



Dr. Linda Wright



Positioning New Zealand at the forefront of the global hydrogen economy

New Zealand FCEV Consortium



Mission

Position New Zealand at the forefront of the global hydrogen economy.

Vision

- ✦ Utilise New Zealand's renewable energy resources to decarbonise domestic energy needs and reduce reliance on fossil fuels.
- ✦ Deliver world leading hydrogen innovation through public and private sector collaboration both nationally and internationally.



Aims

- ✦ Connect public and private organisations to deliver hydrogen capability.
- ✦ Develop a renewable hydrogen model that can be replicated throughout New Zealand.
- ✦ Deliver renewable hydrogen capability across Consortium Member operations.



Focus

- ✦ Heavy vehicle bus and truck fleets
- ✦ Industrial process heat & onsite energy storage
- ✦ Rural off grid scenarios in the agricultural, farming and tourism sectors
- ✦ Food industry materials handling solutions using fuel cell forklift trucks
- ✦ Fuel cell towing tugs for airports and ports
- ✦ Hydrogen fuel cell propulsion of maritime vessels.

Consortium Members

- ✦ Fonterra
- ✦ Fulton Hogan
- ✦ HW Richardson Group
- ✦ Real Journeys
- ✦ Southern Hemisphere Proving Ground
- ✦ Green Cabs
- ✦ Hyundai NZ
- ✦ Venture Southland
- ✦ Siemens

Also in discussions with: Auckland Transport, Daimler, Air NZ and Toyota NZ.

Supportive Members:

Callaghan Innovation, Queenstown Lakes District Council and Central Otago District Council



Southern Region Hydrogen Model



- ✦ Significant contributor to NZ economy.
- ✦ Renewable energy generation.
- ✦ Globally iconic tourist routes with heavy passenger vehicle transport needs and maritime vessels.
- ✦ New Zealand's largest companies with significant operations.
- ✦ Progressive private sector companies seeking to decarbonise.
- ✦ Extensive rural agriculture and farming sector with off grid applications.
- ✦ World Heritage Site, national parks, island communities and remote off grid locations.

New Zealand Opportunity

One of the highest proportions of renewable electricity generation in the world.

Can produce renewable hydrogen from hydro, wind and geothermal capacity.

Opportunity to:

- ✦ Decrease reliance on imported fossil fuels;
- ✦ Transition to a low carbon economy and stimulate energy productivity;
- ✦ Take advantage of, and be an active participant in, establishing a global renewable hydrogen export industry





New Zealand FCEV Consortium

Assisting New Zealand transition to an energy productive,
low emission economy.