

Tūhoe–Te Uru Taumatua

Te Uru Taumatua is a first step in restoring the cultural pride and regional economy in the development of an administrative headquarters and communal meeting space for a New Zealand *Iwi*, Ngāi Tūhoe. Located in Tūneatua, which has a small settlement of about 800 people, the building is sited adjacent to a major seismic fault line running between Wellington and White Island in the Bay of Plenty.

The region is remote, settlements are dispersed, and the land dominated by the beautiful Te Urewera National Park.

Ngāi Tūhoe have lived in the region for centuries but suffered serious and compounded injustices by representatives of the Crown (government) over the last 150 years. They have completed settlement negotiations with the Crown under the Treaty of Waitangi Tribunal for restitution of losses. Through this process, Tūhoe will regain responsibility for their own health, education, housing, planning, justice, and other infrastructural needs.

The settlement is a new beginning, a chance to create an environmental, economic, social, and culturally sustainable framework for the future of the Tūhoe people.

THE PROJECT

For Ngāi Tūhoe, aligning their project with the Living Building Challenge (LBC) has been a reflection of the ingrained environmental principles of the Tūhoe people for generations past.

“People come and go, but if your natural resources are depleted, people have nothing. That’s the order of things,” says Kirsti Luke, Tūhoe chief executive. But for Tūhoe, this building is a lot more than the environment. “For most, choosing a location for your office headquarters is a straightforward decision. For Tūhoe, it’s a very political decision: it will be the first central office it has had in centuries.”

The vision for Te Urewera after settlement is one of steady progress in the redevelopment of Tūhoe communities and infrastructure using sustainable principles and strong land management practices that maintain conservation values and biodiversity.

The project actively encompasses this vision and in doing so, provided a building which can be viewed as an exemplar of what restorative building practice can look like in New Zealand. The project brought forth training in sustainable building practice, creation of job opportunities, and active engagement with the community. Ultimately, bringing these factors together in the construction process aligned the fundamental aspects of social, environmental and economic regeneration and restoration that the LBC strives for.

THE BUILDING

The new headquarters for Ngāi Tūhoe was completed in March 2014. It is one of only 200 buildings across the world (13 buildings in Australasia) that are registered with the International Living Future Institute (ILFI), the organisation which administers the LBC. The building is currently entering the 12-month post completion occupancy phase of monitoring and will only know after a year or so if it has succeeded in becoming New Zealand’s first certified project.

KEY PRIORITIES AND CHALLENGES IN THE DESIGN/CONSTRUCTION OF THE BUILDING

Community & Regional Economy

Tūhoe–Te Uru Taumatua is a physical representation of the principles and the age-old values of Tūhoe sustainability, reflected in the LBC. The two are intertwined.

Both Tūhoe and the LBC stand for the belief that communities and local economies should be nurtured to thrive. A key aspect of the building process was

that local materials, local businesses, and the local workforce should be sourced first and foremost from within the Tūhoe region. In an area of high unemployment, Tūhoe seized the opportunity to use the project to create jobs and instigate training in new skill sets for the local community. A wonderful example being a small group of locals who were trained in the art of earth brick making, who in turn went on to train approximately 150 people that were needed to make 5,000 earth bricks. These bricks were key in providing thermal mass within the building, as well as being a visual representation of the different earth types in the region.

Materials: Remote Location and Red List

The team received approval from ILFI for a unique set of sourcing radii for New Zealand. Due to the remote location, almost all sourcing zones needed to be expanded. This was particularly the case for the building services systems in which many of their components were sourced from Asia.

The design and construction team researched approximately 750 building materials for Red List compliance, a challenging process that involved hundreds of hours of research, contacting every supplier and manufacturer to find out the ingredients in every product. There are several success stories to tell of manufacturers realising a Red List chemical could be removed from a product ingredient list with no detrimental effect on the end product or of finding local manufacturers whose products are equal, if not better, in quality than the internationally-sourced products specified as ‘standard’ on non-LBC projects.

ACHIEVEMENTS

Te Uru Taumatua boasts achievements that show the way for environmentally-designed buildings in New Zealand:

- A vehicle to aid Tūhoe in their regeneration strategies, offering local employment, training and community engagement
- The building generates all its electricity from the largest grid-connected photovoltaic solar array in New Zealand to date (Energy Petal)
- Uses no fossil fuels in its operation (Energy Petal)
- Collects and manages all storm water on-site with no run-off onto adjacent sites (Water Petal)
- Collects and uses roof rainwater for all water needs within the building (Water Petal)
- Treats all its wastewater (grey and black water) on site via a constructed wetland system (Water Petal)
- Avoids toxic chemicals including PVC, arsenic, formaldehyde, and halogenated flame retardants (Materials Petal)
- Incorporates a seismic timber structural system with innovative deep piling system
- Constructed almost entirely of wood; either with FSC-certified timber or fallen native timber harvested from Tūhoe’s own forests, gifted by the Tūhoe people from the Urewera National Park (Materials Petal)

PROJECT DATA

Location
Tāneatua, New Zealand
Completion Date
March 2014
Client/Owner
Ngāi Tūhoe
Architect
Jasmax, Auckland
Contractor
Arrow International, Auckland

Structural Engineer
MLB Structural Engineers, Auckland
Services and Civil Engineer
BECA, Auckland
ESD and LBC Consultant
Tricia Love Consultants Ltd, Auckland
Images/Photos
www.daveolsen.co.nz

For updates on the project you can visit www.facebook.com/Tuhoelwi or www.facebook.com/TheTuhoebuilding

16 Entrance to Te Uru Taumatua **17** The building is a first step in restoring the cultural pride of Ngāi Tūhoe **18** The community will have access to building facilities such as the archival centre, library, café, and conference hall **19** Timber is mainly used in the construction, bringing a sense of warmth to the interiors



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