

Green from the ground up

Camp Glenorchy is the first ever guest accommodation designed according to the Living Building Challenge™ – the most rigorous sustainability standards in the world.

The LBC asks, "what if every single act of design and construction made the world a better place?". It sets out a number of sustainability dimensions, of which Camp Glenorchy achieved four: energy, water, materials and beauty.

To help bring this complex and deeply rewarding project to life, Rubix was engaged as Project Manager for the planning, design and construction management, from development in 2014 to completion in 2018.

In order to meet the environmental requirements laid out by the LBC, the project demanded creativity and innovation at every level. We were challenged to rethink the norm, which included finding workarounds for any 'red-list' materials, incorporating ground source, solar water and thermal storage hot water systems, and integrating state-of-the-art controls and energy monitoring systems.

The result has been nothing short of remarkable. Camp Glenorchy has gained international recognition for its environmental performance and inspires and educates every guest who stays. We are proud to have been an integral part of the project and look forward to taking our learnings into future green building projects.







"Camp Glenorchy aims to educate, inspire and delight guests by showcasing some of the most innovative and energy-efficient products in the world."

Paul Brainerd, Camp Glenorchy co-founder

Our role

- Project Manager for the design consenting, construction, commissioning and handover of the whole project
- Design Manager for the consenting and design
- managing over 30 consultants and designers
- Procurement and Construction Manager
- managing over 80 contractors and 100 suppliers
- Commissioning and Handover Manager
 - staged handover with complex commissioning
- Waste Management full tracking of construction waste recycling and disposal



Green highlights

- Not only is the Camp zero energy, it actually produces 5% more energy than it consumes.
- Buildings are connected to the guest booking system so rooms are heated only when needed and the amount of hot water stored is optimised for the number of guests.
- State-of-the-art composting toilets save up to 300,000 litres of water per year.
- The LED lighting used is so efficient that the lighting load for each three-bedroom cabin is equivalent to a single 200-watt light bulb.
- An innovative heating system comprised of ground-source heat pumps, deep heat bores and solar thermal collectors means the Camp gets almost \$4 worth of energy for every \$1 spent running it.



Key sustainability features

- Rain water harvesting
- · Grey water treatment and recycling
- Composting toilets
- · Solar farm with battery storage
- · LPG generator for resilience
- Ground source heat pumps
- · Solar hot water
- Stratified Hot Water Storage technology
- · Heat recovery ventilation
- Air-tight buildings with blower tests completed
- Structural Insulated Panel construction
- Triple glazed timber windows
- · No PVC, VOC's, heavy metals etc (LBC 'red-list')
- Use of recycled timber and materials
- In-room energy monitoring and information systems

Key accolades

- The world's first ILFI Petal certification for visitor accommodation
- The fourth ILFI certification in New Zealand
- Listed as one of Time Magazine's top 100 places to visit in the world
- Qualmark 100% Pure NZ Experience Award 2019
- Tourism Industry Aotearoa Sustainability Innovation Award 2019

Do you have an eco build on your horizon? We'd love to make it happen, ask us how we can help. www.rubix.nz





