exclude native forest biomass power from your list of renewable energy sources. The science and the economics do not stack up. These plants will not be clean, green or renewable. A real renewable energy future will give Australia a leading edge in new technologies, not lock us back in the past, with old technologies that will continue to destroy and damage our forests, our wildlife, our soils and our water.

<sup>8</sup> http://www.abc.net.au/science/articles/2009/10/29/2726587.htm