

Pathways to the decarbonisation of heating and industrial process heat

A conference in Auckland 8-9 December 2020 will discuss the wide range of options for decarbonisation of heating and industrial process heat. The Conference, *Decarbonising Heat* will use a number of case studies from industry that provide demonstration on the pathways open to business.

www.conferenz.co.nz/events/decarbonising-heat



Process heat accounts for 28% of energy-related emissions in New Zealand. With governmental investment to reduce greenhouse gas emissions, societal pressures and innovation in mind, it is now more crucial than ever for industries to take up incentives and lower emissions.

Biogas technologies and facilitating circular economies

With various biogas technologies available to reduce methane emissions from waste – and with New Zealand having a successful, growing biogas sector with several consultancies and equipment suppliers implementing projects at home and abroad, companies can feel supported by a well-informed and skilled research sector.

Biomass Fuel or Wood Energy

With New Zealand having a thriving wood fuel sector, with expertise in the production and sale of all types of wood fuel and the heat plant equipment in which to use it, there is a wealth of opportunities for exploring the realities and logistics of transition when it comes to integrating new or improved sustainable actions into your planning that aligns with business goals.

NZ Government Input

The Ministry of Business, Innovation and Employment has allocated \$12.5m in funding to the University of Waikato School of Engineering. Professor Michael Walmsley will lead a seven-year research programme to reduce energy-related greenhouse gas emissions. The collaborative project involves

researchers from the University of Waikato, the University of Auckland and Massey University, and will build a new technology platform called Ahuora to help reengineer the way we use, convert, supply and store renewable energy for industrial process heating.

The programme is an important step towards zero net emissions of greenhouse gases by 2050, a goal set under the Government's Climate Change Response (Zero Carbon) Act 2019.

Professor Michael Walmsley leading this programme will be speaking at the **Decarbonising Heat - a unique conference first being held in Auckland on 8-9 December**, an event that particularly focuses on the decarbonisation of industrial and process heating.

Professor Walmsley will present a session on demand reduction using process integration. His case study will include real-world examples and how these can be used to develop long-term energy transition plans.

Companies in New Zealand – Leaders in the change

When it comes to the available options and logistics of transition for more sustainable outcomes, who better to hear from than those at the forefront of this push. This conference includes case studies and panel discussions from some of NZ's leading companies moving towards sustainable change.

Oliver Belton, MD of **Carbon Forests will share on the future of carbon pricing** – the analysis of the New Zealand Emissions Trading Scheme. Will the current and projected carbon prices and credits drive the usage of renewable fuels?

Changes come at a cost and when trying to merge new technologies with original infrastructure, the result can be trying and an expensive experience. **Fibre Solutions share the key factors in their transition** with a session titled *Balancing innovation and integration*.

Fonterra's journey to decarbonising dairy will be presented by Linda Thompson, Head of Operational Energy & Climate. She has said that *"sustainability's at the heart of Fonterra's strategy and the Co-op is committed to getting out of coal at the site"* She also has commented on findings "that retrofitting existing systems for using electricity is not a viable option and we now see wood biomass as a better option for this site. This is because it's a renewable source of energy and requires fewer changes to existing infrastructure."

At Fonterra's Te Awamutu site; which is using wood pellets, the transition away from coal says Fraser Whineray, COO *"is a positive step towards meeting our interim target of achieving a 30% reduction in emissions by 2030 and shows us what can be achieved by using wood biomass to decarbonise our manufacturing sites."*

Both Linda Thompson and Fraser Whineray will be sharing at the Decarbonising Heat Conference and not to be missed is also the **Leaders Panel: The current profile of Industrial and Process Heat in New Zealand and the goals through to 2030.**

Bioenergy in the news

The closing case study is on **Danone's sustainability focus**. Danone Nutricia NZ who invested in a biomass boiler at NZ's infant formula producing plant who took on a significant investment [\$40 million], to be NZ's first carbon neutral plant of its kind.

Carbon Capture and storage technologies

Lee Beck of Clean Air Task Force (USA) is the CCUS Policy Innovation Director. As part of their Decarbonised Fossil Energy team, Lee primarily works on CCUS policy.

Carbon capture, utilisation and storage (CCUS) is the only group of technologies that contributes both to reducing emissions in key sectors directly and to removing CO₂ from the atmosphere to balance the emissions that are the hardest to prevent.

CCUS technologies can deliver zero carbon electricity and zero carbon liquid fuels. CCUS can also decarbonise industrial processes that emit CO₂ into the atmosphere.

Lee Beck's session will analyse carbon capture and storage technologies, share on the benefits of CCS , the logistics and health and safety considerations.

Climate Change Response (Zero Carbon) Amendment Bill

With the passing of the Climate Change Response (Zero Carbon) Amendment Act; it's time for organisations to develop and implement climate change policies that contribute to global efforts under the Paris Agreement. New Zealand has committed to reduce greenhouse gas emissions by 30 per cent below 2005 levels by 2030. Decarbonising heat processes will make strides in this area.

View all the presenting companies and details, see: www.conferenz.co.nz/events/decarbonising-heat

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