

# Design for Sustainability

Construction costs were the same as a conventional building of the same nature.  
Operating energy costs will be 60–70% less.

**T**his new purpose-built facility reflects our commitment to the principles of sustainable development. The design has sought synergies (rather than trade-offs) between economics, the natural environment, and people's needs. It has a very low level of energy and water use compared to other buildings with similar functions, and it delivers those cost saving features for the same capital cost of an equivalent conventional building. We hope it will encourage other organisations to follow and share in caring for the environment.

## Goal

The key goal was to provide for all the functions we needed in a building where staff would enjoy working, and which encompassed state-of-the-art environmentally friendly features that cost about the same as a conventional building of the same nature, and with far less in operating costs.

Early in the design process, a workshop that included staff, council employees, EECA and other parties interested in sustainability, helped us identify, define and explore the design parameters for this building. The design responds to the requests of our staff, collaborators, shareholders, and other stakeholders.

Chow:Hill (architects) and Connell Mott MacDonald (mechanical services design) worked with us to develop integrated systems that mimic natural ecosystem processes. Many mechanical and energy services are inter-related with waste from one system usefully feeding another service.

## Achievements

Construction costs were kept to the same as a conventional building of the same nature. The power savings, through using energy efficient design and sensible operating of the building, are projected to be a 60–70% reduction equating to approximately \$70K a year.

Water use is projected to be about half normal consumption through good water management and appropriate re-use.

Chow:Hill

Connell Mott MacDonald  
building the future



Manaaki Whenua  
Landcare Research

