

## Sustainability showcase examples

Uptake of sustainable practices across government, industry and the community is increasing. The following sections describe some excellent examples of the adoption of sustainability practices.

### Queensland Environmentally Sustainable Schools Initiative

The Queensland Environmentally Sustainable Schools Initiative (QESSI) is a concept that aims to fulfil one of the challenges issued by the General Assembly of the United Nations in the pursuit of a sustainable global society by 'encouraging Governments to consider the inclusion... of measures to implement a Decade of Education for Sustainable Development 2005–14 in their respective education systems and strategies' (UNESCO 2005).

The mission of QESSI is to establish a network of environmentally sustainable schools that demonstrate curricular connections and environmental action based on ecologically sustainable development principles. QESSI's vision is for all schools to be environmentally sustainable schools. The QESSI concept aims to integrate existing environmental education with sustainability programs for schools in a holistic process that has measurable environmental, economic, social and educational outcomes. QESSI is a member of the Australian Sustainable Schools Initiative (AuSSI) partnership. It supports implementation of efficiencies into a school's management of resources such as energy, waste, water and biodiversity by improving school grounds. This approach integrates QESSI into the existing curriculum and daily operations of the school. Twelve QESSI regional hubs are supporting clusters of schools as they work to become more environmentally sustainable.

Partnerships among community groups, industry and government agencies are at the heart of QESSI's success. Current key partners in the alliance are Education Queensland (lead agency), Commonwealth Department of Environment and Water Resources, Great Barrier Reef Marine Park Authority, Environmental Protection Agency, Keep Australia Beautiful—Queensland, Queensland Transport, Department of Natural Resources and Water, Department of Mines and Energy, EnviroCom, Earth Charter Australia, Independent Schools Queensland, Queensland Catholic Education Commission, Science and Geography Teacher and Environmental Education Associations, QUT and Griffith University, Ergon Energy, and Origin Energy.

A total of 914 schools have participated in one or more QESSI alliance partner programs over the past four years. This equates to approximately half of all schools in the state. The alliance members contribute a significant financial investment, both cash and in-kind, to help schools become more environmentally efficient and aware. Local councils and regional natural resource management groups give financial support and Education Queensland helps with its network of 25 outdoor and environmental education centres.

Economic benefits are documented, and schools have saved hundreds of dollars through more efficient use of

their resources. One school demonstrated a reduction of more than 40% in energy consumption through participation in an energy-efficiency program conducted by the QESSI regional hubs.

Water-efficiency initiatives have created significant savings for schools, particularly in drought-affected areas. The impact of Commonwealth water grants cannot be documented yet because the program is just beginning. Between the 2003–04 and 2004–05 financial years, water consumption in state schools reduced 8%. Between 2004–05 (7766 ML) and 2005–06 (6122 ML) consumption reduced again by more than 20%.

Schools have saved considerable money through sustainability initiatives such as these. They have also been rewarded with awards and grants for their environmentally sustainable initiatives. Reef Guardian Schools receive cash grants as an incentive and reward for good practice. Many schools also received community water grants to install conservation devices and water-efficient strategies in their schools. Several 'learnscape' projects have resulted in biodiversity improvements: weeds are removed and endemic native species are planted. The resultant improvement in catchments and water quality are bonus benefits of these projects.

The QESSI concept has demonstrated best practice in showing schools how to improve their sustainability and eco-efficiency. Just as importantly, it highlights the education industry's potential to improve the environmental and economic performance of schools through the alliance approach.



### Queensland Sustainable Energy Innovation Fund

The Queensland Sustainable Energy Innovation Fund (QSEIF) helps organisations develop innovative technology that reduces consumption of fossil fuels, greenhouse gas emissions or water consumption (EPA 1999). A description of two outstanding successes follows.

#### High-efficiency reservoir mixer

An ingenious reservoir aeration system that uses about one-twentieth of the energy of conventional systems while providing superior water quality has been developed by Water Engineering and Research Solutions (WEARS) with assistance from QSEIF.