

TAFE NSW Northern Sydney Institute: Practicing what it teaches

Sustainability Advantage Case Study

TAFE NSW

TAFE NSW Northern Sydney Institute (NSI) is one of Australia's largest vocational and training institutions located in Sydney's northern region. NSI facilitates learning for more than 50,000 students and employs more than 1,500 staff in full or part-time positions. There are seven colleges and training venues located at Bradfield, Crows Nest, Hornsby, Meadowbank, North Sydney, Ryde and the Northern Beaches, at Brookvale.

Industry

Tertiary Education and Training



North Sydney College is the first of TAFE NSW Northern Sydney Institute's colleges to install a 1.980 kW solar grid interactive system. The panels can generate 8.3kWh of electricity a day. This translates to a 2.7 tonne reduction in greenhouse gas emissions.

Sustainability drivers

TAFE NSW Northern Sydney Institute (NSI) is committed to integrating sustainability into all teaching practices, and understands the importance of modelling sustainability on its own campuses. NSI wanted practical support to address its own environmental footprint and saw Sustainability Advantage as a good opportunity to access additional help and advice in achieving its goals.

Achievements and savings

Energy	<ul style="list-style-type: none">• 5.21 per cent reduction in electricity use – saving 934 tonnes of greenhouse gas and \$87,500 per annum• 16.25 per cent reduction in gas use between 2006-2007 saving 270 tonnes of greenhouse gas and \$57,600
Waste	<ul style="list-style-type: none">• Site-specific waste minimisation projects e.g. installation of Pulp Master processor for organic food waste at Brookvale college
Planning	<ul style="list-style-type: none">• Conducted staff sustainability survey• Developed three-year Sustainability and Greenhouse Gas Reduction Plan with full support of the executive• Appointed Environment Officer to oversee program

Steps

Sustainability planning

NSI joined Sustainability Advantage in 2007 and has focussed its efforts on the Resource Efficiency and Climate Change modules. As well, the executive has developed its NSI Environmental Sustainability Plan for 2007-2010.

Tailored waste initiatives

In August 2007, the Northern Sydney College conducted a waste assessment, which provided useful strategies that could be transferred to other colleges' waste recovery systems.

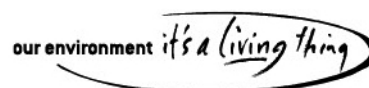
Currently, all colleges maintain systems for the reuse and recycling of paper, cardboard, ink cartridges, fluorescent tubes, metal, batteries, tyres, pallets, cooking oil, linen, furniture, wood, vegetation and some food waste.

Northern Sydney college extended the canteen's commingle facilities to staff offices, and Northern Beaches and Hornsby colleges initiated commingle facilities at key locations.

Northern Beaches College has installed a Pulp Master processor that captures all food waste. The waste is transported to Earth Power for conversion into energy and organic fertiliser.



Environment,
Climate Change
& Water



Since August 2007, the system:

- has eliminated the need to use approximately 11,400 plastic bags for waste storage
- reduced waste to landfill by 114 tonnes
- prevented 344 tonnes of green house gas emissions
- saved \$16,200 in waste removal costs
- saved \$5,900 in plastic bag costs.

Reducing energy and emissions

With assistance from Sustainability Advantage, NSI conducted an electricity base load and seasonal usage audit, identifying a number of low-cost energy efficiency strategies. The projects included:

- changing the start-up time for plant and equipment
- installing 210 'Energy Saver' and 30 '24-hour timers'
- turning off all computers at 10.30 pm every night
- installing more energy-efficient outside lighting
- purchasing 136 push-button timers for classrooms
- implementing a 'Switch off/Turn off' campaign with signage, brochures, staff induction sessions, presentations and workshops.

After completing the Climate Change module, NSI prepared greenhouse gas inventories for all colleges, measured its carbon footprint and developed a greenhouse gas reduction action plan. To assist in offsetting the greenhouse gases from vehicles, NSI decided to charge for parking and use part of the funds for an alternative energy project.

North Sydney College is the first of NSI's colleges to install a 1.980kW solar grid interactive system. The panels can generate 8.3KWh of electricity a day and 3,000KWh a year. This translates to a 2.7 tonne reduction in greenhouse gas emissions. NSI recouped \$15,300 of the \$27,000 investment from the federal solar rebate scheme and intends to reinvest the funds in solar panels at other colleges.

Sustainability survey

In April 2008, about 200 NSI staff took part in a sustainability survey. The survey found that, in general, employees are highly engaged and want more aspirational goals and better environmental performance for the organisation. NSI has developed a communication strategy that includes sustainability case studies, placing information in local papers and producing an internal electronic newsletter, *Green and Alive @NSI*, to promote awareness of NSI's activities.

'The hallmark of Sustainability Advantage is that it is an education program – it's really building the capacity of people to take hold of ideas and run with them. For us, this assisted in developing the interest and capability of the executive, management and staff.'

Audette Benson, Associate Director, Industry & Environment
College Director, Hornsby College

Outcomes

Joining Sustainability Advantage has provided practical assistance in embedding NSI's strong environmental ethos across all campuses. It has extended upon and integrated a number of earlier initiatives, such as NSI's water efficiency actions through Sydney Water programs. Effective staff and student engagement is helping progress NSI's sustainability program.

Next steps

NSI plans to continue implementing the actions in its environmental sustainability and greenhouse gas reduction plans, with an emphasis on those with the greatest sustainability impacts. There will be a focus on Ryde College, which has 18 commercial kitchens and provides an enormous opportunity for food organics reprocessing. NSI also plans to put extra effort into maintaining its ISO14001 Environmental Management Systems certification.

More information

Northern Sydney Institute of TAFE

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Register

Contact DECCW's Business Partnerships

to register for Sustainability Advantage

Call: 02 8837 6000

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Visit: www.environment.nsw.gov.au/sustainbus

Achieve a Sustainability Advantage. Sustainability Advantage is a business support service from the Department of Environment and Climate Change NSW (DECC). It is designed to help your organisation understand sustainability, successfully manage for a better environment and add business value.

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