

Canterbury Air Regional Plan Hearing

Oral submission from the Bioenergy Association of New Zealand provided by Sam Lees, Canterbury Woodchip Supplies

The Bioenergy Association of New Zealand (Bioenergy Association) represents a significant portion of owners of wood fuelled heat plant, consultants, researchers and equipment suppliers across New Zealand. It also has similar members in the biogas sector who also have an interest in emissions to air.

The Association has Biogas and Wood Energy Interest Groups who manage the specific technical matters of the biogas and wood energy sectors, specifically with regard to standards and best practice.

Overview

The Bioenergy Association supports the adoption of science based policy and takes seriously the necessity to reduce emissions to air. It is concerned however that much of the policy developed by the Canterbury Regional council with regard to emissions to air has been draconian and simplistic rather than addressing the issue in a more pragmatic manner. This can result in perverse incentives for achievement of good economic and environmental outcomes for the community at large. For example an encouragement of use of electricity using heat pumps can necessitate the construction of additional new electricity power stations, while the use of wood fuel is not encouraged - yet this can use a renewable resource that otherwise may go to waste.

While it is accepted that emissions to air is an important issue to be addressed these can not be separated from the wider environmental effects, many of which concern the achievement of good environmental outcomes through encouragement of good emission reduction opportunities.

The regulation for particulate matter less than 10 microns in diameter (PM10) is of particular concern as bioenergy can be part of the solution – but we recommend that more work be undertaken on the methods of particulate reduction. The policy should set what is to be achieved and then allow different mechanisms for achieving the aims. For example burning wood is not necessary a problem if the wood is burnt in an appropriate manner. Moisture content in wood affects the degree of combustion and thus can result in smoke which is un-combusted material emitting to air. However a high moisture wood can be burnt satisfactory within an appropriately designed boiler.

The law requires the Council to focus on the overall environmental and health consequences of r air quality regulations, not just one narrow indicator, PM10.

The methods of achieving a reduction in cumulative particulate emissions appears contrary to and often duplicates the principles and processes set out in the Resource Management Act. The Association would encourage the Council to investigate and discuss with the sector the methods available.

Policy mechanisms

Where the wood fuel moisture content is very low such as in wood pellets, or the wood fuel supplier can consistently provide wood fuel of a specified moisture content the policy should recognise the benefits of this and be more permissive in its combustion. To this end the Bioenergy Association has established a Wood Fuel Supplier Accreditation Scheme to recognise wood fuel suppliers who have appropriate quality control procedures which will allow them to demonstrate that they can meet specified wood fuel standards.

These mechanisms can apply to both domestic and commercial applications where there is a focus on wood fuel supplier regulation. For example fire wood merchants can be required to sell only specified low moisture content firewood. While this would not cover the freedom scavengers of wood for use in fires, regulation of the domestic wood burners used can assist, while allowing a transition to best practice heating.

While it is acknowledged that Regional plans and Air Plans may be different for each region so as to reflect different local circumstances, too stringent or an inappropriate policy can create a significant barrier to the implementation of modern low emissions bioenergy plant. The approach needs to take into account point sources of emissions as well as the cumulative effects.

Heat plant are point sources of emissions and thus an easy target for Councils yet the sometimes more significant emissions from transport are being ignored. The Regional plans should be considering the whole picture and policies should be focussed on the worst issues, e.g., in some areas from transport, by regional air Quality Plans. Solutions such as the requirement for using biodiesel in urban areas would provide a generic solution (Biodiesel has less emissions than mineral diesel and in some cities in the USA, biodiesel has been mandated for).

Modern wood fuelled heating equipment can be designed and operated to meet most reasonable regulatory standards and can be specified when new heating equipment is installed. However, the replacement of existing high emissions heating equipment takes time on a natural investment cycle. Heat plant often has an economic life of up to 30 years.

Specific concerns

There are four core issues which the Bioenergy Association is concerned with:

1. The clean air regulations, the 50µg/m³ limit and the way in which it is to be enforced.
2. The way in which the region's air pollution is measured
3. The way in which it is proposed to test and approve solid fuel combustion appliances
4. Lack of consideration of transport on emissions to air.

The technical discussion is set out in the submission by Brian Anderson who the Association supports.

Relief sought

The Association and its members would welcome discussion on the mechanisms and policies that would encourage the use of wood fuel and biogas while meeting international best practice standards