

COMPRESSED AIR TRUMP CARD IN CLIMATE CHANGE DEBATE

New Zealand trade negotiators now have another card to play, if their international counterparts accuse our food giants of dragging the chain on climate change.

The Executive Officer of the Energy Management Association, Mr Ewan Gebbie, said export markets would slap on trade sanctions at the bat of an eye, if they thought New Zealand was not paying enough attention to climate change. Once in place sanctions would take years to remove.

He said New Zealand's trade negotiators would be able to roll out evidence that companies such as Silver Fern Farms and Fonterra were using world-best, energy efficiency practices.

Mr Gebbie says a compressed air auditing programme, developed by the Electricity Commission, would play a significant part in achieving targeted energy savings of \$2 billion a year for the New Zealand manufacturing sector within five to 10 years.

"They dropped the food miles debate in Britain when MAF proved that the average shopper spent more energy getting to the supermarket, than we spent getting the product onto the shelves."

Already four times more efficient than European meat works, Silver Fern Farms' Belfast plant in Christchurch reduced its annual electricity costs by about \$25,000 with improvements to its compressed air systems, from working through the Commission's programme.

Other major players in the food industry, such as AFFCO, Alliance Group, Fonterra, NZ Sugar and Westland Dairy, have also been involved with the Commission in the programme, which targets the top 500 industrial users of compressed air.

New Zealand's first two compressed air systems auditors have been accredited under a scheme that forms part of the programme, and more are going through the process. To be accredited the compressed air auditors must have completed a course run by Waikato University and have demonstrated their competence in practice.

The Energy Management Association assesses whether auditors meet the requirements for accreditation.

The Electricity Commission was the catalyst in bringing together the various interests and assisting the development of self-sustaining compressed air auditing businesses to work with industry on accessing the available savings.

The Commission's research estimates electricity savings of 230 GWh a year can be achieved through improvements in compressed air systems—enough to keep 50,000 homes in electricity for a year. Not having to generate that amount of electricity would also mean reducing carbon emissions by 46,000 tonnes per year.

So far 100 'walk-through assessments' of compressed air systems have been completed under the programme. Typically, the assessments have identified electricity savings available from the air systems of more than 20 percent.

Compressed air is an expensive form of stored energy – even when a compressed air system is operated perfectly. More commonly there are many inefficiencies, resulting in less than 10% of the energy input into a compressed air system being used productively.

Air leakages, inappropriate uses of compressed air, or the way the compressors are controlled to maintain the supply of air, can substantially increase the amount of electricity consumed.

Mr Gebbie said there was a huge information gap and quantifying an individual manufacturing plant's losses was an obvious answer.

"It builds awareness with management that the hissing noise they hear down the back of the factory is actually costing them 50 cents a minute, so they'll fix it straight away" he said.

The compressed air audits calculate payback time for implementing changes and in many cases this was less than two years, Mr Gebbie said.

For further information contact:

Ewan Gebbie + 64 385 2839, or Rod Treder, Programme Manager Industrial, Electricity Commission +64 462 0618 or 021 723 745