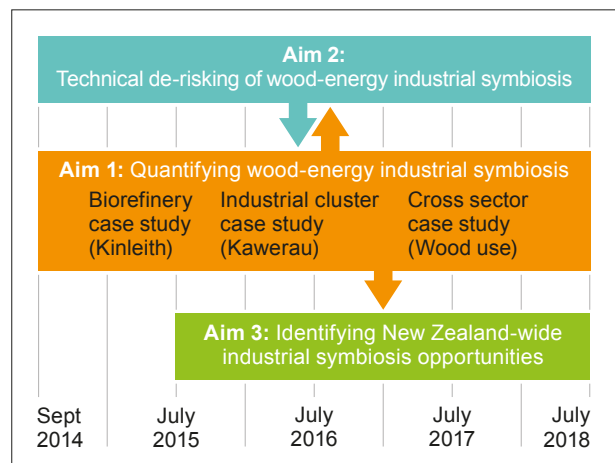




Industrial symbiosis

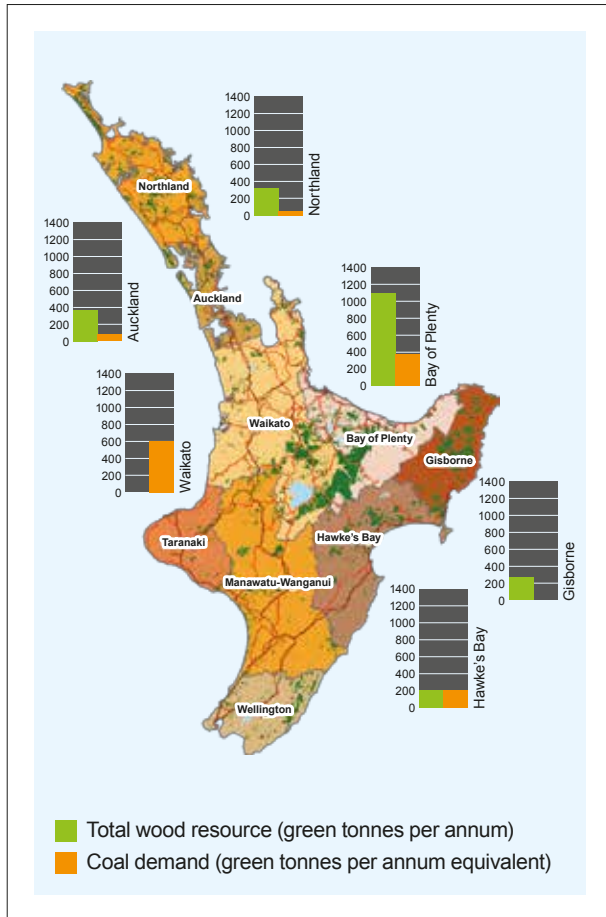
Industrial symbiosis is the association between two or more industrial facilities in which the wastes or byproducts of one become raw materials for another. Acting co-operatively, operating costs can be reduced and new business and job opportunities open up.



Programme overview.

Identifying New Zealand-wide industrial symbiosis opportunities

Siting industry together with wood and other renewable energy resources will improve energy efficiency. We are collating data on resources such as coal, gas, geothermal and wood and mapping these versus demand for industrial heat. We will use this data to explore opportunities for industrial symbiosis outside the central North Island.



All wood residues vs coal demand (North Island).

Industrial process heat options in New Zealand

New Zealand industries can choose from a variety of industrial process heat options. For industries like the dairy industry, using wood and other biomass as boiler fuel in industrial processes presents both opportunities and challenges. Among the issues to be considered are carbon and fuel price uncertainty, and how they may affect process heat emissions in the future.



Funding and Partners

- Ministry for Business, Innovation and Employment
- Energy Efficiency and Conservation Authority
- Oji Fibre Solutions
- Sequal Lumber
- Bay of Connections
- Norske Skog
- H.R.L. Morrison and Co
- Kawerau District Council

Contact information

Scion

Paul Bennett

Telephone +64 7 343 5601

Email paul.bennett@scionresearch.com

Website www.scionresearch.com

About Scion

Scion is the Crown research institute that specialises in research, science and technology development for the forestry, wood and wood-derived materials and other bio-material sectors.

Scion's purpose is to create economic value across the entire value forestry chain, and contribute to beneficial environmental and social outcomes for New Zealand.



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato