PART 4: 19 SUBMISSIONS

Anna Timbrell
Environmental Planning Officer
Infrastructure Projects
Department of Planning
GPO BOX 39
SYDNEY NSW 2000

Paul Brunton
5 Illoura street
TATHRA NSW
2550

April 18, 2010.

Dear Ms Timbrell,

Re: Proposed Wood Fired Power Station in Eden NSW

I am writing to express my concern regarding the approval and construction of the proposed wood fired power station at Eden.

South East Fibre Exports, owners of the Eden Chipmill state that the power station will be fuelled with 'waste wood' from logging of our native forests. I have lived in the area for 17 years and see on a daily basis truckloads of 'waste wood' on its way to the chipmill. This wood is not 'waste', it is habitat for plants and animals, storer of carbon and preserver of our delicate water supplies. The 'waste' from logging of native forest is left on the forest floor, bulldozed into piles and burnt green. That is a fact, what is on those trucks that goes to the chipmill as 'waste' are solid timber logs.

According to the International Union for the Conservation of Nature 2008 report, Australia has the worst record of mammal extinction or near extinctions of any developed nation in the world due to its deforestation practices. On a world wide stage for a supposedly educated society, that that is something to be proud of.

Another issue to consider is the health of the marine life in Twofold Bay. The temperature to be used in the cooling process of the furnace will be at least 21 degrees hotter than the ocean temperature in the winter, you don't need to be a scientist to know that this will have a dire effect on the marine life in the bay. Then there's the algae bloom that will result due to increased temperatures, in turn affecting tourism in the area. What will become of the whale watching businesses that operate in the bay when the whales no longer come into the bay because of the noise of the furnace.

It is a disgrace for a government to actively encourage the destruction of our native forests for the benefit of a few at the expensive of our natural biodiversity and future generations. The wood chip industry is in a down turn, this is a grab at an opportunity to use tax payer resources to provide yet another destructive avenue for making money. Lets look at cleaner power alternatives, listen to the science, take action to make the future better. We need to be serious about pursuing renewable energy.

Short term gain for a long term cost. Let us take an educated approach to the power needs of the future. Don't let the proposal go ahead.

Yours faithfully,

Paul Brunton

Environmental Planning Officer
Infrastructure Projects
Department of Planning
GPO Box 39, Sydney NSW 2001
Sydney NSW 2000

Re: 09_0034

Submission opposing proposed biomass fired power station

I strongly oppose the approval of this project on the following grounds:

In general

- Just three days after this current environmental assessment went on display for public comment, South East Fibre Exports made public announcements that the project was "on hold." This is clearly a blatant subterfuge designed to fool an already apathetic public out of making submissions and has fatally compromised the entire public consultation process. The Minister must reject the current application and require that the application be resubmitted so that the approval and public submission process can be started again, free of interference. South East Fibre Exports must not be allowed to interfere in the public process.
- The abovementioned blatant subterfuge is typical of the dirty deeds and deception which I have seen practiced by the woodchip industry for many years now. It is not coincidental that woodchipping operations are also now targeting several controversial Far South Coast "old growth" forests at once, at the very same time that submissions on this project are being called for. This is a "divide and conquer" ploy by the industry against the public which has also compromised the public consultation process of this current environmental assessment.
- The fuel to be used is largely not "waste" I find the short description of the project to be less than honest with only about 20% of the proposed fuel coming from true waste which is currently incinerated. The only way that this proposal can be large enough to be viable is to use currently saleable output and off-site material call it "waste". You can be sure that if constructed, the power station will be run at full capacity to maximise the returns and the shortfall of true "waste" will be diverted from virgin chips (albeit lowest grade).
- At 3.3.1, the submission is again less than honest when it dismisses the option of reprocessing "waste" into saleable fuel pellets on the basis that "there is insufficient waste wood on-site to justify the expenditure". The same statement would apply for this power station if otherwise saleable and off-site material were not included in the proposal. Lets see the sums redone on the same basis for the fuel pellet option. Of course, none of this "waste" would exist if one million tonnes of trees (almost 19,000 hectares of forest) were not logged each year to supply the chipmill.
- The existing use of much of the proposed fuel as mulch currently generates substantially less greenhouse gas than the proposed power station because it decomposes slowly and transfers significant carbon to the soil.
- The scope of this assessment is so narrowly defined as to make it almost meaningless. It examines in minute detail some aspects but ignores the bigger context. For example, it refers to the "terrestrial ecology" of the site as having "a disturbed under-storey of exotic grasses", in other words, mown lawn, but totally ignores the immense ecological implications of intensive, industrial scale logging required to supply the fuel.
- While acknowledging that deadly dioxins, furans and HAPs will be emitted, the EA does not examine the human health implications of the emissions at all.

Environment

- Very hot water will be discharged into Twofold Bay. The temperature of cooling water discharged into Twofold Bay will be more than 21 degrees above the ambient water temperature in the winter. The implications of this are dismissed, but there are some serious consequences:
- The Weedy Sea Dragon, a threatened species, can only survive in temperatures less than 22 degrees. The EA says that the sea dragons will go somewhere else: they "may avoid the area around the outlet." Too bad for them if they don't.
- Green Sea Turtles. The presence of these creatures is noted but the report fails to mention that in other power stations in NSW, turtles are regularly trapped in cooling water pipes because they are attracted by the warmer temperature.

- Whales. Noise may interfere with whale migrations via Twofold Bay
- Anti-fouling treatments. Toxic treatments may threaten marine life and mussel culture.
- Emissions estimates, especially in relation to particulates and heavy metals assume that the wood will be clean and uncontaminated and no consideration is made for its exposure to salt.
- SEFE CEO Peter Mitchell explicitly told the Bega Valley Shire council on 26 August 2008 that "municipal waste" was a potential fuel.
- The stockpile of fuel will be stored a few meters from the ocean where it will be contaminated by salt, increasing dioxin levels.
- Heavy metal content in ash will exceed allowable limits and additional approval from DECC will be required to use it on the SEFE Rockton plantation. Exposure to heavy metals has been linked to penis defects. http://www.smh.com.au/lifestyle/wellbeing/heavy-metals-raise-risk-of-penis-defects-20091202-k6es.html
- A Canadian study commissioned the government of British Columbia (Canada) last year. "Emissions from Wood-Fired Combustion Equipment" found that basic emissions which could be expected include:
  Acetaldehyde Alpha-pinene Beta-pinene Carbon monoxide (CO) Formaldehyde Methanol Naphthalene Toluene Total phenols Turpentine 2,3,7,8 Tetrachlorodibenzo-p-dioxin (TCDD) C/P 2,3,7,8-Tetrachlorodibenzo-p-furan C/ Hydrogen sulphide C/S Nitrogen oxides (NOx) Beryllium Cadmium and compounds Chromium (II) compounds, as Cr Chromium (III) compounds, Cr Chromium (metal) Chromium (total) Chromium, hexavalent metal and compounds Cobalt as Co metal Dust and fume Cobalt carbonyl as Co Copper, Dusts and mists, as Cu3 Copper, Fume Iron Lead arsenate, as Pb3 (A2O4) Lead chromate, as Cr Lead compounds Magnesium Manganese Molybdenum Nickel and compounds Particulate matter (PM) Phosphorus Selenium Silver Thallium Zinc Arsenic and inorganic arsenic compounds Mercury Hydrochloric acid Sulphuric acid Sulphur dioxide (SO2)

Climate change

- Electricity generated from native forest wood is more greenhouse intensive than coal fired power.
- Electricity generated from native forest wood will compete with and potentially displace genuine renewables permitted under the Mandatory Renewable Energy Target MRET scheme. It will not be competing with coal.
- The project depends for its fuel on the continued existence of the native forest woodchipping industry, one of Australia's biggest greenhouse polluters.
- The EA does not look at the full life cycle of the fuel (i.e. it ignores the greenhouse impacts of native forest logging; it simply asserts this is "sustainable because it has Australian Forestry Standard (AFS) certification). It fails to examine the consequences of the one million tonnes of woodchipping each year, without which there would be no fuel.
- It claims: "Improved environmental outcomes due to lower greenhouse gas emissions per unit of output compared to conventional coal-fired power generation technologies. The proposed plant would potentially avoid the emission of 23,800 t Of C02-e from fossil-fuel based power generation per year."
- Logging of native forests to supply the Eden chipmill has been conservatively estimated at over 18 million tonnes per year[1] with one estimate as high as 61 million and another as low as 9

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[1] **Carbon pollution generated by logging for the Eden chipmill**

According to Mackey et al "Green Carbon" 2008, the average carbon carrying capacity for all the SE Australia eucalypt forests is 640 tonnes per hectare. In those forests in SE NSW where the actual carbon stored is currently less than the carrying capacity, this is entirely due to the previous operations of the Eden chipmill over the past 40 years, so it is valid to use Mackey's figure of 640.

According to FOI information, in 2006-07 FNSW logged 14,388 hectares in the Eden, South Coast/Southern and Tumut areas.

The figures below do not include the emissions from running the mill, and transport associated with logging contractors or deliveries to the mill. The calculation is based on:

Area logged x Carbon stock per ha x 40% (loss from logging) x 3.666 (converting C to CO2

Thus, for NSW:

14,388 x 640 x .4 x 3.666 = 13,503,080 tonnes of CO2

For East Gippsland:

4,500 x 700 x .4 x 3.666 = 4,611,600 tonnes

Total: 18,114,680 tonnes.

40% of the carbon stored in a forest is lost to the atmosphere when it is logged, even after 150 years. The weight of a carbon dioxide molecule is 3.666 times the weight of a carbon atom. Approx hectares logged in East Gippsland in 2007.

million tonnes. Logging emissions must be counted in assessing the GHG implications of burning native forest wood for electricity. It is simply not valid to start counting at the furnace door; the whole life cycle of the fuel must be taken into account in measuring greenhouse impacts.

- When power generated from native forest is compared with coal fired power, if the full life cycle of the fuel is assessed, wood fired power is as much as 6.4 times more greenhouse intensive than coal fired power[2].

Woodchipping

- Without ongoing woodchipping of a million tonnes of native forest a year, there would be no fuel available.
- Sustainability of native forest logging. No serious attempt is made to assess this. It is simply deemed "sustainable" because most SEFE chips are certified under the highly controversial AFS. Japanese paper manufacturers are increasingly reluctant to accept AFS as an adequate label of sustainability and the biggest paper manufacturing company in Japan, Oji, does not accept it.
- The EA claims "Improved environmental outcomes due to lower greenhouse gas emissions per unit of output compared to conventional coal-fired power generation technologies. The proposed plant would potentially avoid the emission of 23,800 t Of C02-e from fossil-fuel based power generation year." See point 4 under "If you are concerned about climate change."
- All emissions from logging should be counted in assessing the GHG implications of burning native forest wood for electricity. It is simply not valid to start counting at the furnace door; the whole life cycle of the fuel must be taken into account in measuring greenhouse impacts. GHG emissions from the proposed plant should be compared with those of other MRET approved technologies, not with coal fired power.
- However, even if it is compared with coal fired power, if the full life cycle of the fuel is assessed, wood fired power is possibly 6.4 times more greenhouse intensive than coal fired power. It is claimed that "no native or plantation forest would be felled for the purpose of fuelling the plant" (19-3).Forests NSW expects that some timbers which are not currently used for woodchipping because they are either too red or too hard, and are not of sawlog quality will be used for power generation.

Effects on the local community

- While acknowledging that deadly dioxins, furans and HAPs will be emitted, the EA does not examine the human health implications of the emissions <u>at all</u>.
- Emissions estimates, especially in relation to particulates and heavy metals assume that the wood will be clean and uncontaminated and no allowance is made for its exposure to salt.
- (a). SEFE CEO Peter Mitchell explicitly told the Bega Valley Shire council on 26 August 2008 that "municipal waste" was a potential fuel.
- (b). The stockpile of fuel will be stored a few meters from the ocean and will be contaminated by salt, increasing dioxin levels.
- It will not "improve the reliability of the local electricity supply." (19-2)
- In 2009, the Eden chipmill was closed for weeks at a time, for most of the year it was on a 4 day week. If Eden residents were counting on it to power their homes in 2009, they would have experienced many outages.
- Emissions inventory states that "most of the particulate matter will be controlled," especially particulates of greater size. There is no examination of the nature, volume and consequences of particulates bigger than 10 microns. There is no justification provided for ignoring them. The EA leaves open the possibility that some of these bigger particulates will be emitted, but fails to provide any detail of the nature, volume and consequences of those emissions.
- Odour. While it is acknowledged that sulphur dioxide, rotten egg gas will be generated, there is no consideration of odour as an issue to be addressed. Neither are the acid rain consequences of sulphur dioxide emissions addressed.
- Bega Valley Shire Council Zoning. The chipmill site is currently zoned 1(A) agricultural, arguably not appropriate for this type of development.

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[2] Dr John Kaye MLC. Adjournment Speech 2 December 2008 "Our very rough analysis, based on forestry industry and peer-reviewed data, suggests that for every megawatt hour of energy generated by south-east native forestry biomass, more than 6.4 tonnes of CO2 would be released instantaneously. This is more than **6.4 times the amount of CO2 released from burning coal to produce the same amount of energy**. Certainly regrowth would bio-sequester some of this carbon but at a very slow rate. It would take about 80 years of regrowth to capture 5.4 tonnes, thus returning the greenhouse gas emissions to the same level as coal."

- Recreational divers will have reduced access to the chipmill jetty (8-23)
- Anti-fouling treatments (8-17). Toxic treatments may threaten marine life and mussel culture.

Renewable energy

- Electricity generated from native forest wood fired power is even more GHG intensive than coal.
- In assessing greenhouse implications and calculating "avoided emissions" this power should be compared with wind or solar or other MRET approved technologies because it will be competing with and potentially displacing these technologies in the market place, not coal fired power.
- The fuel for the power station is not "waste." It is material that already has an economic value and it is bought and sold in the market place. Only a tiny amount is currently incinerated. Burning it as electricity gives it a higher value because of implicit subsidies[3] available to it under the MRET scheme.
- The greenhouse analysis highlights the arbitrariness of some current national and international conventions on measuring GHG emissions; e.g., deeming burning of biomass to be carbon neutral. The comparison between GHGs generated by current ways of disposing of wood "waste" as mulch and by the power station creates a nonsensical result. Mulching and composting add carbon the soil but slowly decompose releasing some CO2 over time. In burning, the entire product instantly becomes CO2, and yet the (greater) emissions from the burning are not counted, while the (smaller) emissions from mulching are counted. Where is the logic in that?
- The project is wasteful. 75% of the heat is "lost" and according to some reports may even negatively affect precipitation rates in the area. Recently researcher, Aron Gingis, said that the plant would have adverse effects on air quality, causing less rainfall, affecting river flows, increased bushfire risk and having devastating consequences for the Snowy River.
- Abatement Certificate Provider scheme. Eligibility of the plant is unclear, especially with uncertainty surrounding the future of the Carbon Pollution Reduction Scheme. This should be clarified.
- One of the claimed benefits of the project is "the generation of electricity from renewable biomass material in contrast to current practice which under-utilises a valuable resource," Burning wood from native forest which has been industrially logged for woodchips is not a renewable technology. At least 180 years are needed for most of the forest to replace itself once it is logged intensively for woodchips.
- "The supply of around 22 GWh of base load power annually to the electricity grid"; The Eden chipmill is an ideal site for alternative forms of renewable energy which could be generated more cheaply at this site using wind, solar or tidal technologies.

Please do not share my personal details with others.

Yours faithfully,

[redacted]

19/4/10

[3] According to a study by MBAC Consulting "Global and Australian initiatives and impediments to the production of renewable energy from wood in Australia" May 2003, commissioned by the National Association of Forest Industries (NAFI), the maximum price payable for wood fuel under MRET is $41.05/ t. Maximum price payable for wood fuel without MRET $7.71/t. Thus the effective subsidy value of MRET $33.33/t

Submission on Native Forest-Fired Power Station Eden NSW

Application No MP 09 0034

Skye Etherington
PO Box 1162
Bega 2550 NSW

Director Infrastructure Projects
Dept Planning
GPO Box 39
Sydney 2001

April 7th 2010

Dear Director,

I write this submission objecting to this proposal on a number of grounds.
From a purely logical point of view, it seems absurd to even contemplate allowing an industry to expand, when their core business involves the destruction every year, of thousands of hectares of native forests here in NSW and more generally in Australia, through the dominance of the woodchipping industry.

Forests are our most important place of biodiversity, securing water supply, providing habitat for many species, being th ›est means of storing carbon from our saturated atmosphere, a place of beauty; and very important to many businesses which rely on clean water, such as the million dollar oyster industry here on the south coast, as well as our extensive and expanding tourism market.

Sustainability... ??

South East Fibre Exports claim that the wood supply is sustainable. This is refuted in the *Independent Assessment Report of the NSW RFA process,* which confirms that Forests NSW have *failed to meet* both *their transparency and sustainability obligations.*
Forests NSW have been running at a financial loss for a number of years, as seen in the Auditor Generals reports for 2009, which documents a $14million loss in that year.
As they are the supply agent for SEFE to receive their timber, the lack of accountability, both financially and environmentally, from State Forests NSW, should be considered in assessing this proposal.

This proposal must also meet the requirements of the *Renewable Energy (Electricity) Act,* which says that the source of the energy must be ecologically sustainable. Burning Native forests for electricity clearly does not fit the intended requirements of the Act.

Waste...??

SEFE are trying to assert, that the material they will burn is a waste product from their operations. [redacted] The whole industry of woodchipping is a wasteful operation and consumes up to **90% of all trees** harvested in the Eden and Southern RFA regions. This is not residue from sawlog operations. It is a woodchip driven industry.
Currently, the majority of the "waste" from their operations is sold on to landscaping firms, where the sawdust and chips return valuable carbon and organic matter back into the soil.
Only a tiny proportion (2% in the EA) is currently burnt on site.
It could be said that the economic incentive of having this material recognized under the MRET scheme, provides a motivation for the desire to burn further quantities of trees for power.
(The max price payable for wood fuel without MRET is $7.71/t, with MRET subsidies it is $41.05 /t)

The assurance that "no native forest will be felled for the particular purpose of fuelling the power station" does little to reassure, given the long standing myth put out by the industry that woodchipping only uses the "waste" from timber felling operations.
130 trucks full of trees, ***not crowns or butts***, roll into the chipmill each day [redacted]. (annual truck surveys taken on Edrom road by Chipstop and South East Forest Rescue)

The Site
The proposed site of the burner is on land currently used by the SEFE chipmill at Twofold Bay and is adjacent to the Ben Boyd National Park.
The area is zoned Rural 1(a), which is a zone with objectives including; *protection of rivers and riparian zones; encouraging tourism, and not detracting from the environmental and cultural aspects or scenic amenity of the area.* This proposal will impact and detract from the significant cultural and natural history opportunities of the area.

Marine life and hot water
The outflow of water heated to 22 degrees from the burner, will clearly impact on the aquatic ecosystem of Twofold Bay. The rare and endangered weedy sea dragon is found in the area, and it is visited by a number of migratory birds and Cetacea. There is also a mussel industry in the bay.
Ir fficient detail is made in the EA regards the possible environmental effects of the discharge of this hot water into the bay.
Saying that species will go somewhere else is not appropriate, and shows a complete lack of sensitivity to the environmental ecology of the area.

Tourism
There is also significant tourism occurring in the area at Davidson Whaling Station, a heritage site run by NPWS immediately adjacent to the site. Whales often come into the bay in the migration season, providing close to hand whale watching opportunities. Twofold Bay is the only ocean embayment in the twofold Shelf region and the area has recently been declared a Marine Park.

Again, the impacts on the growing tourism opportunities of the area are ignored in the Assessment. Tourism on the South Coast in 2009 brought $1.9 billion dollars in revenue, employing 58,463 people.

Greenhouse gas emissions.

Th comments regarding the emissions from the burner are [redacted]
The carbon accounting in the proposal, does not include the loss of carbon from the soils of the forest areas logged , or the native forests' carbon storage capacity in situ. Carbon accounting seems to only begin at the point at which the trees are burnt. They do not even include transport or harvester fuels in the equation.
According to *Mackey et al "Green Carbon" 2008*, the average carbon storage capacity of eucalypt forests in the SE NSW is 640 tonnes /hectare. 40% of this carbon is lost when the trees are felled.
If we then go on to burn these trees as woodchips, for every Megawatt hour of energy produced, 6.4 tonnes of CO2 would be released. *(J.Kaye MLC Speech Dec 2 2008.)*
This is more than 6 times the amount from burning the equivalent in coal.
The absurd thing is that the Eden Chip mill is located on *one of the best sites in Australia for a wind farm. (Clean Energy for Eternity correspondence.)* The comparisons made in the EA should be made in reference to *true renewables* of solar, wind and wave.

Under the *POEO Regulations* it is an offence to allow native forest biomaterial to be burned for electricity generation of power stations over 200W. Under the *Renewable Energy general Regulations*, this is exempt if the forests are logged in accord with 'Ecologically Sustainable Forest Management Principles, or logged for a high value process. Woodchipping is ***not*** high value and it is apparent that forestry operations have not been carried out in a sustainable manner for the last 10 years at least, under the faulty RFA legislation. Also *the requirement to table reports showing the progress on meeting these ESFM targets have not been met.*

Emissions.
The proposed power station will emit a toxic collection of emissions from its smoke stack, including carbon monoxide, nitrogen oxides, dioxins, sulphur dioxide and particulate matter. The potential health effects on the Eden community have not been addressed.

Clean Energy objectives of the Bega Valley Shire Council and community.
Over the last several years there has been a concerted effort and involvement of the community in setting targets for our shire to reduce our consumption of electricity from fossil fuels and switch over to renewable technologies. To this end, the Bega valley Shire Council support the 50 /50 by 2020 campaign targets, of reducing our use of greenhouse emitting technologies and using 50% renewable technologies by 2020. This has been agreed to by the community and our Council, and this proposal does not meet the required criteria.

Consultation…??
The EA suggests that wide spread consultation has occurred in the community. *This is not true.*
To suggest that turning up at a forum organised by conservationists of the area and handing out leaflets outside the venue is part of their consultation process, is insulting, [redacted]. Further, the information in the leaflets was subsequently found by the ACCC to be misleading the public in their claims.
I have seen only one add in the local Bega newspaper alerting me to the Environmental Assessment being on display, with no articles related to the matter in the body of the paper. It seems that the onus for consultation or a call to accountability, is constantly in the hands of the local environmentalists of the region.

Stakeholders
I consider myself a stakeholder in the NSW forest debate.
I have been involved in working for preservation of high conservation forests in this region for 2 decades. I have a legitimate right to ask that this public resource; our forest estate, is well managed, and no longer subject to the inadequacies of the State Forest Department.

I urge you to give due consideration to the objections you receive to this application which is so clearly flawed, both in content and in [redacted].
Principles of ESD should be applied.

Climate change and pollution mitigation measures are important in today's world. The loss of biological diversity, negative impacts on water supply and quality, and on our environment, and emissions from this proposal all deem it unsuitable for approval. The future of this area lies in tourism around the abundant natural values that the area provides.

I urge you to reject this proposal on all accounts.

For our common future,

Skye Etherington Skye Etherington

Anna Timbrell
Environmental Planning Officer
Infrastructure Projects
Department of Planning
GPO BOX 39
SYDNEY NSW 2000

Nancy Brunton
5 Illoura street
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According to the International Union for the Conservation of Nature 2008 report, Australia has the worst record of mammal extinction or near extinctions of any developed nation in the world due to its deforestation practices. On a world wide stage for a supposedly educated society, that that is something to be proud of.

Another issue to consider is the health of the marine life in Twofold Bay. The temperature to be used in the cooling process of the furnace will be at least 21 degrees hotter than the ocean temperature in the winter, you don't need to be a scientist to know that this will have a dire effect on the marine life in the bay. Then there's the algae bloom that will result due to increased temperatures, in turn affecting tourism in the area. What will become of the whale watching businesses that operate in the bay when the whales no longer come into the bay because of the noise of the furnace.

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Short term gain for a long term cost. Let us take an educated approach to the power needs of the future. Don't let the proposal go ahead.

Yours faithfully,

N. Brunton

Nancy Brunton

Northern Rivers Greens
PO Box 379, Lismore, 2480
Email : northernriversgreens@gmail.com

15th April 2010

Re: The Eden wood-fired plant

The Northern Rivers Greens are concerned for the natural environment if South East Fibre Exports (SEFE) constructs a wood-fired plant at Eden on the South Coast of NSW. We are concerned about several aspects of the proposal including those relating to: climate change; the health of humans; and the health of various creatures that live and visit the region including sea creatures.

For example, in relation to the impact of the wood-fired plant on climate change, electricity that is generated using wood from forests is considerably more greenhouse exhaustive than power produced from coal.

As well, in relation to the health of humans, while it is acknowledged that deadly dioxins, along with others, will be emitted, the EA does not look at the implications for human health due to these emissions.

In addition, the wood-fired plant would have an impact on various creatures within the region including sea life. For instance, hot water will be discharged into nearby Twofold Bay which will affect various sea creatures. One such creature that will be affected by the warming waters is the Weedy Sea Dragons, which is a threatened species found in the region. The Weedy Sea Dragon can only survive in temperatures less than 22 degrees. We need to nurture the survival of this threatened creature.

Another creature we are concerned for is the Green Sea Turtles. While the existence of these creatures in the area is noted in the EA, the report does not mention that in other power stations in NSW, these turtles are habitually trapped in the cooling water pipes due to their attraction to warmer water.

Whales too may become distressed due to excessive noise. Noise from the wood fired power station may hinder the whale migration by way of Twofold Bay. Other marine life, including mussels and various fish, may also be threatened due to temperature rises and toxic treatment.

The Northern Rivers Greens sees solar and wind power replacing fossil fuels not burning forests.

Regards,

Louise Holdsworth
On behalf of the Northern Rivers Greens

Anna Timbrell
Environmental Planning Officer
Infrastructure Projects
Department of Planning
GPO BOX 39
SYDNEY NSW 2000

Cathleen O'Halloran
5 Wildlife Drive
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South East Fibre Exports, owners of the Eden Chipmill state that the power station will be fuelled with 'waste wood' from logging of our native forests. I have lived in the area for 17 years and see on a daily basis truckloads of 'waste wood' on its way to the chipmill. This wood is not 'waste', it is habitat for plants and animals, storer of carbon and preserver of our delicate water supplies. The 'waste' from logging of native forest is left on the forest floor, bulldozed into piles and burnt green. That is a fact, what is on those trucks that goes to the chipmill as 'waste' are solid timber logs.

According to the International Union for the Conservation of Nature 2008 report, Australia has the worst record of mammal extinction or near extinctions of any developed nation in the world due to its deforestation practices. On a world wide stage for a supposedly educated society, that that is something to be proud of.

Another issue to consider is the health of the marine life in Twofold Bay. The temperature to be used in the cooling process of the furnace will be at least 21 degrees hotter than the ocean temperature in the winter, you don't need to be a scientist to know that this will have a dire effect on the marine life in the bay. Then there's the algae bloom that will result due to increased temperatures, in turn affecting tourism in the area. What will become of the whale watching businesses that operate in the bay when the whales no longer come into the bay because of the noise of the furnace.

It is a disgrace for a government to actively encourage the destruction of our native forests for the benefit of a few at the expensive of our natural biodiversity and future generations. The wood chip industry is in a down turn, this is a grab at an opportunity to use tax payer resources to provide yet another destructive avenue for making money. Lets look at cleaner power alternatives, listen to the science, take action to make the future better. We need to be serious about pursuing renewable energy.

Short term gain for a long term cost. Let us take an educated approach to the power needs of the future. Don't let the proposal go ahead.

Yours faithfully,

Tess Brunton

Brunton

Anna Timbrell
Environmental Planning Officer
Infrastructure Projects
Department of Planning
GPO BOX 39
SYDNEY NSW 2000

Sean Yeo
PO Box 325
BEGA NSW 2550

April 15, 2010.

Dear Ms Timbrell,

Re: Proposed Wood Fired Power Station in Eden NSW

I am writing to express my concern regarding the approval and construction of the proposed wood fired power station at Eden.

South East Fibre Exports, owners of the Eden Chipmill state that the power station will be fuelled with 'waste wood' from logging of our native forests. I have lived in the area for 17 years and see on a daily basis truckloads of 'waste wood' on its way to the chipmill. This wood is not 'waste', it is habitat for plants and animals, storer of carbon and preserver of our delicate water supplies. The 'waste' from logging of native forest is left on the forest floor, bulldozed into piles and burnt green. That is a fact, what is on those trucks that goes to the chipmill as 'waste' are solid timber logs.

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Short term gain for a long term cost. Let us take an educated approach to the power needs of the future. Don't let the proposal go ahead.

Yours faithfully,

Sean Yeo

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Submission re the proposal by South East Fibre Exports (SEFE) to construct a wood fired power station at the Eden chipmill.

This is a brief document written by a layperson, but who none the less is aware of the damage such a proposed project could cause.

In my opinion it is time to close the Eden chipmill, not ramp up its activities. Here in SE NSW, the forests have been damaged enough, enough native animals, including koalas, have died, enough damage done to the climate by the felling of trees, leading the area to become drought stricken.

This industry has existed, so far, to send the woodchips to Japan for paper manufacturing. It just mystifies me why we would do this, clearfelling our beautiful native forests. There must be some reason, not economic, but I really can't understand it. There are many alternatives to use for making paper.

To consider using the "waste" from these activities to manufacture power is pure stupidity. For a start there are just not enough trees to sustain the idea/industry. Starting up such a business without much thought for what might happen in the future is not good business sense. Hopefully soon it will be recognised by the powers that be, that trees really do play an enormous part in the health of the planet, and it will be decided to stop destroying the forests at such a great rate. Or another scenario might be that it will be decided to keep destroying the forests and then there will be no more trees left. Either way there will be no more "waste"

Also this proposed plant itself will be damaging to the environment, producing more greenhouse gas emissions than a coal fired power plant, to say nothing of the pollution at the site and the damage to marine life, and the atmosphere in and around Eden.

There are other sustainable ways to produce power. In Australia we could be leading the way in this field, with solar or wind power for starters, so why on earth are we even considering such an absurd idea.

Thank you

From

Sylvie Mester

41 Dilkera Rd

Tathra

NSW 2550

CLARENCE ENVIRONMENT CENTRE
29-31 Skinner Street
South Grafton 2460
Phone/ Fax: 02 6643 1863
Web site: www.cec.org.au
E-mail: admin@cec.org.au

Date: 20th April 2010

SUBMISSION

to

The Environmental Assessment

of

South East Fibre Exports' proposed wood-fired power station

Attn Anna Timbrell
Environmental Planning Officer
Infrastructure Projects
Department of Planning
GPO Box 39 Sydney
NSW 2001

Compiled by John Edwards
Honorary Secretary
April 20, 2010

SUBMISSION
to the Environmental Assessment of
South East Fibre Exports' proposed wood-fired power station

Dear Assessor

The Clarence Environment Centre has maintained a shop-front in Grafton/South Grafton for over 20 years, and has a proud record of advocacy for the environment of the Clarence Valley, and the wider community. As such we appreciate the opportunity to comment on the above development application.

Preamble

The Clarence Valley, and indeed the entire Northern Rivers region, has seen a proliferation of monoculture plantation establishment in the last decade for the express purpose of supplying the export woodchip market.

This tax incentive driven boom has seen large quantities of native vegetation and old growth trees destroyed, and the landscape saturated with a cocktail of chemicals, ranging from fertilizers to herbicides, fungicides and insecticides.

Many of the chemicals used, such as Simazine, Atrazine, Rogor and Paraquat have been banned in some overseas countries after being found to cause everything in humans from cancers, organ failures, reproductive problems and death.

With the recent financial collapse of many of the entrepreneurial companies involved, these plantations are up for grabs, and the end use proposals are yet to emerge. However, pulp mills, chip processing plants, and wood-fired power generation are among the possibilities, with all the attendant pollution implications for the region.

As a result, we have a deep understanding of the concerns of residents of the Eden district who not only face the pollution problems but the ongoing decimation of native forests and loss of their natural environment.

Issues:

1. Economic.

The building of any wood-fired power station will ensure a demand for fuel (wood). At Eden that fuel is proposed to come from forest waste. However, we assert that the only waste is the destruction of native forests to supply woodchip, a product that has by far the lowest financial return of any timber product. Australia is essentially giving it away because the environmental cost is never quantified in dollar terms.

The problem with establishing wood-fired power stations is that they are likely to remain in service long after the source of waste wood is depleted, either because of a collapse in woodchip demand, possible changes in government policy in regard to forest destruction, or simply by running out of the resource. At that point the vacuum will then be filled by clearing more forests.

As it is, we understand the current demand for woodchip is extremely depressed, to the point where the chipmill proposal has been "put on hold". With the long-term predictions that on-line communications will further erode demand for newspapers, books and paper generally, the future of woodchip, and availability of woodchip waste, is far from assured.

We reject the power station proponent's claim that the proposed fuel is 'waste', and point out that it would not even exist if almost 19,000 hectares of forests were not logged each year to feed the chip mill. Also we point out that the current use of the 'waste', mulching the soil, not only results in lower carbon emissions than those that will be emitted through power generation, but will sequester some carbon in the soil, improve soil structure and help prevent erosion.

Note: In terms of greenhouse gas emissions, it has been determined that paper products have an average carbon storage life of less than 5 years (Southern Cross University, 2008).

2. Water pollution:

We are seriously concerned at the plan to discharge cooling water into Twofold Bay, which is 21 degrees hotter than ambient water temperature in winter), and Environmental Assessment's claim that the threatened Weedy Sea Dragon, which requires an environment no warmer than 22 degrees C, "may avoid the area around the outlet".

There have also been concerns expressed for other marine life, and the potential for toxic anti-fouling chemicals to poison the marine environment.

We are always assured that robust precautions will be put in place to ensure pollution does not occur. However, if history has taught us anything, accidents can, and most certainly will happen.

3. Air pollution:

One of the major problems with the use of combustible materials that there are always emissions. A recent 4 Corners program (ABC TV, April 12) highlighted the deadly consequences of breathing polluted air containing dust, particulates, and an array of poisons pumped out by coal mines and coal-fired power stations in the area. Any suggestion that dioxins, furans, and particulates this proposed operation will produce can be safely emitted must be discounted.

All existing power stations that involve the use of combustible materials emit poisonous substances. The Department of Environment, Climate Change and Water provides power stations with licences to pollute. In 2009 Macquarie Generation paid over 4¼ million dollars for just one of its power stations, Liddell, in the Hunter Valley, allowing them to pump a range of pollutants into the atmosphere, including 29 tonnes of Course Particulates; 1,562 tonnes of Fine Particulates, along with 128 tonnes of Fluoride; 38.8 thousand tonne of Nitrogen Oxides, and an unbelievable 81 thousand tonnes of Sulfur Oxides. As well 1,400 tonnes of salt, 8.3 tonnes of suspended solids, and a small amount of Selenium were dumped into "enclosed waters".

Also mentioned under the licence are – Benzo(a)pyrene; Arsenic; Beryllium; Cadmium; Chromium; Cobalt; Lead; Mercury; Manganese; Nickel; Tin; Vanadium; Dioxins and Furans.

While the plant proposed for Eden will not be in the same league as Liddell, it should be noted that emissions from wood-fired generators are 6.4 times greater than those generated by coal

The Environmental assessment claims that most of the larger particulate matter will be "controlled". We believe this is deliberately misleading, because it is fine particulates, that cannot be 'controlled', that contribute most to respiratory problems in humans.

The human health implications of poisons entering into the atmosphere have been well documented for over 200 years, but it is not considered by the Environmental Assessment, and we are concerned that the authorities will again abrogate their responsibilities to protect the health of South Coast residents when considering this development approval, in the same way they continue to allow big business to expand and contribute to ill-health and the premature deaths of Hunter Valley residents.

If there is any doubt about the dangers of wood-fired power generation, we recommend you refer to "Emissions from Wood-fired Combustion Equipment", a Canadian study which can be found at <http:/www.env.gov.bc.ca/epd/industrial/pulp_paper_lumber/pdf/emissions_report_08.pdf>. That report identifies no less than 50 substances, mostly highly toxic, that are emitted through the burning of wood waste, and pollute the air we breathe.

The reported suggestion that the proponent has also flagged the possibility of using municipal waste to power the generator, is evidence that they care little for the human health consequences, and adds further compulsive reasons for refusing this proposal.

4. Climate Change:

Deforestation is acknowledged as one of the biggest drivers of climate change. Despite this, Australia continues to clear fell and over log its native forests (Forests NSW currently logs an average of 40% basal volume every 8 to 12 years), in a way that has been identified by the NSW Auditor General as "unsustainable".

Therefore, we believe that to continue along this course must be considered highly immoral bordering on criminal. To cause this environmental devastation simply to produce and sell woodchip is plain stupid, but to then burn the residue and reintroduce that CO^2 back into the atmosphere to further exacerbate climate change is sheer lunacy.

5. Agriculture:

It is ironic that the Bega Valley Shire Council zoning for the land upon which this proposed wood-fired power station is to be built is 1 (A) Agricultural. The Bega Valley is renowned for its food production, particularly dairy products, yet here we have a proposal that could potentially have a devastatingly negative impact on the "Clean Green" credentials of the Shire, while actually reducing the Valley's production potential by building the plant on agricultural land.

Again there is a moral issue; that of destroying good food producing land when more than half a billion people around the world are starving or seriously malnourished. Prime agricultural land must be preserved.

6. Tourism:

While many areas of Australia are benefiting from tourism, it is our understanding that over-logging of the south-east forests has had a detrimental impact on the tourist industry. We believe there is nothing more likely to drive tourists elsewhere than the sight of belching smoke.

There is already concern that diving operations are being hampered by the chip mill and reduced access to the jetty by dive operators. Potential loss of marine species as a result of pollution and the hot water outfall, will almost certainly suppress the tourism potential even further.

7. Renewable Energy:

The burning of wood, conveniently lumped together with other organic materials and referred to as "biomass" in order to make it sound more environmentally acceptable, is a renewable energy source. However, we strongly believe that simply because a wood is renewable, it should not be promoted as "green" energy or in any way considered as an acceptable fuel source because of the dangerous emissions it produces.

There are acceptable exceptions, such as the use of mill waste (offcuts, sawdust etc) to cogenerate electricity, using material that has tradionally been burned anyway. Wood burning is a poisonous business, and must be recognised as such.

(31)

Vince Phillips
29 East Cochranes Rd.
Wolumla. NSW. 2550
Email ; vince.phillips@bigpond.com

Director, Infrastructure Projects
Department of Planning
GPO Box 39,
Sydney. NSW. 2001.

Dear Sirs,

Submission re 5.5 Megawatt Biomass-Fired Power Station
Application No. MP 09 0034

I have considered the Environmental Assessment dated March 2010 and related to the above project and wish to make a **submission in support of the project.**

Submission

The Environmental Assessment (EA) developed by URS Australia Pty Ltd, for South East Fibre Exports Eden, is a comprehensive document that details a renewable energy project that is presented in a form that is likely to meet the operational regulatory requirements of the NSW Department of Climate Change and Water. However the project goes well beyond that technical achievement.

The project also helps to meet renewable energy Policy commitments of Governments as well as meeting community expectation in relation to a shift from coal fired power generation to power generated from renewable sources.

The NSW Government states "the NSW Government has set targets through the State Plan to achieve 20% renewable energy consumption by 2020 in light of the Federal Government's expanded Renewable Energy Target."

The NSW Dept of Industry lists current sources of renewable energy generation in NSW as 88% hydro, 5% biomass, 5% landfill methane, 1% wind and 1% solar. I expect that the current % contribution of renewable energy to NSW primary energy mix is quite low.

Internationally, a recent International Energy Agency report shows renewables to have an estimated 13% share of world primary energy mix. Within that share, bioenergy forms 77% of the renewable energy and wood biomass underpins 87% of the bioenergy outcome. (Refer attachment 1).

The Eden project will help NSW move further down the renewable energy path and towards what is being done overseas where 20% renewable energy targets have been formally legislated as opposed to announced at the Plan level. (European Union). In Europe biomass power technology is highly developed and expanding using both wood waste and manufactured wood pellets as primary fuel sources.

The 2010-2020 time frame is essentially a very short time in respect to what is a very considerable target task to change base load power profiles significantly.

Practical Benefits of the Eden proposal

The power plant delivers **base load power**, a critical component in the present public power grid and essential to industry and public infrastructure.

Key related power infrastructure is already present. e.g. 66kV service power line, substation and internal switchrooms. Most other new renewable energy installations in rural NSW will require expensive new infrastructure to link them to the grid.

A large proportion of the required fuel is already produced on site – significantly enhancing the economic feasibility of the proposal.

The **proposed fuel is mill wood waste** that is already a bi product of a long term timber processing industry in the region. Its use for power generation will change long term practice such as burning at various sites for no commercial return or energy outcome. It will also greatly reduce road haulage impacts and emissions associated with current cartage to low value capital city markets.e.g. landscaping.

No additional logging activity has to take place to supply fuel to the project so there are virtually no additional resource emissions as these are already counted in existing processes and primary product uses of harvested wood fibre.

The proposal should reduce the need for some duplication of existing infrastructure bringing power into the Eden region and **reduce transmission losses** being incurred in high distance power transfer to Eden within the existing public grid.

The project will be **a confidence builder for the renewable energy sector** where doubts abound as to whether private investors can successfully bring renewable energy smaller scale projects on line. The sector needs successful private sector outcomes to drive further private investment at the community and regional scale.

Technically the plant **relies on proven technology** and thus avoids the risks associated with experimental type design.

South East Fibre Exports claim to have their own internal financing arrangements already in place.(Pers Comm).

The Environmental Assessment details **significant avoided emissions** of 23,780 TCO2-e (Sec 11-11) and **negligible localised impacts** in respect to visual impact, noise, smoke, emissions and impacts on the marine environment of Twofold Bay, a tidal bay of some 3,000 hectares in size.

The Assessment finds that **expected process emissions will be contained to within limits set by the NSW regulatory authority** and that modern emissions control technology is readily available and suitable to the project technology.

The project represents a **good use of existing long term waste streams** in a way that meets emerging community expectations in relation to renewable energy expansion.It should improve the emissions profile of current waste by reducing the size of the Methane component and replacing that with CO2.

The project provides an opportunity for consideration of associated investment by others using project outputs such as surplus heat and this should be of interest to bodies such as NSW State and Regional Development given the location of the project midway between Sydney, Melbourne and Canberra and adjacent to the multi purpose export wharf in Twofold Bay.

The inherent power availability associated with the project and the current availability of considerable vacant land adds to the potential for other associated developments.

The project also offers the town of Eden a point of competitive advantage as a town that will be able to claim legitimately that it runs largely on renewable energy. It can be expected that the project will be a point of considerable interest to tourists and I understand that SEFE intends to use it to actively showcase what can be achieved in far flung rural communities in the area of renewable energy.

Project Misinformation Campaigns

Leading up to and during the EA exhibition period the local community has been bombarded with numerous unsubstantiated claims from a small number of anti forest industry objectors relating to the Eden bioenergy project. During the exhibition period I have received 2 documents that seek to influence the content of submission to the approving Authority. (Refer attachments 2&3). I am finding these documents highly misleading and full of misinformation.

For example in att. 2 it is claimed that the project will undercut solar, tidal and wind power generators. How??? There is great need for multiple additional investments in renewable energy systems across technologies to meet Government targets.

Att 2 refers to "Dead Koala Power" and that the project will ensure regional extinction of Koalas and other endangered species. Given that these species have multiple records in local National Parks how does the project in any way achieve this???

Further claims that the project opens up vast new markets for woodchips – there are no plans to increase logging rates within this project. No new woodchip markets.

In attachment 3, page 2/5 – power plant opponents attempt to quantify forest related emissions relating to the project. Any real quantum of such emissions are already being counted against timber harvesting, sawmilling, pulp and paper outputs and consumer product waste streams. They do not happen several times over.

The actual calculation detailed for wood supplied to the Eden chipmill is fatally flawed. It is claimed footnote page 2/5 that for NSW wood supply, based on the 2006-07 year, a calculated total of 13,503,080 tonnes of CO2 emissions attaches to the power plant proposal.

However if you use the Green groups own figures and the information contained in reports that they reference e.g. Mackey Green Carbon 2008 you discover that in order to generate their claimed figure of emissions --SEFE Eden had to have received over 7 million tonnes of wood fibre in 2006-07 from Forests NSW when in fact they purchases 448,000 tonnes, less than 7% of the calculated figure.

Mackey page 28 Table 1 reveals that the predicted 640 tonne/hectare carbon carrying average used in green group calculations is made up of soil carbon 280t, living biomass carbon 289t and dead biomass carbon 71t. Using the greens flawed assumption that 100% of all predicted site carbon is removed from every site and attributed to SEFE, then over 14,388 ha, assuming 90% living biomass is trees and 28% of tree weight on average is carbon and then using the Kyoto multiplier of 1.9 to take delivered tonnes to a whole tree equivalent – calculated delivered wood volume becomes in close approximate terms

289t x 0.9 = 260t x 14,388 ha = 3,742,319 tC div by 0.28 div by 1.9

= 7,034,434 tonnes

The sorts of claims being made by opponents of the project are remarkable for their misinformation content. This approach does nothing to inform the community in terms of issues that are quite important to the future of environmental management.

I expect that this project will be judged on its technical merit and how it contributes to the important function of changing the profile of base load power production.

I look forward to the successful commissioning of this project and a further step forward for the Eden community, a community that has exhibited a far greater capacity for constructive change than have the blinkered opponents of renewable resource industries.

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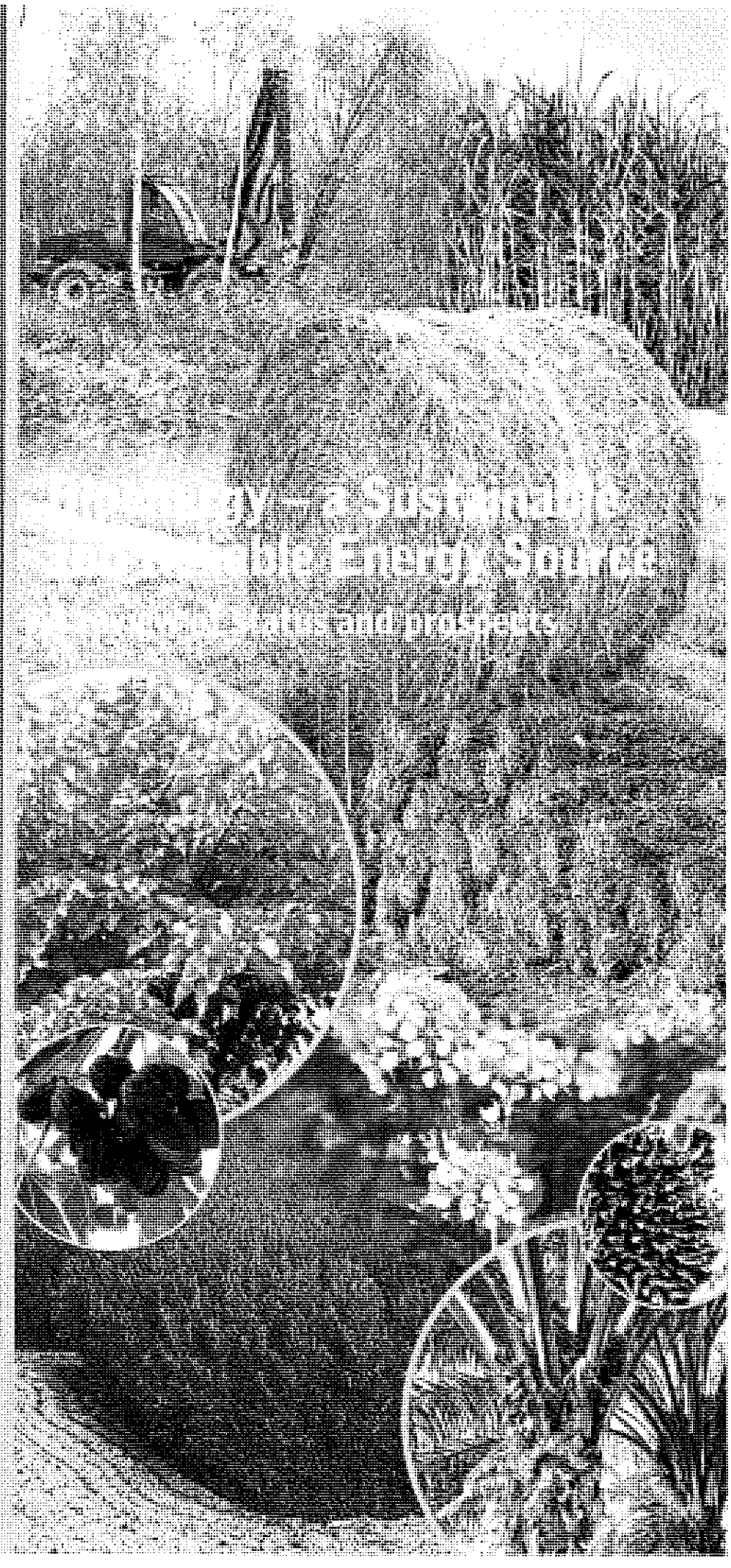


Bioenergy – a Sustainable and Reliable Energy Source

A review of status and prospects

IEA Bioenergy

INTRODUCTION

The supply of sustainable energy is one of the main challenges that mankind will face over the coming decades, particularly because of the need to address climate change. Biomass can make a substantial contribution to supplying future energy demand in a sustainable way. It is presently the largest global contributor of renewable energy, and has significant potential to expand in the production of heat, electricity, and fuels for transport. Further deployment of bioenergy, if carefully managed, could provide:

- an even larger contribution to global primary energy supply;
- significant reductions in greenhouse gas emissions, and potentially other environmental benefits;
- improvements in energy security and trade balances, by substituting imported fossil fuels with domestic biomass;
- opportunities for economic and social development in rural communities; and
- scope for using wastes and residues, reducing waste disposal problems, and making better use of resources.

This review provides an overview of the potential for bioenergy and the challenges associated with its increased deployment. It discusses opportunities and risks in relation to resources, technologies, practices, markets and policy. The aim is to provide insights into the opportunities and required actions for the development of a sustainable bioenergy industry.

BIOMASS RESOURCES

At present, forestry, agricultural and municipal residues, and wastes are the main feedstocks for the generation of electricity and heat from biomass. In addition, a very small share of sugar, grain, and vegetable oil crops are used as feedstocks for the production of liquid biofuels. Today, biomass supplies some 50 EJ[2] globally, which represents 10% of global annual primary energy consumption. This is mostly traditional biomass used for cooking and heating. See Figure 1.

There is significant potential to expand biomass use by tapping the large volumes of unused residues and wastes. The use of conventional crops for energy use can also be expanded, with careful consideration of land availability and food demand. In the medium term, lignocellulosic crops (both herbaceous and woody) could be produced on marginal, degraded and surplus agricultural lands and provide the bulk of the biomass resource. In the longer term, aquatic biomass (algae) could also make a significant contribution.

Based on this diverse range of feedstocks, the technical potential for biomass is estimated in the literature to be possibly as high as 1500 EJ/yr by 2050, although most biomass supply scenarios that take into account sustainability constraints, indicate an annual potential of between 200 and 500 EJ/yr (excluding aquatic biomass). Forestry and agricultural residues and other organic wastes (including municipal solid waste) would provide between 50 and 150 EJ/year, while the remainder would come from energy crops, surplus forest growth, and increased agricultural productivity. See Figure 2.

Projected world primary energy demand by 2050 is expected to be in the range of 600 to 1000 EJ (compared to about 500 EJ in 2008). Scenarios looking at the penetration of different low carbon energy sources indicate that future demand for bioenergy could be up to 250 EJ/yr. This projected demand falls well within the sustainable supply potential estimate, so it is reasonable to assume that biomass could sustainably contribute between a quarter and a third of the future global energy mix. See Figure 2. Whatever is actually realised will depend on the cost competitiveness of bioenergy and on future policy frameworks, such as greenhouse gas emission reduction targets.

Growth in the use of biomass resources in the mid-term period to 2030 will depend on many demand and supply side factors. Strong renewable energy targets being set at regional and national level (e.g. the European Renewable Energy Directive) are likely to lead to a significant increase in demand. This demand is likely to be met through increased use of residues and wastes, sugar, starch and oil crops, and

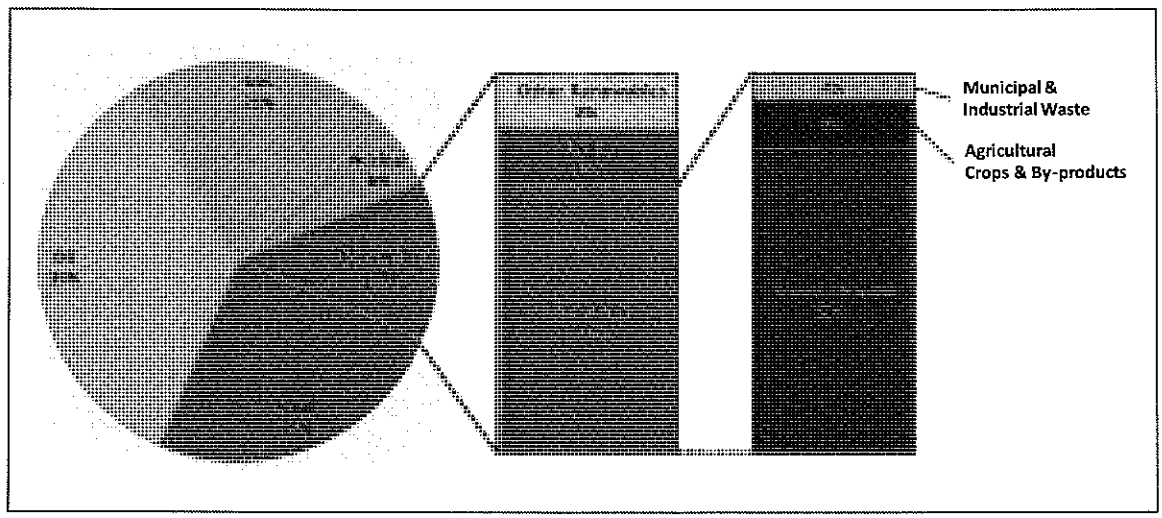
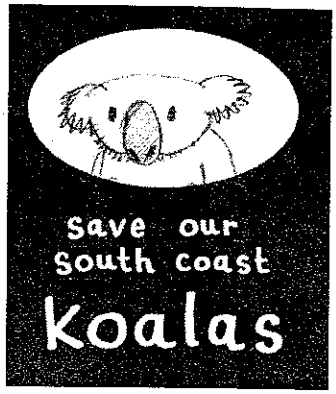


Figure 1. Share of bioenergy in the world primary energy mix. Source: based on IEA, 2006; and IPCC, 2007.

[2] 1 EJ = 10^{18} Joules (J) = 10^{15} kilojoules (kJ) = 24 million tonnes of oil equivalent (Mtoe).

SUBMISSION TO THE PREMIER

South East Region Conservation Alliance



Date.....

ATTACHMENT 2 1/1

The Hon Kristina Keneally
Premier of New South Wales
Governor Macquarie Tower 1 Farrer
Place, Sydney NSW 2000
Fax: (02) 9228 3934
Copy to: My Local MP

Dear Premier Keneally,

Woodchipping of South East Forests and Dead Koala Power

I am asking for your urgent action to save the koalas of the South East Forests of NSW from extinction and to stop the woodchipping of these forests, including for power generation.

State Forests (a NSW Government agency) is about to start woodchipping the forest areas where the last remaining koalas survive on the far south coast. A fragile colony of less than 50 koalas has been identified recently, by your own Environment Department, in a region that once had hundreds of thousands of koalas.

At the same time the NSW ALP Government is considering approval for a wood fired power plant at the Eden Woodchip Mill contrary to its promise never to use native forest wood for energy generation. I believe a woodchip fired power station at Eden is:-

- not a genuine 'clean green energy source' and will undercut solar, tidal and wind power generators.
- not acceptable given the urgent need to reduce logging and woodchipping of native forests around the world, including Australia, to reduce CO2 emissions. We could save up to 20% of Australia's Co2 emissions immediately if we stopped logging, woodchipping and clearing of forests.
- Dead Koala Power in that it will assure the regional extinction of the South East Forest's koalas and many other endangered forest species including owls, gliders, possums, fruit bats and potaroos.
- opens up a vast new market for woodchipping on top of the already disastrous export market of woodchips for paper production. Nearly a million tonnes a year are exported from Eden to Japan.

I believe it is time that the NSW Government took all logging and woodchipping out of our wonderful forests and created a genuinely sustainable timber industry based on plantations.

I hope to see your Government commit to such an approach before the next State election.

Please pass this letter on to the Minister for Planning and count it as a submission opposing the Eden Wood Fired Power Plant

Yours sincerely,

Signature: .....

Name: .....

Address: ..... **Postcode:** .....

www.serca.org.au sercansw@gmail.com

Help stop the Eden woodchip forest furnace:

A guide to writing a submission opposing 'dead koala' power

27 March 2010

South East Fibre Exports (SEFE), owners of the Eden chipmill wants to build a wood fired power station burning native forest wood.

The NSW Minister for Planning has received the final Environmental Assessment (EA) for the project and will soon decide whether to approve the power station. If SEFE gets the go ahead for its power station it will be the first of many around Australia.

You have until 22 April 2010 to make your voice heard.

Points to make in your submission

1. General
2. If you care about the natural environment
3. If you are concerned about climate change
4. If you don't like woodchipping
5. If you live in or near Eden
6. If you want to see more renewable energy generated and used.
7. How to lodge your submission

1. General

1. The chipmill announced on 22 March 2010 that this project is "on hold," before it has even been approved. The Minister should therefore reject it or if he approves it, impose a condition that if no commencement has occurred within 6 months, the approval should lapse. Its status as "on hold" reflects the state of the international woodchip market and demonstrates how dependent it is on that market.
2. The fuel to be used is not "waste" and would not exist if one million tonnes of trees (almost 19,000 hectares of forest) were not logged each year to supply the chipmill.
3. The existing use of the proposed fuel generates substantially less greenhouse gas than the proposed power station because, as mulch, it decomposes slowly and transfers significant carbon to the soil.
4. The scope of this assessment is so narrowly defined as to make it almost meaningless. It examines in minute detail some aspects but ignores the bigger context. For example, it refers to the "terrestrial ecology" of the site as having "a disturbed under storey of exotic grasses", in other words, mown lawn, but totally ignores the immense ecological implications of intensive, industrial scale logging required to supply the fuel.
5. While acknowledging that deadly dioxins, furans and HAPs will be emitted, the EA does not examine the human health implications of the emissions <u>at all</u>.

2. If you care about the natural environment

1. Very hot water will be discharged into Twofold Bay. The temperature of cooling water discharged into Twofold Bay will be more than 21 degrees <u>above</u> the ambient water temperature in the winter. The implications of this are dismissed, but there are some serious consequences:
    a. The Weedy Sea Dragon (8-21), a threatened species, can only survive in temperatures less than 22 degrees. The EA says that the sea dragons will go somewhere else: they "may avoid the area around the outlet." Too bad for them if they don't.
    b. Green Sea Turtles. The presence of these creatures is noted but the report fails to mention that in other power stations in NSW, turtles are regularly trapped in cooling water pipes because they are attracted by the warmer temperature.
    c. Whales. Noise may interfere with whale migrations via Twofold Bay (8-10)
    d. Anti-fouling treatments (8-17). Toxic treatments may threaten marine life and mussel culture.
2. Emissions estimates, especially in relation to particulates and heavy metals assume that the wood will be clean and uncontaminated and no consideration is made for its exposure to salt.

a. SEFE CEO Peter Mitchell explicitly told the Bega Valley Shire council on 26 August 2008 that "municipal waste" was a potential fuel.
b. The stockpile of fuel will be stored a few meters from the ocean where it will be contaminated by salt, increasing dioxin levels.
c. Heavy metal content in ash will exceed allowable limits and additional approval from DECC will be required to use it on the SEFE Rockton plantation. Exposure to heavy metals has been linked to penis defects. http://www.smh.com.au/lifestyle/wellbeing/heavy-metals-raise-risk-of-penis-defects-20091202-k6es.html
d. A Canadian study commissioned the government of British Columbia (Canada) last year. "Emissions from Wood-Fired Combustion Equipment" http://www.env.gov.bc.ca/epd/industrial/pulp_paper_lumber/pdf/emissions_report_08.pdf found that basic emissions which could be expected include:
Acetaldehyde Alpha-pinene Beta-pinene Carbon monoxide (CO) Formaldehyde Methanol Naphthalene Toluene Total phenols Turpentine 2,3,7,8 Tetrachlorodibenzo-p-dioxin (TCDD) C/P 2,3,7,8-Tetrachlorodibenzo-p-furan C/ Hydrogen sulphide C/S Nitrogen oxides (NOx) Beryllium Cadmium and compounds Chromium (II) compounds, as Cr Chromium (III) compounds, Cr Chromium (metal) Chromium (total) Chromium, hexavalent metal and compounds Cobalt as Co metal Dust and fume Cobalt carbonyl as Co Copper, Dusts and mists, as Cu3 Copper, Fume Iron Lead arsenate, as Pb3 (A2O4) Lead chromate, as Cr Lead compounds Magnesium Manganese Molybdenum Nickel and compounds Particulate matter (PM) Phosphorus Selenium Silver Thallium Zinc Arsenic and inorganic arsenic compounds Mercury Hydrochloric acid Sulphuric acid Sulphur dioxide (SO2)

3. If you are concerned about climate change

1. Electricity generated from native forest wood is more greenhouse intensive than coal fired power.
2. It will compete with and potentially displace genuine renewables permitted under the Mandatory Renewable Energy Target MRET scheme. It will not be competing with coal.
3. The project depends for its fuel on the continued existence of the native forest woodchipping industry, one of Australia's biggest greenhouse polluters.
4. The EA does not look at the full life cycle of the fuel (i.e. it ignores the greenhouse impacts of native forest logging; it simply asserts this is "sustainable because it has Australian Forestry Standard (AFS) certification). It fails to examine the consequences of the one million tonnes of woodchipping each year, without which there would be no fuel.
5. It claims: "Improved environmental outcomes due to lower greenhouse gas emissions per unit of output compared to conventional coal-fired power generation technologies. The proposed plant would potentially avoid the emission of 23,800 t Of C02-e from fossil-fuel based power generation per year."
   Logging of native forests to supply the Eden chipmill has been conservatively estimated at over 18 million tonnes per year[1] with one estimate as high as 61 million and another as low as 9 million tonnes. Logging emissions must be counted in assessing the GHG implications of burning native forest wood for electricity. It is simply not valid to start counting at the furnace door; the whole life cycle of the fuel must be taken into account in measuring greenhouse impacts.

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[1] **Carbon pollution generated by logging for the Eden chipmill**
According to Mackey et al "Green Carbon" 2008, the average carbon carrying capacity for all the SE Australia eucalypt forests is 640 tonnes per hectare. In those forests in SE NSW where the actual carbon stored is currently less than the carrying capacity, this is entirely due to the previous operations of the Eden chipmill over the past 40 years, so it is valid to use Mackey's figure of 640.
According to FOI information, in 2006-07 FNSW logged 14,388 hectares in the Eden, South Coast/Southern and Tumut areas.
The figures below do not include the emissions from running the mill, and transport associated with logging contractors or deliveries to the mill. The calculation is based on:
Area logged x Carbon stock per ha x 40% (loss from logging) x 3.666 (converting C to CO2
Thus, for NSW:
14,388 x 640 x .4 x 3.666 = 13,503,080 tonnes of CO2
For East Gippsland:
4,500 x 700 x .4 x 3.666 = 4,611,600 tonnes
Total: 18,114,680 tonnes.
40% of the carbon stored in a forest is lost to the atmosphere when it is logged, even after 150 years. The weight of a carbon dioxide molecule is 3.666 times the weight of a carbon atom. Approx hectares logged in East Gippsland in 2007.

When power generated from native forest is compared with coal fired power, if the full life cycle of the fuel is assessed, wood fired power is as much as 6.4 times more greenhouse intensive than coal fired power[2].

4. If you don't like woodchipping

1. Without ongoing woodchipping of a million tonnes of native forest a year, there would be no fuel available.
2. Sustainability of native forest logging. No serious attempt is made to assess this. It is simply deemed "sustainable" because most SEFE chips are certified under the highly controversial AFS. Japanese paper manufacturers are increasingly reluctant to accept AFS as an adequate label of sustainability and the biggest paper manufacturing company in Japan, Oji, does not accept it.
3. The EA claims "Improved environmental outcomes due to lower greenhouse gas emissions per unit of output compared to conventional coal-fired power generation technologies. The proposed plant would potentially avoid the emission of 23,800 t Of C02-e from fossil-fuel based power generation year." See point 4 under "If you are concerned about climate change."
   All emissions from logging should be counted in assessing the GHG implications of burning native forest wood for electricity. It is simply not valid to start counting at the furnace door; the whole life cycle of the fuel must be taken into account in measuring greenhouse impacts. GHG emissions from the proposed plant should be compared with those of other MRET approved technologies, not with coal fired power.
4. However, even if it is compared with coal fired power, if the full life cycle of the fuel is assessed, wood fired power is possibly 6.4 times more greenhouse intensive than coal fired power. It is claimed that "no native or plantation forest would be felled for the purpose of fuelling the plant" (19-3).Forests NSW expects that some timbers which are not currently used for woodchipping because they are either too red or too hard, and are not of sawlog quality will be used for power generation.

5. If you live in or near Eden

1. While acknowledging that deadly dioxins, furans and HAPs will be emitted, the EA does not examine the human health implications of the emissions at all.
2. Emissions estimates, especially in relation to particulates and heavy metals assume that the wood will be clean and uncontaminated and no allowance is made for its exposure to salt.
   (a). SEFE CEO Peter Mitchell explicitly told the Bega Valley Shire council on 26 August 2008 that "municipal waste" was a potential fuel.
   (b). The stockpile of fuel will be stored a few meters from the ocean and will be contaminated by salt, increasing dioxin levels.
3. It will not "improve the reliability of the local electricity supply." (19-2)
   In 2009, the Eden chipmill was closed for weeks at a time, for most of the year it was on a 4 day week. If Eden residents were counting on it to power their homes in 2009, they would have experienced many outages.
4. Emissions inventory states that "most of the particulate matter will be controlled," especially particulates of greater size. There is no examination of the nature, volume and consequences of particulates bigger than 10 microns. There is no justification provided for ignoring them. The EA leaves open the possibility that some of these bigger particulates will be emitted, but fails to provide any detail of the nature, volume and consequences of those emissions.
5. Odour. While it is acknowledged that sulphur dioxide, rotten egg gas will be generated, there is no consideration of odour as an issue to be addressed. Neither are the acid rain consequences of sulphur dioxide emissions addressed.

[2] Dr John Kaye MLC. Adjournment Speech 2 December 2008 "Our very rough analysis, based on forestry industry and peer-reviewed data, suggests that for every megawatt hour of energy generated by south-east native forestry biomass, more than 6.4 tonnes of CO2 would be released instantaneously. This is more than **6.4 times the amount of CO2 released from burning coal to produce the same amount of energy**. Certainly regrowth would bio-sequester some of this carbon but at a very slow rate. It would take about 80 years of regrowth to capture 5.4 tonnes, thus returning the greenhouse gas emissions to the same level as coal." http://www.john.greens.org.au/media/adjournment-speech-eden-chipmill-and-green-power

6. Bega Valley Shire Council Zoning. The chipmill site is currently zoned 1(A) agricultural, arguably not appropriate for this type of development.
7. Recreational divers will have reduced access to the chipmill jetty (8-23)
8. Anti-fouling treatments (8-17). Toxic treatments may threaten marine life and mussel culture.

6. If you want to see more renewable energy generated and used.

1. Electricity generated from native forest wood fired power is even more GHG intensive than coal.
2. In assessing greenhouse implications and calculating "avoided emissions" this power should be compared with wind or solar or other MRET approved technologies because it will be competing with and potentially displacing these technologies in the market place, not coal fired power.
3. The fuel for the power station is not "waste." It is material that already has an economic value and it is bought and sold in the market place. Only a tiny amount is currently incinerated. Burning it as electricity gives it a higher value because of implicit subsidies[3] available to it under the MRET scheme.
4. The greenhouse analysis highlights the arbitrariness of some current national and international conventions on measuring GHG emissions; e.g., deeming burning of biomass to be carbon neutral. The comparison between GHGs generated by current ways of disposing of wood "waste" as mulch and by the power station creates a nonsensical result. Mulching and composting add carbon the soil but slowly decompose releasing some CO2 over time. In burning, the entire product instantly becomes CO2, and yet the (greater) emissions from the burning are not counted, while the (smaller) emissions from mulching are counted. Where is the logic in that?
5. The project is wasteful. 75% of the heat is "lost."
6. Abatement Certificate Provider scheme. Eligibility (3-6) of the plant is unclear, especially with uncertainty surrounding the future of the Carbon Pollution Reduction Scheme. This should be clarified.
7. One of the claimed benefits of the project is "the generation of electricity from renewable biomass material in contrast to current practice which under-utilises a valuable resource," Burning wood from native forest which has been industrially logged for woodchips is not a renewable technology. At least 180 years are needed for most of the forest to replace itself once it is logged intensively for woodchips.
8. "The supply of around 22 GWh of base load power annually to the electricity grid"; The Eden chipmill is an ideal site for alternative forms of renewable energy which could be generated more cheaply at this site using wind, solar or tidal technologies.

7. How to lodge your submission

Post your submission to arrive by 22 March 2010 to:

Anna Timbrell
Environmental Planning Officer
Infrastructure Projects
Department of Planning
GPO Box 39, Sydney NSW 2001
Sydney NSW 2000

To read the full Environmental Assessment or make your submission on line, go to:
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2914

For more information see: http://www.chipstop.forests.org.au/forests%20in%20the%20furnace.htm

[3] According to a study by MBAC Consulting "Global and Australian initiatives and impediments to the production of renewable energy from wood in Australia" May 2003, commissioned by the National Association of Forest Industries (NAFI), the maximum price payable for wood fuel under MRET is $41.05/ t. Maximum price payable for wood fuel without MRET $7.71/t. Thus the effective subsidy value of MRET $33.33/t

PAGE 5 IS BLANK.

Canopy Native Forest Committee
Total Environment Centre of NSW
Level 4, 78 Liverpool Street
Sydney NSW 2000

Environmental Planning Officer
Infrastructure Projects
Department of Planning
GPO Box 39
Sydney NSW 2001

Submission on the proposed Eden Biomass-Fired Power Station

Dear Sir/Madam

Thank you for the opportunity to make a submission on this important matter.

I am writing on behalf of the Canopy Native Forest Committee of the Total Environment Centre of NSW, a voluntary organisation concerned with the protection of our native forests and wildlife from damaging and inappropriate activities.

This Committee wishes to express its strong opposition to the current proposal as it is expected to have numerous adverse environmental impacts.

The environmental assessment report is a travesty that fails to take into account the ecological and climate change impacts of the process of supplying biomass fuel to the proposed power station and plays down the issues of aerial and aquatic emissions from the plant.

The section on terrestrial ecology confines itself to the narrow issue of the impacts of developing the site of the power plant.

Any discussion of the logging operations that will supply the fuel for this project ends with unsubstantiated references to such activities being sustainable and renewable simply because they are certified under the Australian Forestry Standard. It must be pointed out that this forestry standard lacks any credibility with environmental organisations or independent experts.

Canopy has consistently opposed the native forest logging activity in this region that has primarily supplied woodchips and will provide most of the resource for the proposed plant. For decades the excessive intensity and extent of this activity

has removed old growth forests, reduced threatened flora and fauna populations, degraded numerous ecosystems, lowered water quality and quantity, caused soil erosion and added significantly to greenhouse gas emissions in the South Coast and Eden regions. There is currently considerable controversy concerning logging operations in koala habitat in Mumbulla State Forest near one of the last viable koala colonies in the region. The great majority of the timber produced by these operations is destined for the proponent's woodchip mill.

Canopy's key concern is that the proposed power plant, along with the current woodchip mill, will underpin this ecologically unsustainable logging for many years and possibly lead to the future expansion of this activity.

The proponent is clearly seeking to entrench its access to the native forest timber resource by realizing another economic use for it in addition to export woodchipping. There is an uncertain future for the mill's export woodchip markets given recent economic turmoil in Asia, increasing competition from other suppliers and the growing demand for certified timber from plantations. If this biomass power station is accepted as a renewable energy source it will also attract federal subsidies and possibly increased demand for its product.

This Committee contends that logging activity should be phased out of these native forests altogether and any export woodchips and other timber products supplied by plantations. The so called waste that will supply the proposed power plant would not exist if it were not generated by destructive and unnecessary logging activity in the first place.

The environmental assessment report claims that the biomass fuel will compare favourably with coal with regard to greenhouse gas emissions generated during burning.

However, the report fails to take into account the most recent scientific research into the carbon storage qualities of native forests conducted by the Australian National University (Green Carbon – the role of natural forests in carbon storage – Mackey). This report underlines the importance of protecting native forests as part of the solution to climate change and the contribution of native forest logging to greenhouse gas emissions.

If the logging activities that will supply the fuel are taken into account, the overall greenhouse gas emissions of the biomass power station will be much greater, possibly as much as six times that of an equivalent coal fired power plant.

Moreover, it is unfair to compare the greenhouse gas emissions of this proposal with coal projects when it is being presented as a renewable energy source. It should instead be compared with the emissions from genuinely renewable energy sources of an equivalent scale such as solar, wind, geothermal and tidal projects. The latter can be expected to generate much lower emissions.

Canopy is concerned that if this particular biofuel is accepted as a renewable energy source under the federal government's mandatory renewable energy target scheme the power plant will compete successfully with low emission renewable energy projects for market share. This could occur due to the size and relative cheapness of its guaranteed potential resource from subsidized logging operations on publicly owned land. This will defeat the purpose of encouraging renewable energy, which is of course to reduce national greenhouse gas emissions.

For these reasons, Canopy calls on the government to totally reject the proposed power station.

Yours faithfully

Graham Daly
Chairperson
22/04/10

22nd April 2010

Anna Timbrell

Environmental Planning Officer

Infrastructure Projects

Department of Planning

GPO Box 39, Sydney NSW 2001

I oppose SEFE's proposal to build a Forest-fired power station at Eden. I lived in Eden for five years and know that the overwhelming majority of people in that community oppose it too. Furthermore, many other local, regional and state Indigenous and non-Indigenous communities do not want our publicly owned native forests to be woodchipped and burned!

There is enormous public opposition to this development and I believe it is for some of the following reasons.

1. SEFE's promotion of biomass as a "green" renewable source of energy that will be purely derived from "forest residues" or "waste" is misleading and contradictory.

- The "waste" will be in high demand with an increased economic value that is $33.33/t higher (under the MRET subsidy scheme) than its current value. Even while it still exists as a live tree in a native forest, its economic value will be identified by its allocation to "waste" (wood fuel) product. That standing trees, unsuitable for paper or wood products will be now sought and logged for "waste", is insultingly absurd.

- The proposed power plant is clearly not carbon neutral. Proper carbon-accounting of the power plant and its fuel sources would have to include emissions from deforestation, transportation and the burning of the biomass itself. Furthermore, the forest re-growth would have to be accounted for as "Forest degradation" (Internationally agreed REDD scheme concept). For carbon stocks in native forests to be replaced, meriting a „Carbon Neutral' status, logging cycles would need to be at least 5 times longer that they are presently.

2. We NSW taxpayers would rather not sponsor or subsidise through Renewable Energy Certificates, a project that is dependent on a shrinking industry; that vandalises our natural ecosystems, makes consistent financial losses (last financial year by $14.4 million!) and exacerbates climate change.

- It would compete for and de-value subsidies available for genuinely renewable energy sources such as wind, solar and other MRET approved technologies.

- Development of a power station at the chipmill not only depends upon the continuation of woodchipping our native forests, but may be instrumental in defining policy that secures it, setting precedence for similar destructive developments nationally.

- The uncertainty of such policies and the international hardwood market itself means that the chipmill's power plant will not be a reliable source of baseload power to Eden. If SEFE wishes to secure a power source for Eden's residents and future that doesn't rely on unpredictable market conditions; it is in a prime location to generate power from wind and solar energy.

3. There is a common lack of trust in the integrity and security of Regional Forest Agreements and the Australian Forestry Standard because they have failed to:

- deliver adequate or genuine protection to high conservation value areas including endangered species habitat; old growth forest and water catchments.

- enforce "sustainable" forest logging practices- breaches are seldom "policed" nor remedied.

- properly consult the „community' which is made up of a diverse range of stakeholders that oppose woodchipping native forests for a multitude of reasons

The only stakeholders to benefit will be the foreign owned Nipon/SEFE Chipmill and a few logging contractors who frequently „turn over' or experience attrition in their employees anyway. The "creating employment and JOBS" Compromise-argument is quite ridiculous given the scale of destruction. More jobs would be created and sustained using a fraction of the NSW tax payer money currently spent on subsidizing the industry, to re-plant trees on degraded land!

It is well and truly time that the government enacted its duty of care of communities and our environments by enforcing the transition of the dying native forest logging industry into absolutely sustainable plantations and directing its MRET subsidies at developing and rewarding genuine and innovative renewable energy production.

Yours faithfully,

Carmen Robinson

2 Spencer Road,

Londonderry

NSW, 2753

Thank you for giving the public the opportunity to respond to this proposal.

We would like to register our opposition to the proposed power plant at Eden. We believe that logging native forests and using the associated waste products for a wood-fired power plant is short sighted for a number of reasons:

1) Greenhouse gases are increased through the intensive logging involved. Logging emissions of between 9 million and 61 million tonnes per year are estimated and must be taken into account in this proposal.
2) The electricity generated from burning native forest wood is even more greenhouse intensive than that generated from coal.
3) It is a wasted opportunity to use renewable energy.
4) Biodiversity will continue to be lost from the ongoing destruction of the habitat of native wildlife.
5) There is the possibility that native timbers, currently unsuitable for sawlogs, will be used to fuel the power plant.
6) The health implications of the dioxins and other chemicals emitted are not yet fully known. In fact the health implications that may possibly affect the residents of Eden have not been addressed at all.
7) There is no account taken of the impact of foul odours on the residents of Eden.
8) Already endangered marine life will be under serious threat from the release of hot water (21 degrees above the ambient temperature) into Twofold Bay
9) The operation is inefficient in that 75% of the heat is lost.
10) There is only a limited amount of forest to log. When that is gone, then what?

Any short term profits will be blown away by the long term consequences. The benefits to a few will be to the detriment of everyone else.

To conclude, on a planet that is fast running out of natural resources, that is under threat of climate change from increasing emissions, that is losing biodiversity at an unprecedented rate, this proposal is an irresponsible anachronism of the highest order.

Name: Margaret Kerr
Organisation: Northern Beaches Greens

Address:
P.O. Box 200
Mona Vale
NSW 1660

IP Address: cpe-124-183-134-61.lns15.ken.bigpond.net.au - 124.183.134.61

Submission for Job: #2914 Biomass-Fired Power Station
https://majorprojects.onhiive.com/index.pl?action=view_job&id=2914

Site: #1828 South East Fibre Exports 5 MW Biomass-Fired Power Station
https://majorprojects.onhiive.com/index.pl?action=view_site&id=1828

Anna Timbrell

E: anna.timbrell@planning.nsw.gov.au

Hello Anna Timbrell
please ignore previous email, replace with this

yesterday I lodged a brief individual objection but unfortunately included a typo in the response.

I would be grateful if this could be corrected.

My statement, under security code weu83k, giving my postal address of PO Box 591, Broadway, NSW 2007, should read:

I wish to register my objection to the proposed SEFE Biomass Fired Power station on the basis that it will exacerbate unsustainable extraction of native forest resources in the region.

Anne Reeves.

Objections to the Eden Wood Fired Power Plant
Melinda Downs
Yurangalo Inc
PO Box 9002 Wyndham NSW 2550
melinda@dovewood.com.au

1. South East Fibre Exports (SEFE) announced on 22 March 2010 that the proposed plant is “on hold,” yet it hasn't yet been approved. The fact that SEFE is not committed to constructing the plant reflects the state of the international woodchip market, and demonstrates how dependent the plant is on that market.
2. The Minister should therefore reject it or if he approves it, impose a condition that if no commencement has occurred within 6 months, the approval should lapse.
3. The timber to be used as fuel for the furnace is not 'waste', it is part of a living forest ecosystem. The plant would not have fuel to burn if thousands of hectares of forests were not being woodchipped; if the chipmill were not in existence, there would be no 'waste' to burn.
4. The existing use of the proposed fuel generates substantially less greenhouse gas than the proposed power station because, as mulch, it decomposes slowly and transfers significant carbon to the soil.
5. The scope of this assessment is so narrowly defined as to make it almost meaningless. It examines in minute detail some aspects but ignores the bigger context. For example, it refers to the “terrestrial ecology” of the site as having “a disturbed under storey of exotic grasses”, in other words, mown lawn, but totally ignores the immense ecological implications of intensive, industrial scale logging required to supply the fuel.
6. While acknowledging that deadly dioxins, furans and HAPs will be emitted, the EA does not examine the human health implications of the emissions at all.

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From: [redacted]
To:
CC:
Date:
Subject:
Attachments:

I oppose the native wood fired power station.

The environmental impact assessment is woefully inadequate.

It fails to take into account or even mention any possible implication from discharging hot water into the ocean.

Woodchips hold commercial value and are therefore cannot be classed as waste.

The assessment acknowledges that deadly dioxins and hazardous air pollutants will be emitted but does not assess any possible human health implications.

I strongly believe that all new power stations should utilise green power such as solar or wind and that the proposal for this wood fuelled power station should be rejected.

I do not want my contact details made available.

Thank you.

[redacted]

IP Address: aragorn.dpa.act.gov.au - 136.153.2.2

Submission for Job: #2914 Biomass-Fired Power Station
https://majorprojects.onhiive.com/index.pl?action=view_job&id=2914

Site: #1828 South East Fibre Exports 5 MW Biomass-Fired Power Station
https://majorprojects.onhiive.com/index.pl?action=view_site&id=1828

At a time when the Australian government and corporations should be putting all their energy into developing renewable energy sources, I am disheartened and extremely disappointed to hear that a proposal for a wood fire power station, using native forests as fuel is being proposed. It is my strong opinion that this proposal should be refused and there are multiple reasons for this. Firstly preserving the natural environment is important as we are facing climate change. Secondly the forests are beautiful and there aesthetic should be maintained for future generations to enjoy. Also the forest provides habitat for many types of Australian wildlife including the iconic Koala, which has been steadily decreasing in numbers over the past few years. It is imperative that the government realises the importance of protecting such habitats and ensuring the survival of these invaluable animal populations. I am also extremely worried that if this wood fire power station is approved it will open the floodgates for other similar proposals to be approved and this would be catastrophic for the preservation of native forest that are so sadly under appreciated and too often sold off for profit. I urge you to make the right decision, which is to refuse this proposal!

Name: Jacinda Jamieson
Organisation: UTS environmental collective

Address:
11 Tavistock Rd,
South Hurstville
N.S.W 2221

IP Address: c211-30-18-205.rivrw2.nsw.optusnet.com.au - 211.30.18.205

Submission for Job: #2914 Biomass-Fired Power Station
https://majorprojects.onhiive.com/index.pl?action=view_job&id=2914

Site: #1828 South East Fibre Exports 5 MW Biomass-Fired Power Station
https://majorprojects.onhiive.com/index.pl?action=view_site&id=1828

Anna Timbrell

E: anna.timbrell@planning.nsw.gov.au

SUBMISSION BY FORESTMEDIA ON SOUTH EAST FIBRE EXPORT'S PROPOSAL TO BUILD A WOOD FIRED POWER STATION AT EDEN

This submission is in response to the proposal by South East Fibre Exports to build a 5mW wood fired power station at Eden, on the NSW south coast.

Forestmedia believes that this proposal should be rejected in light of its failure to consider and account for many of the environmental, social and economic implications of the development and operation of a wood fired power station on the NSW south coast.

Forestmedia calls on the government to instead set up a process for considering alternative energy sources on the south coast of NSW that are genuinely sustainable and do not depend on a taxpayer supported logging industry that causes immense on-going environmental degradation.

This submission highlights a number of points made in the application.

1. **Reliability of Supply**

Throughout the document, the applicant cites the improved security of electricity supply both to the operator and to the local community. It mentions long term economic benefits in the Eden area due to the increased reliability of supply during peak demand periods.

Since this is one of the main claims of the application, and a cornerstone of the rationale for this proposal, the Department of Planning will want to establish that a reliable supply can be maintained before approving this power station.

The claim of improved reliability of electricity supply cannot be supported. The Eden Chipmill was closed regularly during 2009 and for most of the year was on a 4 day week. On this basis, it cannot produce the requisite amount of 'waste' to power the plant. Because the plant cannot guarantee a reliable supply of electricity, it cannot therefore claim that it will contribute long term economic benefits to the area through increased reliability of supply during peak demand periods.

2. The productive use of material that would otherwise be wasted.

The application as part of its justification states that it will be generating electricity from renewable biomass material that is currently largely burnt for no energy recovery or commercial return. [1.1]

SEFE states that "in the course of its timber milling operations of hardwood and softwood logs, SEFE generates around 35,100 tpa of potential biomass fuel, **a proportion of which** is currently sold as landscaping materials with the balance being disposed of in a burner for no energy recovery.

What SEFE do not specify in their justification, is that of the **35,100** tonnes produced, only **1,060** tones are burnt as waste – an insignificant proportion of the whole. The rest is currently not wasted at all, but is sold for mulch and other agricultural purposes. [See Greenhouse Gas submission 1.1]

As described in Section 2.2, national guidance indicates that if fuel that would otherwise be wasted, such as wood waste, is used for electricity generated, then it is considered that the generation does not increase emissions compared to what they would otherwise be and results in emissions reductions compared to fossil fuel generation. [4.2] Since most of the wood fines are currently not wasted, but sold as mulch and other materials, this would not apply.

3. **The applicant states that the power plant will provide economic benefits to the Eden community**;

"short term through the purchase of local goods and services by the construction workforce; and long term local employment for six suitably trained operators, with anticipated flow – on employment opportunities."

SEFE's rationale of providing economic benefits to the region by building the power station cannot be supported. The economic benefit to the community is minimal at best, but there is more likely to be an economic cost rather than an economic benefit.

Major projects currently underway in the area providing solar panelling in conjunction with initiatives established by local groups are providing vastly more employment opportunities. The tourist industry is one of the biggest employers on the south coast, employing ten times more people than the logging and woodchipping industry. Why has the impact of this plant on tourism not been addressed?

If SEFE wish to cite economic factors in this proposal, these must be linked to the logging industry and woodchipping on the south coast, on which the material resources of the power station rely. The logging industry has had a negative impact on the tourist industry, and the oystering industry as well. The effects of erosion and siltation from logging on water catchments and water supplies threaten a number of industries, as well as the health and well being of the community.

4. Renewable Energy

The application claims to offer improved environmental outcomes due to lower greenhouse gas emissions per unit of output compared to conventional coal-fired power generation technologies. It states that "the generation of 28 GWh per year by the proposed plant (31 GWh minus the parasitic load from the Power Plant) would avoid the emission of approximately 23,800 t of CO2 from fossil-fuel based power generation".

In calculating 'avoided emissons' it does not compare the power station with wind and solar or other approved MRET technologies. These are the ones it will be competing with in the market place, not coal fired power.

The industrial burning of native forest wood has been calculated to generate about six times the greenhouse gas emissions as coal fired electricity when you take account of the whole life cycle of the fuel, and even accounting for the uptake of

carbon in new growth, it is about four times as GHG intensive.[1] If the carbon associated with harvesting is declared part of the emissions and added to the stock, as it should be, no argument about sustainability of biomass could be upheld.

The application states that "It is considered that a mulch disposal scenario would be the best practice wood waste processing method in terms of reduction of greenhouse gas emissions. Given that the current practice at the SEFE facility is predominantly to sell waste as mulch material (approximately 76%), current practice is considered to be very close to best practice. If its current practice is the most renewable, why is it proposing to abandon this use of its waste? A comparison between the Power Plant and a best practice mulch disposal scenario has not been made as part of this assessment. [4.1.3] If the current practice is considered the 'best practice' – this comparison cannot be ignored in the EA.

5. Human Health and Safety

There are a number of concerns for human health and safety that have not been adequately addressed:

- The application acknowledges that dioxins, furans and HAPs will be emitted. Yet it does not examine the implications of this.

- Emissions estimates assume the wood will be uncontaminated by salt. The exposure to salt, as it is a few metres from the ocean, will increase dioxin production. This has not been taken into account.

- The EA states that '*most* of the particulate matter will be controlled." Particulates bigger than 10 microns are not included. Why is this?

- The possibility of using 'municipal waste', was explicitly mentioned by Peter Mitchell, COE of SEFE, in August 2008. Why have the health and environmental implications of this not been included?

- Heavy metal content in ash. The EA notes that this will exceed allowable limits and approval from DECCW will be required to use it on the SEFE Rockton plantation. Why has this not been adequately addresed?

- It has been acknowledged that sulphur dioxide (rotten egg gas) will be produced but the consequences of this have not been addressed.

6. Marine Environment

Effects of the power plant on the marine environment have not been adequately addressed:

The analysis supports the selection of the seawater cooling option and states that it has **minimal** environmental impact. It also states the "The level of aquatic ecosystem protection for Twofold Bay is "slightly to moderately disturbed". It is not explained

[1] http://www.john.greens.org.au/media/adjournment-speech-eden-chipmill-and-green-power

how the power plant can have minimal environmental impact if the ecosystem is **'moderately' disturbed**.

Some issues:

- Hot water discharged into Twofold bay will have important consequences for wildlife. The threatened Weedy Sea Dragon can only survive in temperature less than 22 degrees.

- Green Sea Turtles are regularly trapped in cooling water pipes because they are attracted by the warmer temperatures. Ways of avoiding this have not been adequately addressed.

- Anti-fouling treatments may threaten marine life and mussel culture. This has not been addressed.

7. Fuel Supply

a. Regional Forest Agreements:

This application for a cost intensive power station is based on the assumption that Regional Forest Agreements will continue well into the future, otherwise a large amount of money would not be allocated to this project.

It is incumbent upon the Department of Planning therefore to establish that this plant would be able to securely acquire its fuel supply on an ongoing basis well into the future. However, this is not the case, given the dependency on this power station on the terms of the Regional Forest Agreements.

There is no indication that the Regional Forest Agreements will continue after the ten years left on the current agreement is finished. The RFA process has attracted a lot of criticism, and there are calls for the agreements to be scrapped.

There is no satisfactory accountability process in place for the RFAs. Despite the regulation that an RFA report must be produced every five years, none has yet been produced for the current SE forests agreement, even though it has been in place for over ten years.

b. Supply of Logs for Woodchipping

ForestsNSW has already told community groups that there will be no sawlogs left in those forests in 2-3 years time. Only regrowth will remain.

These forests cannot sustain the current rate of systematic heavy industrial logging. Logging these forests over many years has had a profound effect on the timber supply.

This submission has already mentioned increasing difficulties in supplying contracted minimum volumes for the chipmill. To supply the logging contracts, half of all the

currently available forest would be logged over the remaining ten years of the RFA agreements, largely clearfelled.

c. Economic Issues

This industry currently makes a very large loss, and is heavily subsidized by the NSW taxpayers, last year alone by $14.4 million. It seems illogical that the government would allow a loss-making industry to continue to be subsidized by taxpayers into the future.

d. *Purchase of Woodchips from native forest sources*

Currently, paper manufacturers require only the controversial Australian Forestry Standard certification for the purchase of woodchips. More and more Japanese Pulp and Paper companies are requiring the much more rigorous Forest Stewardship Council certification. Japanese paper manufacturers are increasingly reluctant to accept AFS as an adequate label of sustainability and are insisting on woodchips supplied from plantations instead of native forests. A change such as this would mean native forest wood could not be supplied to the chipmill and therefore no 'waste' would be available for the power station.

8. Current Regulations Preventing the use of Native Forest material for electricity generation

While S.97 of the Protection of the Environment Operations (General) Regulation 2009 prevents the use of native forest material for electricity generation, there are powerful incentives for changing these regulations, given the unreliability of supply under the current legislation.

The capacity to earn Renewable Energy Credits from biomass burning creates a desire to maximise the use of native forest inputs by seeking to broaden the scope of the Regulations. In addition, changes to the Regulations do not require Parliamentary approval.

The Department of Planning must take these wider implications into account

9. The Environment

A proposal such as this cannot stand in its own right without an examination of the wider implications of the sustainability of native forest logging for woodchips.

The steady conversion of native forest into managed plantations and the devastation of native species and biodiversity are the antithesis of sustainability. An industry that destroys priceless native forests could never be called 'renewable'.

Not only does this biomass fuel make no environmental sense, but it allows the destruction of native forests to continue unabated, with the inevitable effects of continuing to destroy biodiversity and condemning more native animals to extinction. Australia currently has the worst rate of small mammal extinction in the world.

The forests are currently logged on shorter and shorter cycles, with 20 year cycles now becoming the norm and even shorter cycles sometimes used. There is no time for older hollow bearing trees to develop, and these are the ones that many species of animals depend on for survival.

Logging for woodchips dries out the forests and makes them more fireprone, as researcher David Lindenmayer at ANU has established. The increasing frequency of fires is testimony to this.

Waterways and catchments are profoundly affected by logging for woodchips. Logging causes erosion and threatens the supply of clean water to much of the region.

Disturbed and unhealthy ecosystems promote the incursion of bell-miner related dieback, a condition that is causing significant destruction in the forests and is recognised by ForestsNSW as a major problem.

Summary:

As set out in this submission there are significant deficiencies in the proposal and Environmental Application for a Biomass power station at Eden. Even though some of these deficiencies could be addressed, the profound flaw in this process is the dependency of the proposed plant on the on-going supply of fuel as a by-product of woodchipping native forests.

The approval of the power plant by the Department of Planning based on narrow guidelines that begin at the furnace door would mean a drastic failure to consider the wider implications of this proposal, including its duty of care in relation to the forests in south eastern NSW and the people who live in that region.

The Department of Planning should instead investigate the potential for genuine renewable and sustainable power for south eastern NSW, and base their strategies on a better deal for the people of south eastern NSW and for the forests.