18 September 2025

Attention:
MBIE Energy Use Policy team
Ministry of Business Innovation and Employment

Subject: Draft Wood Energy Strategy

Q1 How would you describe the problems and barriers that are affecting the development of the wood energy sector?

The wood energy sector is now well established in the South Island and poised for rapid growth in the North Island. The foundations for the market were established in 2010 and since then has consolidated as more and more biomass is being used as a solid biofuel. The wood energy market is ready for immediate expansion

The most significant barrier is the lack of recognition by Government and the energy sector that bioenergy, specifically wood energy, is a technology and market which is already established and can be expanded with minimal cost, limited research and proven technology to address the current and growing energy crisis. The uptake of wood energy by North Island industrial and commercial heat users is constrained by the high capital cost of biomass boilers, combined with the 'hassle factor' of consenting and switching to a solid fuel boiler that has a larger footprint and is not as user-friendly as natural gas, or indeed, electric boilers. This reluctance to invest in wood energy and other bioenergy solutions could be addressed if there is a Government supported program such has been recently announced for tourism ($70 million), offshore gas exploration ($200million), and AI ($70million) market expansion. Such a program would provide a signal to investors which would encourage near immediate solutions to address the electricity and natural gas supply problems

Unlike other initiatives being pursued to address the energy crisis, bioenergy supply can be expanded today, and at less cost to Government. Expansion of the wood energy market also provides significant other employment, environmental and land use benefits, as well as multiple strategic benefits for NZ Inc.

Bioenergy in the form of woody biomass supply can expand today, with 20m tonnes of logs as export, and at less cost to Government. Expansion of the wood energy market also provides significant other employment, environmental benefits and 7x multiplier as it is stored solar and in the words of Malcolm Johns CEO Genesis it is our lake Onslow 24x7 dispatchable.

Recent growth in the number of new biomass fuelled boilers installed arising from the stimulation created by the Government's previous capital grants fund has resulted in a number of new entrants to the market. This has resulted in a number of the new entrants failing to understand and use the tools, resources and experience which has have been developed and are made available by the Bioenergy Association.

During the last 15 years, as the biomass supply market has grown the economies of scale and efficiencies have resulted in adequate biomass fuel being available so that demand has always been able to be met, and biomass fuel prices continuing to be at a similar level to those in 2010.

As occurs in any small market, there have been locations particularly in the North Island where there has been the perception of a mismatch of biomass supply and demand. This has generally been because the market has not been previously active in those areas due to the lack of demand for biofuel. Any biofuel supply issues can be immediately addressed if there is a demand for biofuel.

While a wood fuel supply strategy will be helpful, it will not have the effect on addressing electricity and natural gas issues unless assistance is provided to encourage investment in replacing existing fossil fuelled equipment.

Over the last fifteen years as the market has grown the quality of fuel has been maintained by the established Accredited Wood Fuel Suppliers, but the entry of some new fuel suppliers has resulted in some fuel quality issues arising. In some locations the lack of established fuel suppliers has also resulted in fuel costs being unnecessarily higher than if there was a more competitive market. Recently there has also been shortages of wood pellet supply in some areas, yet at the same time wood pellets are being exported.

The Bioenergy Association maintains a list of its members who are wood fuel suppliers, both accredited and non-accredited, however there are a number of other potential suppliers who are not members and who therefore are not listed or promoted. The information on potential wood fuel suppliers could be expanded to include non-members if funding was provided to the association to do this. Member suppliers are bound by the Association's Code of Conduct and Complaints Scheme and there would be a risk of poor performance not being monitored and addressed by non-members, if non-members are encouraged to supply fuel regardless of their quality assurance practices.

The Bioenergy Association has identified that the poor advice of some consultants has resulted in often misinformed decision making in the evaluation of heat plant options. To address this the Association has established a Register of Advisers who have been able to demonstrate to an external assessor that they have the knowledge and experience to provide good advice on bioenergy opportunities. This Register is under utilized and a missed opportunity to improve the quality of decision makers, when not used by investors or investigation funders.

It has been unfortunate that government funding through the GIDI fund did not require that recipients of the funding must use competent advisers and purchase fuel from Accredited Solid Biofuel Suppliers. It is recommended that any assistance that may come out of the current strategy should be dependent on recipients employing only qualified advisers and purchase fuel from Accredited Solid Biofuel Suppliers.

Access to capital for investment in bioenergy solutions is now a major barrier for transitioning from fossil fuels to biofuels and the subsequential freeing up of gas and electricity for other uses. The success of the previous capital grant fund stimulating transition from fossils to biofuels showed the size of the capital costs barrier to investment. The drop-off in current levels of investment in new biofuels heat plant correlates with the return of constraints on access to capital for new investments.

The current fragmented application of the Resource Management legislation with each region applying different Rules results in significant unnecessary delays and costs when consenting heat plant. With standardization of regional Rules there will be less need for bespoke design and a reduction in requirements of some regions to require some unnecessarily risk adverse design.

Bioenergy Association has undertaken a *Stocktake of sector capability to deliver optimal benefits from bioenergy* [1] which provides a list of actions which have been recommended be addressed in order that the bioenergy goals available to New Zealand can be achieved by 2050. This report provides details on the actions referred to in this submission and forms part of the submission. A list of the recommended actions applicable to wood energy are included in Appendix 1.

Q2 What outcomes and objectives do you think the strategy should focus on?

The strategy should focus on the following:

1. Assisting and encouraging investment in the use of wood fuel for heating by addressing the capital cost barriers. Increased investment with its increased demand for biomass will provide incentive for increased wood fuel supply.
2. Encouraging all participants in the wood energy market to adopt best practice processes, most of which already exist. This needs to be based on dissemination of knowledge and experience by qualified practitioners.
3. Making the consenting and construction of biofueled heat plant easier by having standard rules for all consent authorities.
4. Encouraging regional collective action regarding demand and supply of biomass for wood energy. Each region is developing a biomass supply plan.

Q3 Which of the objectives are the most important? (or would have the biggest impact)

All of the objectives in Q2 are important and they are interrelated, however the most important is assistance to encourage investment in new or modified heat plant would make the greatest and most immediate impact. If the Government wanted to supercharge export receipts, regional growth, address the energy crisis, and reduce inflation, targeted support like accelerated depreciation, regional development, capital grants or repayable loans could help overcome the resistance to uptake of biomass as we transition away from gas/coal.

The other objectives in Q2 would improve market efficiency but any effects would be slower and have less impact.

Q4 What would achieving these mean for your business? And the market more broadly?

Increasing the profile of wood energy and the opportunities for supporting the electricity and natural gas market, employment creation and regional economic growth, along with policies which would reduce the capital cost barrier, would encourage investment in wood fuelled heat plant. Increased demand for wood fuel would encourage providers to adopt the best practice processes already developed in the market. A bigger market would strengthen the business resilience of bioenergy sector participants.

[1] https://www.bioenergy.org.nz/resource/op30-stocktake-of-sector-capability-to-deliver-optimal-benefits-from-bioenergy

New Zealand food growers and processors are being required to demonstrate to their international customers that the food they sell has been produced using only sustainable energy. A bigger, more resilient bioenergy market would provide strong evidence to those international customers.

A larger supply of wood energy into the energy market will free up increasingly scarce supplies of natural gas for other higher value uses and reduce the need for additional investment in increasingly more expensive electricity generating plant.

The supply of biomass is integral to the growing and harvesting of trees on farms and in forestry. If landowners and forestry companies are able to gain a higher recovery of biomass from their trees, then this will improve their financial viability but also reduce the amount of slash currently left after harvesting. Currently there is no incentive for slash to be removed after harvesting. If there is a use for the slash such as producing wood fuel from it, then it would be removed. This has been demonstrated by forestry companies such as OneFortyOne who recover harvest residues and sell them as feedstock for wood fuel used by nearby covered horticulture.

Q5 What actions should the government consider to support the strategy?

1. **Establish an Energy Strategy:**
    a. Collect and publish actual regional data on supply and use of biomass for energy
    b. Expand awareness of regional economic potential of bioenergy
    c. Include in the Energy Strategy for the production and use of biomass for liquid, gaseous and solid biofuels as these are highly related to freeing up electricity and natural gas for higher value uses.

2. **Incentivise transition from fossil fuels to biofuels to free up natural gas and electricity:**
    a. Reduce barriers to access to capital – deferred appreciation, suspensory loans, performance-based grants, interest free or low-interest loans
    b. Integrate biomass recovery and wood energy production with regional development through the Kānoa – Regional Economic Development & Investment Unit
    c. Provide tools & case studies for the market
    d. Promote the value proposition for investment in bioenergy plants
    e. Promote the use of modular off-the-shelf heat plant design

3. **Improve knowledge and experience of investors and their advisers:**
    a. Expand training advisor networks and professional development
    b. Promote best practices, sustainability standards, and quality assurance
    c. Promote and maintain a Register of Advisers
    d. Promote and maintain the Bioenergy Knowledge Centre as a searchable source of reports and information
    e. Update and promote the Directory of Bioenergy Facilities
    f. Undertake promotion of where best practice information can be obtained by new entrants to the sector
    g. Develop and publish a fuel comparison calculator for heat plant advisers to compare different fuels for heat production

4. **Standardised consenting of heat plant:**
    a. Removing the differing consent conditions applying to the building or modification of heat plant
    b. Fast-track consenting, with consistent air particulate requirements across all regions
    c. Establish sustainability criteria for solid biofuels
5. **Partnering with potential biomass suppliers to unlock new revenue opportunities**
    a. Maintain a directory of potential biomass suppliers
    b. Provide case studies and demonstration of methods of recovery of biomass residue from forest harvesting
    c. Disseminate information on the value proposition of integrating trees on farms;
    d. Provide model contracts for agribusiness and foresters to sell biomass
    e. Promote use of timber in buildings which would produce greater volumes of wood residues suitable as a boiler fuel
    f. Increase information and demonstration of domestic processing of wood into bio-products to provide residues as biofuel
    g. Encourage use of treated timber as boiler biofuel where consent conditions can be met
    h. Provide guidance and demonstration role models of how forest growers integrate use of slash to produce biofuels to meet their resource consent conditions
6. **Improve biomass energy market information**
    a. Actively engage and educate stakeholders on the structure of the biomass supply market.
    b. Establish and maintain regional mapping of present and future biomass availability.

Regards

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Appendix 1: Recommended Capability Development Programme - solid biofuels

Table 1: Recommended actions - solid biofuels

	Actions	Page
Grow sector visibility and credibility		
Policy	Provide Ministers, MPs and officials with material so that they are well briefed on what bioenergy is, its benefits and its inclusion as a mainstream energy option	10
Policy	Provide local and central government officials with material so that they are well informed on bioenergy and its benefits as a mainstream energy option	10
Growing the market		
Data	Review data collection and publication on the bioenergy sector so that it is based on actual survey and is regional	2
Data	Collate bioenergy data and update Information Sheet 35 so that the data from the sector is easier to find.	2
Investor confidence	Develop case studies and demonstration projects to provide investor confidence.	18
Information dissemination	Update and promote the Directory of Bioenergy Facilities	5
Information dissemination	Promote the Free Advisory Service	5
Information dissemination	Where organisations wish to provide bioenergy information to their members, rather than provide information themselves they should link to the bioenergy portals as trusted sources of information.	5
Information dissemination	Develop and disseminate information to counter misinformation on bioenergy sustainability wherever it arises	6
Information dissemination	Promote the benefits of solid biofuels to food processors.	6
Sector planning	Develop a roadmap for growth in the availability of biofuels to meet the specific drivers for energy	6
Sector planning	Provide information on how bioenergy is a significant contributor to development of a New Zealand bioeconomy and participate wherever involvement may assist to transition.	7
Strengthening sector capability and standards		
Sustainability	Bioenergy Association to prepare and publish a Sustainability Policy for the bioenergy sector.	7
Sustainability	Work with other sectors to ensure that bioenergy fits with the sustainability criteria they are negotiating with other countries for export of New Zealand sourced products	7
Information	Encourage government entities who are members of IEA Bioenergy or any other relevant international organisation to disseminate bioenergy information from those organisations to the participants in the bioenergy sector	11
Information	Encourage the Bioflash and Bioenergy Knowledge Centre to be used to share appropriate information with the bioenergy sector	11
Information	Presentation of case studies can show by example how a collegial approach to bioenergy projects is necessary for many opportunities to become viable	12
Information	Bioenergy Association to establish story telling about bioenergy as a major activity and reported on at each Board meeting.	4

Standards	That ISO standards be promoted as the relevant standards for the NZ bioenergy sector.	12
Standards	Establish a Working Group to review and prepare model Rules for the consenting of heat plant.	12
Professional development	Bioenergy Association promote itself as a professional body with registration of advisers and management of biofuels accreditation schemes	12
Information dissemination	Undertake promotion of where best practice information can be obtained by new entrants to the sector	5
Operational support	Prepare Technical Guides for operation, maintenance and health and safety of bioenergy plant.	14
Operational support	Establish operator/maintainer Forums to support the safe operation of bioenergy equipment	14
Training	Work with sector advisers to encourage Professional Development by advocating that anyone seeking advice 'employ only registered advisers"	9
Training	Seek economies of scale by working with CEP to evaluate common training services.	9
Training	Develop on-line training packages	9
Solid biofuels market development		
Training	Re-establish training capability for small boiler operators	8
Data	Develop and publish a fuel comparison calculator for heat plant advisers to compare different fuels for heat production	17
Data	Build a database of electricity costs for energy users	17
Tools	Recover the calculators previously on the EECA website and host them on the UseWoodFuelNZ portal.	18
Advocacy	Refresh and relaunch the UseWoodFuelNZ Campaign	17
Trees on farms	Develop a suite of tools and demonstration case studies applicable to the scale of farm forestry including: Model contracts for purchase of biomass from landowners Best Practice Guide Demonstration biomass recovery Market information Examples of collective recovery and sale of biomass	18
Guidance	Provide guidance to farmers and other landowners on the growing of herbaceous biomass and its recovery and use as a biofuel.	19
Guidance	Provide guidance and demonstration role models of how forest growers integrate use of slash to produce biofuels to meet their resource consent conditions.	27
Guidance	Provide guidance to heat plant designers and installers on the combustion of herbaceous biofuels in existing and new boilers.	19
Treated timber	Work with New Zealand Demolition & Asbestos Association on development of Guidelines and training for recovery of treated timber for use as an energy fuel	19
Treated timber	Undertake sampling and testing of typical sources of treated timber to identify possible gradings that can be applied during structure demolition.	19
Treated timber	Identify consenting authorities who are consenting to the use of treated wood as an energy fuel	20
Treated timber	Identify the criteria for consents for use of treated timber as an energy fuel	20
Treated timber	Identify heat plant which are successfully using treated timber as an energy fuel	20
Guidance	Investigate the opportunities for use of ash as a product of boiler operation	33

Guidance	Consenting authorities to adopt consent criteria that is standard across all regions so that consent authorities learn from each other.	33
Guidance	Promote the use of modular off-the-shelf heat plant design	33
Treated timber	Prepare and publish guidelines for the use of treated timber as an energy fuel.	20
Treated timber	Prepare case studies showing the increased financial return from selling low grade logs for energy compared to sale as an export log.	20
Value proposition	Prepare case studies showing the financial return from selling process residues as a feedstock for wood fuel.	20
Value proposition	Prepare case studies showing the financial returns from 100% recovery of biomass from trees planted	20
Value proposition	Improve biomass resource and bioenergy use data collection methods so that actual data is available and published in open source.	21
Data	MPI to expand its log price data collection so that regional monthly data is available	21
Quantity of biomass	Undertake a study on the potential amount of woody biomass which may be available in the future from new plantings.	21
Guidance	Provide guidance on handling wet biomass residues for production as a biofuel	26
Quality assurance	Expand promotion of “buy only from an Accredited Solid Biofuel Supplier”	22
Quality Assurance	Work with existing wood fuel suppliers to assist them gain accreditation	22
Data	Publish regular updates on the possible future prices of the full range of fuels available regionally	22
Quantity of biomass	Regularly publish regional maps and tables of likely sources of solid biofuels out to 2050.	22
Quality Assurance	Review the Scheme for Registering Advisers to confirm that it is fit for purpose	23
Quality assurance	Promote the benefits of bioenergy advisor registration to senior managers in consulting firms.	23
Professional development	Undertake a review of the GIDI applications to identify lessons learnt.	23
Promotion	Expand the equipment and service provider catalogues on the UsewoodfuelsNZ website	24
Professional development	Encourage equipment and service suppliers to provide webinars on their products so that owners and their advisers are well informed on what equipment and services are available in New Zealand	24
Emissions reduction	Review the emissions factors set by MfE for calculating emissions reduction when transitioning from fossil fuels to solid biofuels	24
Funding	Advocate for coal to be levied	25
Funding	Make application to the Forest Growers Levy Trust for research funding	25
Funding	Make application to the Waste Minimisation Fund for research into the use of treated timber as an energy fuel.	25
Funding	Strengthen the Bioenergy Association’s capability to make application for funding and project manage delivery of project outcomes	25
Quality assurance	Include requirements for declaration of sustainability to be included within the criteria for Accreditation of Solid Biofuel Suppliers	25
Information	Encourage use of biomass for heat production so that electricity is freed up for applications where electricity is a more suitable fuel.	27