



Silver Fern Farms Submission on Accelerating renewable energy and energy efficiency

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Key submissions

- Silver Fern Farms support moves by the Government to address the key problem of reducing gross emissions from fossil fuels.
- We believe reductions in fossil fuel emissions will assist in countering the pressure to offset emissions through conversion of food producing land to forestry.
- We are actively measuring our emissions and investing in emissions reductions to reduce our footprint.

Silver Fern Farms

Established in 1948, Silver Fern Farms is New Zealand's leading processor, marketer and exporter of premium quality lamb, beef, venison and associated products. Silver Fern Farms is an equal partnership between Shanghai Maling Aquarius Ltd. and farmer-owned Silver Fern Farms Co-operative Ltd.

We are a food processor with annual revenues of \$2.4b in 2018, of which approximately \$500m comes from added value, customer specific and differentiated branded products. Over 80% is exported to more than 60 markets, the largest of which are North America, China, Asia, the Middle East, Europe and the UK.

Our contribution to regional communities across New Zealand is significant. Silver Fern Farms consists of 14 processing sites spread throughout both islands of New Zealand, two regional support offices and a corporate support site based in Dunedin. At peak seasonal employment we employ over 7000 staff across our sites.

Our contribution on farms is extensive as our services support over 15,500 farmer suppliers nationwide.

Silver Fern Farms is part of the broader meat processing industry which employs some 25,000 people across regional New Zealand and has combined export earnings of \$8.6 billion.

Silver Fern Farms' strategic purpose is to sustainably add value to New Zealand's grass-fed red meat by being the first choice for people who care about food. Our vision is to be the world's most successful and sustainable grass-fed red meat company.

Our Commitment to Sustainability

As a food producer Silver Fern Farms has made a long-term commitment to sustainability across a broad range of material sustainability issues.

Silver Fern Farms produced its first sustainability report in 2018, where the material issues were identified, and targets set across each of those issues. The issues and targets align strongly with the United Nations Sustainable Development Goals. The report can be found at: <https://www.silverfernfarms.com/our-company/our-sustainable-chain-of-care/>

Our actions to reduce carbon emissions

Our energy use is largely for heating water to temperatures required to hygienically produce food safe for export.

We are responding to climate change and are a founding signatory to the Climate Leaders Coalition.

We are the first meat processing and marketing company with a verified carbon footprint under Toitu Envirocare's CEMARS programme.

Our 2019 report card contains our published verified carbon footprint.

We operate coal fired boilers at six sites – Te Aroha, Belfast, Hokitika, Pareora, Finegand and Waitane. No plant has been replaced recently, but most still have significant service life left.

We have an emissions reduction plan as part of our verified carbon footprint with Toitu Envirocare.

This involves investigation of investment in low-emissions technology.

In-line with New Zealand's carbon targets and commitment to the Paris Climate Accord, Silver Fern Farms set carbon targets in 2017 for our intensity and gross emissions which were published in our 2018 Sustainability Report.

By 2030 we will make:

- a 30% reduction on 2005 levels in the GHG emissions intensity of our operations, measured per tonne of product.
- a 30% absolute reduction in the GHG emissions on 2005 levels by 2030.

We are currently developing a science-based carbon reduction target in-line with the Toitu Carbon Reduce verification programme.

We have partnered with EECA, the University of Waikato on the Energy Transition Accelerator programme.

With the support of EECA and Toitu Enviro-care we have developed an emissions reduction plan which is being supported through an infrastructure strategy for the company. We have focused our attention on reducing emissions from areas including; operational process heat, wastewater emissions, freight transport and refrigerants, while ensuring we remain internationally competitive. We are investigating how we make this transition to low-carbon emission processing.

However, we acknowledge that not all food manufacturers will voluntarily take these proactive steps.

We have taken a position in our Zero Carbon Bill submissions on the need for gross emissions reductions from fossil fuel users. We believe that allowing one sector to grow gross emissions and, via netting, off-set those emissions on the productive resource of another sector which cannot (farmland of food producers) is not an equitable outcome.

Comments on the proposal



Corporate Energy Transition Plans

We currently report our verified carbon footprint through Toitu Enviro-care which is available on our website. This has been taken voluntarily to guide our progress and assist in our energy transition. We also have an emissions reduction plan which we have not published due to the commercial sensitivity around the programme. We also require flexibility towards how we achieve our emissions reduction pathway so we can change our approach to meet the business climate, potential infrastructural change and to accommodate new technologies. We acknowledge that the approach we have taken may not be appropriate for all companies.

Option 1.2 Electrification information package and feasibility studies

We support transparent information on the electricity network as this will assist in business investment decisions.

Benchmarking in food processing

We do not support benchmarking in food processing only. It has potential to unfairly compare emissions of foods without relating it to each foods' own nutritional role in a balanced diet. There is also significant variance in reporting standards globally which can potentially provide perceived consumer advantage to imported food products. Additionally, it is unfair to select one sector of the economy, and not others who are also users of fossil fuels. There was no explanation why food processing was suggested to be benchmarked and not other industries.

Option 2: Developing markets for biomass use

In line with the MIA, we support policies which create smoother and more transparent markets for biomass. In particular, decisions to invest in biomass require certainty of long-term supply – information on future supply of wood is critical. Across our network of sites we use biomass for energy and are investigating opportunities in this space as part of our emissions reduction plan.

Option 3:1 Technology diffusion and capability-building

We support option 3.1. Conversion from coal-fired boilers and dryers to alternative technologies (biomass, electric heat pump...) and have been involved with EECA as part of the Energy Transition Accelerator programme to transition to low emissions options. This has been a positive partnership between Silver Fern Farms and government.

Option 4.1 Potential Coal Fired Plant Ban

A ban on new coal fired plant is likely to affect five of our 14 sites as some replacements will be required by 2030. Replacement biomass boilers are more expensive than coal, with greater fuel storage and handling costs, as wood boilers burn approximately three times the fuel volume compared to coal.

Conversion of most current boilers to wood pellets should be feasible with some capital spend plus additional operating costs, provided there is adequate fuel supply available.



Conversion of larger boilers to seasoned wood chip is also possible, with capital work required for fuel storage and handling. Capital and operational costs still being researched but likely to be significantly higher capital than pellet conversion, especially if additional fuel storage is required. Seasoned wood is also likely to be more expensive than coal on an energy basis.

These are all considerations we are factoring into our capital programme and emissions reduction pathway.

Considerations regarding alternative heat sources

Gas firing is not available at the sites with coal boilers, so is not an option for us.

Direct electrical generation is possible but has high operating costs – at about four times the cost of thermal fuels. Greater transparency of electrical pricing mechanisms would give protection to users who have to factor in the capital conversion costs and operational costs as part of business planning.

Conversion of coal burning sites to electrically heated boilers would increase operating costs by over \$10M pa. at current pricing.

Additionally, the national electrical reticulation is not ready for large electrical heated boilers, so there could be considerable delay in getting adequate connections.

Other alternative technologies are becoming available for hot water supply. Basic conservation is of course the first step, and could reduce the thermal demand by 20-30%, with a capital cost of \$2 - \$3M for the sites currently burning coal.

Heat recovery from refrigeration plant is the next most economic heat source, saving about 10% demand.

Heat pumping, using the refrigeration plant as a heat supply, could reduce demand by a further 25%. We estimate this would have a capital cost of approximately \$16M.

Summary

- Silver Fern Farms supports the intent of policies which achieve gross reductions in fossil fuel CO2 emissions.
- We are committed to reporting our verified carbon emissions and meeting our reduction targets through our emissions reduction plan.
- While we have some concerns around the benchmarking in food processing and have noted some of the capital investment requirements this will place on our business, we are supportive of the need to reduce fossil fuel emissions and the intent of the proposal.

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Privacy of natural persons

