



Taking Sustainability on the Road

BY CHANDNI MISHRA – ESD SPECIALIST, CLUBS' SUSTAINABLE FUTURES



Green building design, renewable energy, resource management, and waste recovery are topics you've heard before but when you see it operating in real life, then it tends to make greater sense. Such was the aim of a recent sustainability tour conducted by Clubs' Sustainable Futures and supported by ClubsNSW.

Four facilities across Sydney were visited with the intention to inform interested clubs about sustainable technologies being successfully used in business practices. Clubs that attended the tour included Sutherland District Trade Union Club (Tradies), St Mary's Band Club, St George Motor Boat Club, Ryde Ex-Services Memorial Club, Pittwater RSL, Moorebank Sports Club, Guildford Leagues Club, Cabramatta Rugby League Club, the Bowlers Club of NSW, and Bexley RSL.

The tour commenced at Sydney Water's new headquarters, a five-star Green Star rated building that exemplifies environmentally sustainable innovations in design, construction, and fit outs. While the building had many features reflecting social wellbeing such as vibrant colors, optimum indoor environments, indoor plants, and open spaces, its key sustainability feature is a blackwater treatment plant, recycling all water used on site and reticulating it throughout the building for use in toilets, cooling towers, and irrigation.

A chilled beam air-conditioning system throughout the office space

reduces the energy used by fans within a typical ducted system by using chilled water to cool the air around the pipes and allowing it to descend naturally. Lighting installed are T5 low-energy systems and Solar PV systems to generate renewable energy on site. Furniture manufactured to the highest environmental standards contain no volatile organic compounds and are able to be fully disassembled, recycled, and reused.

Our second facility visited was Blacktown RSL, the first club in Australia to install a 100kW commercial size solar power system, commissioned through Solar Choice, an independent solar broker. The club installed US-owned 'Solyndra' tube technology with German-made SMA inverter technology. The difference between Solyndra and traditional solar panel technology is that the Solyndra tubes are installed flat on a roof (on a framing system) with no fixing required to the roof material.

Third stop was at Blacktown Workers Clubs where participants learnt about the recently installed Edge Intelligent energy management system installed through PDFM and EP&T Global. A presentation by EP&T explained the merits of having a third party collect resource usage data in real time and have it constantly monitored to identify any excessive use of energy, water, or gas. When an item or issue is identified, the system forwards a message to the club's facility manager (PDFM) and it's either corrected or investigated further following discussion with the club.

The system has successfully identified a water leak in the club's cooling tower that wasn't otherwise easily identifiable during regular maintenance, excessive water and energy use by on-site catering contractors, air-conditioning operating beyond planned event schedules, and much more. Through the implementation of the Edge Intelligent system, the Blacktown Workers Club is better able to manage its resources and strip out any wasted resources on a day-to-day basis. Our tour concluded with a very informative session at the Earth Power site at Camellia. Earth Power is a power generation plant that converts organic waste products from your kitchen into green energy and nutrient-rich fertiliser.

Earth Power uses anaerobic digestion technology using bacteria to break down organic matter to produce bio-gas and organic fertilisers. The tour group was able to see recycling and recovery technology in practice and understand the significance of these innovative technologies that help businesses reduce their greenhouse gas emissions by providing useful waste disposal methods.

Over all feedback from participating clubs was very positive. Most of them rated their clubs to have "some knowledge" on sustainability, with some boards "actively committed" towards sustainability while others remain "somewhat committed." Another sustainability tour later this year is being considered so stay tuned for details at a later date. ■