



Kōwhai Park

Sustainably powering
the next generation



“Kōwhai Park will provide the extra green energy New Zealand needs to transition away from fossil fuels. This is an exciting time for aviation - zero and low emission aircraft are not far away. Kōwhai Park will help ensure they can take off as soon as possible.”

Justin Watson

Chief Executive, Christchurch Airport

— Enabling — NEW ZEALAND'S LOW CARBON FUTURE

CHRISTCHURCH AIRPORT IS CREATING KŌWHAI PARK A NEW CONCEPT IN RENEWABLE ENERGY THAT WILL BE HOME TO ONE OF THE COUNTRY'S LARGEST SOLAR ARRAYS AND, POTENTIALLY IN THE FUTURE, GREEN HYDROGEN GENERATION.

Being great kaitiaki of our planet is a core pillar of our strategy and for the past decade we have systematically decarbonised our business.

We've transitioned key assets so they no longer need fossil fuels, this includes electrifying our light vehicle fleet and retiring our terminal's diesel boilers.

We measure all we can (including Scope 1, 2 and 3 carbon emissions, energy, waste and water) so that we can monitor our performance and push our team to do even better.

Since our baseline year of 2015, we've cut our Scope 1 emissions by nearly 90%.

We've been recognised as a global leader in carbon reduction and are on track to be carbon zero well ahead of 2050.

Our focus is now shifting to helping others decarbonise too.

This project, Kōwhai Park, takes that approach up a notch through delivering clean energy to help New Zealanders accelerate their transition away from fossil fuels.

It will provide renewable electricity to future large-scale green energy users such as data centres and vertical farms.

It is also critical to enabling aviation to decarbonise and will be ready to provide the clean energy needed to power the zero and low emission flights we expect to see in New Zealand skies in the near future.



Project RATIONALE

TO MEET THE CHALLENGE OF CLIMATE CHANGE, NEW ZEALAND HAS SET ITSELF A GOAL TO BE NET ZERO BY 2050.

This presents a number of challenges and opportunities.

We all need to make the transition from imported fossil fuels to clean energy sources.

That will put pressure on our renewable energy supply (electricity demand is forecast to increase by 68% by 2050).

We need to both increase and strengthen our renewable energy supply.

Aviation faces a big challenge. To decarbonise and decouple from fossil fuels, we need to develop new technology that is 100% reliable and safe. There's already a global effort trialling and developing solutions.

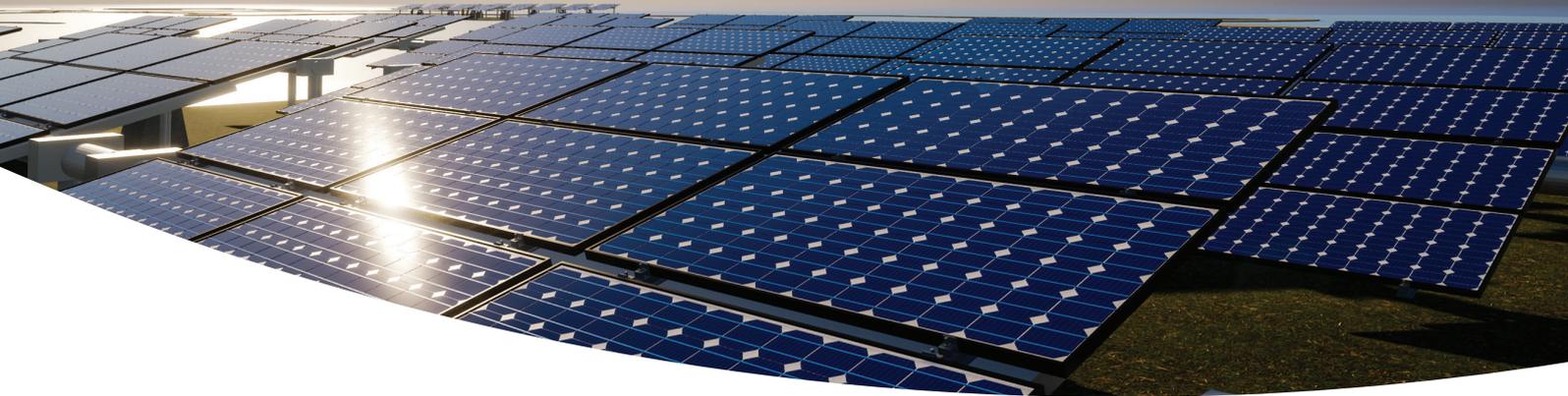
In New Zealand, we'll likely see both electric and green hydrogen-fuelled aircraft service our domestic routes in the future.

Kōwhai Park is well-located to power those aircraft and will help provide stability and resilience to the price and supply of renewable energy in New Zealand.

Orion

"As the electricity lines company for central Canterbury, Orion is pleased to be able to support Kōwhai Park. We are excited to work with Christchurch Airport and these newly announced partners on this significant project in our region."

Nigel Barbour, Chief Executive, Orion



Project OVERVIEW

CHRISTCHURCH AIRPORT HAS COMMITTED 400 HECTARES OF LAND TO KŌWHAI PARK WHICH IS PERFECTLY LOCATED FOR RENEWABLE ENERGY PROJECTS, BEING:

- Right beside New Zealand’s second largest city, Christchurch
- Adjacent to Transpower’s National Grid
- Close to Orion’s lines network that supplies Christchurch



“Many people don’t realise that Environment Canterbury is a significant land owner – it’s exciting to see some of that land being used for Kōwhai Park. This project will make a big difference to Canterbury’s efforts to decarbonise.”
Peter Scott, Chair, Environment Canterbury

We operate on more than 1,000 hectares of land and have extensive experience in building and managing property.

159 hectares of the land Kōwhai Park will be built on is leased to Christchurch Airport by Environment Canterbury.

Contact Energy and Lightsource bp have been selected to develop the park’s first phase.



“We’re excited to have found partners in Contact Energy and Lightsource bp with the technical capability to do this well and the values to ensure it’s done right.”

Justin Watson, Chief Executive, Christchurch Airport



Phase One

OVERVIEW

CONTACT ENERGY AND INTERNATIONAL SOLAR BUSINESS LIGHTSOURCE BP HAVE BEEN SELECTED TO DEVELOP THE FIRST STAGE OF THE PARK – A SOLAR FARM THAT WILL SPAN AROUND 300-HECTARES ON LAND JUST BEHIND THE AIRPORT’S RUNWAYS.

The solar farm will generate 150 megawatts (or 170MWp) of renewable electricity. That’s enough to:

- **Meet the annual electricity demand equivalent to around 36,000 homes**
- **Power around half of Christchurch’s domestic flights if they’re converted to low-emission technologies.**

It has the same carbon benefit as planting 1.25 million native trees and shrubs.

The farm will have around 300,000 solar panels and a lifespan of around 40 years.



“We’re bringing our proven track record of delivering domestic renewable projects in order to meet the massive anticipated demand for renewable electricity in New Zealand.”

Mike Fuge, Chief Executive, Contact

The site sits to the west of the airfield, adjacent to Transpower’s national grid and Orion’s Canterbury lines network.

Construction is expected to begin in 2024.

In April 2022, Contact Energy and Lightsource bp formed a joint venture partnership to develop grid-scale solar generation projects in Aotearoa, New Zealand.

Together, Contact and Lightsource bp are proud to have been selected to develop phase one of Kōwhai Park and, subject to a successful investment decision will build, own and operate the Kōwhai Park solar farm.

Both Contact and Lightsource bp have a proven track record of renewable energy project delivery and will work closely with Christchurch Airport to bring this project to life.

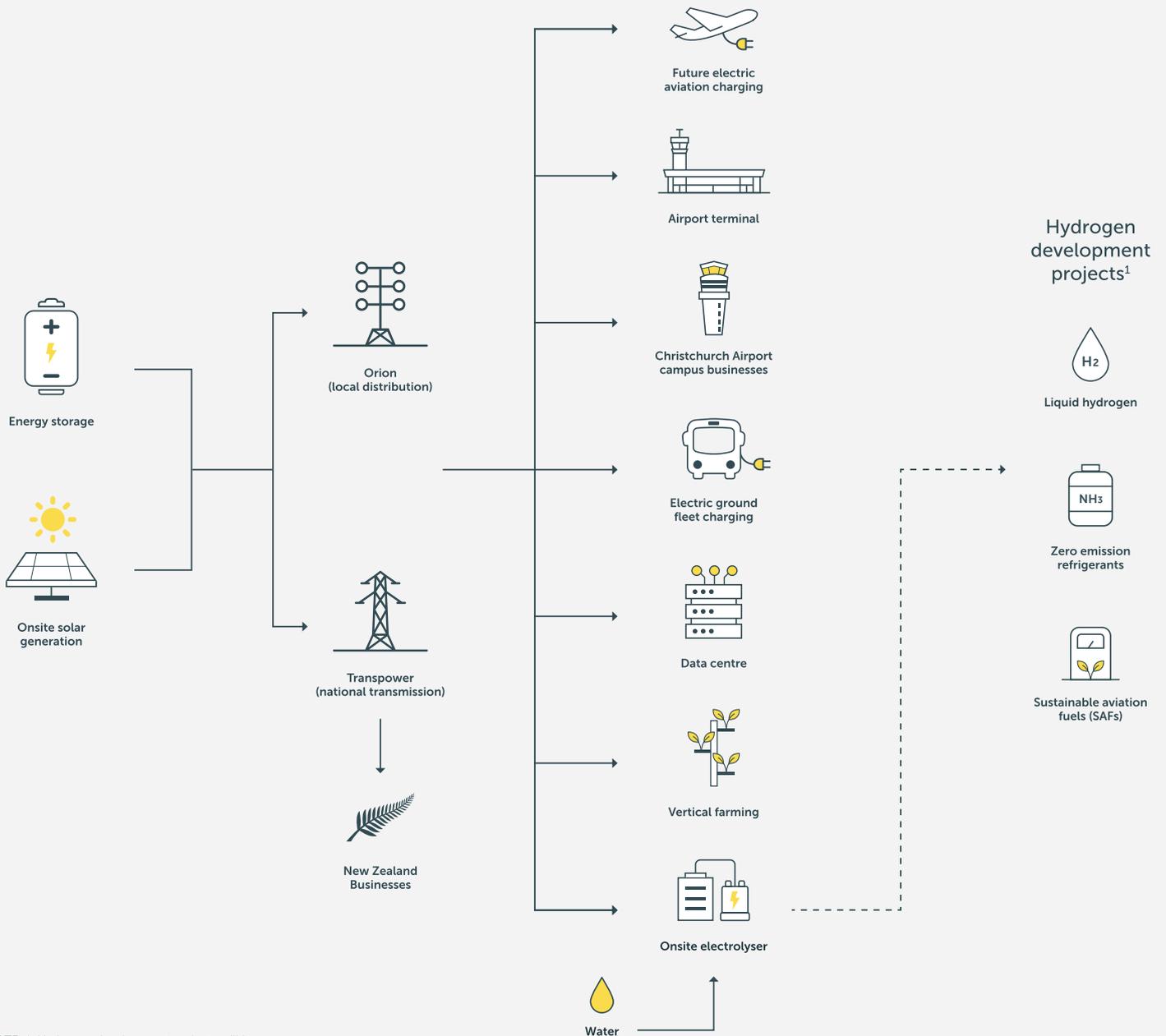


“We’re delighted to launch our first project in New Zealand and to be partnering with organisations who, like us, want to play a leading role in the country’s decarbonisation.”

Adam Pegg, Managing Director, Australia & New Zealand, Lightsource bp

KŌWHAI PARK ECOSYSTEM 2050

Kōwhai Park is a platform for generating green energy at scale. Ideally located next to Transpower and Orion’s network, this energy can be delivered straight to potential customers to help them decarbonise. Christchurch Airport is currently investigating the opportunity to generate green hydrogen onsite in the future. There will be demand for this energy from both existing businesses and future industries, including green data centres and vertical farming.



NOTE: 1. Hydrogen development projects will be customer led depending on the need of the offtakers



CONTACT

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