

## **Managing Challenges to Successfully Deliver the 6 Star Tyree Energy Technologies Building at The University of New South Wales**

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The Tyree Energy Technologies Building (TETB) has been developed by the University of New South Wales (UNSW) to accommodate research, teaching and administrative facilities for the University's Faculty of Engineering. In particular, the \$125 million 6 Star Design rated facility has been developed with the aim of providing a landmark development at the main entry to the Kensington Campus which integrates with and supplements the current campus infrastructure.

It provides collaborative space for undergraduate and postgraduate teaching and learning as well as research in the field of energy technology. This includes the establishment of highly serviced research laboratories for 6 separate research groups and teaching, informal learning and administrative spaces spread over the 5 ½ floors of the 15,000 square metre (gross) building.

The project was partly funded by the Commonwealth Government as part of the initial round of funds allocation from the Education Investment Fund (EIF) in June 2009. The main stage of works was completed on program in mid-January 2012 and the majority of groups have relocated into the building in preparation for commencement of Semester 1 of 2012. Further relocations of research equipment into the building for a key research group are ongoing.

The presentation will focus on the challenges presented to the project management team and the approach they have taken in the successful planning and delivery of the project, including reference to:

- allocation of roles and responsibilities between in-house University project team and the external consultant project management team;
- strategy development for consultant and contractor procurement, which included
- early works and main works contracts and appointment of over 38 consultant disciplines;
- management of the architectural design process following the outcomes of a design competition for the high profile site;
- management of over 15 separate University stakeholder groups (including UNSW Facilities Management stakeholders) and the process of consultation, approvals and managing expectations, including that of space allocation;

- scope management to work within budget, quality and program constraints within a novated design consultant framework;
- development and delivery of design initiatives for a sustainable environment, including the process of obtaining the 6 Star Green Star Design Rating (Education) from the Green Building Council of Australia (GBCA) - 1 of only 2 university buildings to have achieved this rating in Australia;
- planning and delivery of the PC2 laboratories, clean rooms and complex engineering services for photo-voltaic and other energy technologies research;
- enhancement of the campus engineering infrastructure, including power generation through photo-voltaic panels and a tri-generation system and the integration of the building with the Kensington Campus Central Energy Plant;
- a multi-stage project completion and handover process;
- completion of the project within the EIF timeframe constraints and an operating campus environment; and development of a multi-media showcase of research activities as an integral component of the building.

The TETB project is an excellent case study of the implementation of innovation in the planning and delivery processes used for this highly specialized capital works project as well as in the design of this environmentally sustainable facility. The state-of-the-art research and teaching facility transforms a previously under utilised 'front door' location on the UNSW Kensington Campus to enhance the University's teaching and research capability and provide a high profile showcase to market the University's activities.