APEC Business Advisory Council

SWG II 2026

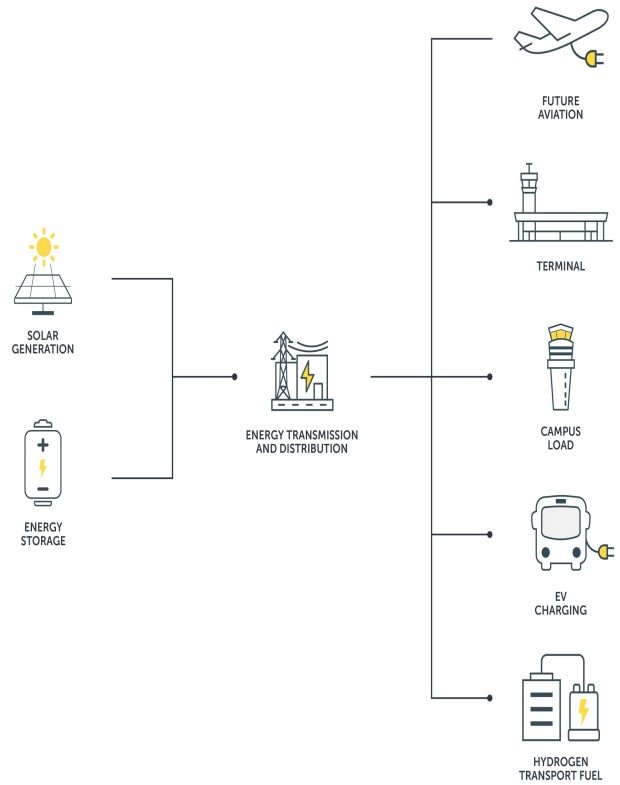
Case Study: Christchurch International Airport
ENABLING RESILIENT & SUSTAINABLE AVIATION ENERGY

Presentation by Sarah Ottrey, ABAC New Zealand

ABAC II, Mexico City, 2026

Christchurch International Airport: A Sustainability Journey

KŌWHAI PARK ECOSYSTEM 2050



Kōwhai Park

CHRISTCHURCH AIRPORT

- A Green Transition Plan is enacted to mitigate climate risk, energy risk and acknowledge distance from markets.
- **Energy**: renewable solar, sustainable aviation fuel, efficiency.
- **Asset transition**: EVs, incl NZ's 1st electric fire truck
- **Emissions reduction**: Operations, energy transition, other measures. Has achieved a 94% reduction in Scope 1 and Scope 2 emissions
- **Biodiversity, environment, circularity**: restoring land, managing wildlife and water
- In 2025, CIAL won the Platinum Award from the Airports Council International Green Airports Recognition for its leadership in sustainable energy

SUSTAINABILITY WORK STREAM CASE STUDY : 2026 “TODAY” SOLAR GENERATION

- Stage one 207/420 Hectares of Kowhai Park complete and energy into the national grid.
- Generating 275GWh annually – powering equivalent to 36,000 households.
- Resilience Planning - ability to stand up Christchurch Airport as a discrete energy generator for 100% of the campus including commercial property portfolio, in the event of natural disasters, climate change events, dry hydro-generation seasons and international energy crises.
- Mitigating diesel generator backup dependency.
- Enabling green hydrogen production for future aviation.



SUSTAINABILITY WORKSTREAM CASE STUDY: “THE FUTURE “ LIQUID HYDROGEN LH2 INFRASTRUCTURE

- New Zealand Hydrogen Aviation Consortium – Christchurch Airport(CIAL), Air New Zealand, Hiringa Energy, Fortescue, Fabrum and Airbus.
- LH2 Liquifaction Facility being stood up at Christchurch Airport to support – testing, certification, commercial.
- Partners are CIAL, Fabrum and the New Zealand Government through EECA.
- EECA = Energy Efficiency & Conservation Authority – goal to mobilise New Zealanders to be world leaders in clean and clever energy use.
- Letters of Support & Intent from 5 aircraft manufacturers.
- Land transport pipeline identified, with support from partners including long haul operators and Toyota New Zealand.



SUSTAINABILITY WORKSTREAM CASE STUDY: "THE FUTURE" WHY LIQUID HYROGEN LH2 FOR AVIATION AND LONG-HAUL LAND TRANSPORT?

- LH2 is higher density for use where large energy volumes and long distances matter.
- Green LH2 requires renewable energy sources which CIAL & New Zealand has good access to.
- It is a long development 'runway" process currently focused on the infrastructure network and regulatory landscape.
- Airbus comment , "Airbus considers Christchurch's Hydrogen Infrastructure planning among the most robust globally. "



Recommendation:

- Members to recognise and advocate that businesses in open markets can innovate to solve large scale problems, taking the lead on energy resilience and sustainability, through strategic planning and smart partnerships. The result is stronger APEC economies, stronger businesses and stronger communities.