



## Westpac Green Building Market Report Case Study

### **Project Data**

**Client:**  
Westpac

**Builder:**  
Leighton Contractors

**Project Address:**  
Kent St, Erskine St, Napoleon St  
& Sussex St, Sydney.

**Metered Points:**  
253 Meters

**Application:**  
Mains failure to Generator  
Zone Lighting Control  
Load shedding for peak demand reduction  
Sub Metering  
NABERS (ABGR) Compliance

### **Sustainability Features**

- Energy Management & Control System (EMCS)
- Electrical sub-metering
- Tenancy sub-metering
- Office lighting zone
- Peak energy demand production capabilities
- Power quality analysis
- Annual, seasonal, quarterly reporting.

Westpac's corporate headquarters in the western precinct of Sydney's CBD opened to praise not only from the bank's staff and customers, but the 'green' construction industry. Setting new standards in environmental sustainability and workplace design, Westpac Place is fitted with an Energy Monitoring and Control System (EMCS) which is paving the way in energy efficiency and productivity.

Westpac's new home is one of the largest and most significant property development projects ever undertaken in this country.

Leighton contractors was awarded the design and construction contract for the project in 2003.

Completed some three years later, the result is a stunning landmark located within the boundaries of Kent, Erskine, Napoleon and Sussex Streets. The development has effectively consolidated Westpac's 10 former CBD office sites into two towers of 32 and 21 levels covering over 77,000 square metres. The site also features two retail levels, tenant car parking for 214 cars and a childcare centre and all of it was designed and built to the principles of Environmentally Sustainable Design, or ESD as it is known.

From the outset, every type of engineering discipline commissioned by the project was under no doubt that the result would have to achieve a 4 star rating under the Australian Building Greenhouse Rating (ABGR) System. From light and power, to ventilation, water recycling, materials, energy sources and processes used, Westpac Place was designed to become a 'green' landmark.

NHP was involved in the crucial aspect of Light and Power Monitoring from key early stages. Leighton Contractors then awarded the electrical services and data contracts to Stowe Australia.

It was Stowe's collaborative attitude and expertise in monitoring systems' installation that won Leightons' respect.

Stowe's General Manager (Sydney and Cumberland Regions), Mick Pawelko, explains. "Stowe has an extensive portfolio of delivering large scale projects that involve SCADA and EMCS solutions. Our most recent track record includes the ABC Studios in Ultimo, the King George V Building at Royal Prince Alfred Hospital and the Mid North Coast Correctional Centre – these projects have similar systems," he says.

NHP Electrical Engineering Products' first job was in design, when product was selected for all facets of the Energy Management System, LV switch gear and control gear.

"Our products were selected and used throughout the project based on the fact that they met, and actually exceeded, stringent specification and technical requirements," explains NHP's Automation Projects Manager, David Sykes.

The foundation of the project's Environmental Sustainable Design model is based on a combined front end utilising NHP's Adroit SCADA software and a Hitachi EH – 150 PLC backbone to monitor and control energy consumption, lighting loads, UPS and generators and power factor correction systems.

Information regarding power consumption and quality at the final sub-circuit level is produced from data obtained from the IME Nemo 96 power meters.

Westpac Place is already renowned as a superior example of a 'green' design and construction at its best.

"We're very proud to have been part of Westpac Place and are continually developing cost effective concepts and technologies to meet the increasing demand in the market place for 'green' development," says NHP National Manager Sales – Commercial Projects, Andrew Bau.

"With an ESD infrastructure clearly in place, NHP is ideally equipped to provide a power monitoring system which is fundamental to any Australian Building Greenhouse Rating design. We look forward to more successful customer results – just like Westpac Place."