



Sustainable Energy Development Office Government of Western Australia

HIGHLIGHTS AND ACHIEVEMENTS 2003/2004

- The Sustainable Energy Development Office, through its representative on the National Appliance and Equipment Energy Efficiency Committee, assisted the Ministerial Council on Energy introduce minimum energy efficiency standards that apply to the sale of air conditioners and fluorescent lamp ballasts.
- Support for energy efficiency and renewable energy in regional areas was further facilitated through a Special Regional Funding Round of the Sustainable Energy Development Office Grants Committee, which provided over \$300,000 in funds to implement a range of projects.
- More than \$10 million was invested in renewable energy systems installed in regional areas of Western Australia as part of the Renewable Remote Power Generation Program. This investment has assisted in the growth of regional businesses supplying and installing the systems. Quality of life for people living in remote areas has been enhanced through the installation of renewable energy power systems, which provide 24 hour power, better quality electricity supplies and reduced fuel and maintenance costs.
- The first whole-of-government Energy Smart Government report on stationary energy consumption, cost and associated greenhouse gas emission arising from Government operations for 2002/03 was produced in October 2003. It showed a reduction of 2.7% in total agency energy use, with 28 agencies reducing their energy use by more than 5%.
- During 2003/04, the Energy Smart Government program funding approved Facilitation Grants totalling more than \$350,000, and Capital Advances of more than \$1.6 million to assist agencies with the identification and implementation of energy saving projects and initiatives.
- The Sustainable Energy Development Office has provided advice to the Minister for Energy, Government, the Office of Energy and other government agencies on a range of technical and policy issues, including analysis of the greenhouse impact of various energy sources and technologies; the potential interaction of waste management strategies with the development of renewable energy sources; national energy efficiency initiatives; infrastructure and transport planning processes arising from the *Dialogue with the City* process; the Mandatory Renewable Energy Target; the State Sustainability Strategy and the draft State Greenhouse Strategy; Green Power; wind power project planning issues; energy and greenhouse intensity of production and the potential implications of electricity restructuring for sustainable energy options and energy-related greenhouse gas emissions.

- In November 2003, the Sustainable Energy Development Office sponsored and assisted the Australian Energy Performance Contracting Association hold a conference on energy performance contracting in Perth to assist Western Australian government agencies and business people gain a better understanding of how energy performance contracts can help achieve energy savings.
- The Sustainable Energy Development Office continued to expand the successful Energy Smart Community program. The objective of the program is to facilitate reduction of energy consumption within Western Australian households and increased uptake of renewable energy.
- During the 2003/2004 financial year Energy Smart Business projects, including the Energy Smart Directory, the Australian Greenhouse Building Rating tool and National Appliance and Equipment Energy Efficiency initiatives, were consolidated and promoted to Western Australian businesses.
- The Sustainable Energy Development Office collaborated with SEDA NSW and SEAV Vic to produce a report on emissions regulations and abatement methods for a range of cogeneration technologies. A number of case studies were also developed to show the potential benefits of installing cogeneration.
- The Australian Building Greenhouse Rating program was officially launched by the Minister for Energy, Hon Eric Ripper, in July 2003. The Australian Building Greenhouse Rating is part of a broader national program that the Sustainable Energy Development Office administers in Western Australia and is a software tool for rating the energy and related greenhouse performance of office buildings.
- It is encouraging that the Property Council of Australia WA supports the program's implementation. The program allows owners of planned new buildings to demonstrate their commitment to social responsibility and sustainability by entering into an agreement to design, build and operate new buildings to a specified star rating level. The City of Gosnells has entered into such an agreement for their new civic centre "The Agonis" by committing to a 4.5 star Australian Building Greenhouse Rating.
- Through its representative on the National Appliance and Equipment Energy Efficiency Committee, SEDO progressed measures to improve the energy efficiency of electrical appliances and equipment. These measures include the star-rating labelling program for whitegoods that allows consumers to consider energy efficiency when making a purchase; Minimum Energy Performance Standards which prohibit the sale of poor performing models of selected equipment types; and a national strategy to reduce equipment electrical standby power consumption (the power consumed by equipment while waiting to perform its primary function).
- During 2003/2004, approximately 4,368 calls were received through the Energy Smart telephone service. The Sustainable Energy Development Office's range of brochures, including the new 2003/04 fact sheets series, is distributed through the service and also through many local government and community organisations.
- The *Reach for the Stars* Program, promoting high energy star-rated electrical and gas appliances, was conducted throughout Western Australia. The Sustainable Energy Development Office developed partnerships with major retail appliance chains and provided training and promotional material to 128 stores in the metropolitan, South West, Wheatbelt, South Coast, North West, Goldfields and Esperance regions. A total of 392 sales staff were trained and updated on current developments.

- House Energy Rating Software (HERS) initiatives have been expanded, in particular the *FirstRate* software tool. The Building Code of Australia (BCA) energy efficient measures amendment was successfully introduced on 1 July 2003, with the HERS an integral part of the implementation. *FirstRate* is now accepted in Western Australia as the pre-eminent software tool for meeting BCA energy efficiency requirements.
- The TAFE network, the Housing Industry Association of Australia and the Master Builders Association continue to deliver *FirstRate* training as industry partners. The HERS initiative now has more than 160 accredited assessors meeting the needs of the local building construction industry.
- The Sustainable Energy Development Office continued its close involvement with local government during the year. These initiatives included participation in the street lighting project and the successful completion and promotion of the City of Subiaco's Sustainable Demonstration Home. The Sustainable Energy Development Office continued to distribute its information resources to numerous Councils around the State, on issues such as energy efficiency and renewable energy.
- During 2003/04, the majority of the Community and Local Government Special Funding round projects were implemented and successfully completed. These projects, funded under a special allocation of \$250,000 through the Grants Committee, will have their results collated and evaluated to stimulate further community and local government partnership based projects.
- The Sustainable Energy Development Office's Energy Smart Directory that brings suppliers of sustainable energy products and services together with potential customers continued to be popular with over 240 suppliers listed and an average of around 1400 site visits each month. The Directory is a web-based database that includes details of organisations providing sustainable energy solutions for business, government and the wider community in Western Australia. The Directory can be accessed at www.energysmartdirectory.com
- The Sustainable Energy Development Office administers and promotes this Australian Government program in Western Australia. The Photovoltaic Rebate Program provides rebates of \$4 per Watt for new photovoltaic systems serving households and community buildings. The photovoltaic systems can be grid-connect or stand-alone. The maximum rebate is \$4,000 for a household application and \$8,000 for a community application.
- In 2003/2004, rebates with a total value of \$76,000 were paid for 13 grid-connect systems, involving the installation of 19 kW of photovoltaic modules.
- The Renewable Remote Power Generation Program provides rebates for renewable energy systems replacing diesel generation in 'off-grid' areas. The objectives of the program are to:
 - help in providing an effective electricity supply to remote users
 - assist the development of the Australian renewable energy industry
 - help meet the energy infrastructure needs of indigenous communities; and
 - lead to long-term greenhouse gas reductions.
- The program is an Australian Government funded initiative. Funding is equal to the excise paid on diesel used for public electricity generation off-grid in Western Australia from 2000/2001 to 2003/2004. For 2002/2003 a total of \$24.89 million in

relevant excise was paid. The Sustainable Energy Development Office administers and promotes the Renewable Remote Power Generation Program in Western Australia.

- Renewable Remote Power Generation Program funding is available for large individual projects (with a rebate value greater than \$550,000), programs providing rebates for multiple small projects of a similar nature, and for industry support projects. Two sub-programs have been introduced in Western Australia as part of the Renewable Remote Power Generation Program.
- During 2004/2004 Renewable Remote Power Generation Program funding totaling \$1.69 million was paid for a 3.6MW windfarm at Esperance and a 600kW wind turbine at Hopetoun. Funding of \$850,000 was provided to support industry support projects carried out by the Research Institute for Renewable Energy located at Murdoch University.
- The Remote Area Power Supply Program started in July 2001 and provides rebates of 55 per cent of the cost of renewable energy systems serving Aboriginal communities, businesses and households in off-grid areas of Western Australia. The Remote Area Power Supply Program is jointly funded by the Commonwealth, through the Renewable Remote Power Generation Program, and by the State, using funding previously committed to the Renewable Energy RAPS Rebate program. The maximum rebate available is \$550,000.
- During the year, 85 rebates, with a total value of \$2.26 million were paid under the Remote Area Power Supply Program. A total of 173 kW of photovoltaic modules and 6 kW of wind turbines were installed.
- The Renewable Energy Water Pumping Program provides rebates on the cost of the renewable energy components of solar pumps and windmills used instead of diesel pumps in off-grid areas. The maximum rebate available is \$20,000 for pastoral and community applications and \$10,000 for all other sites.
- During the year, 266 rebates, with a total value of \$972,000, were paid under the Renewable Energy Water Pumping Program. This involved the installation of 239 solar pumps and 58 windmills.
- The Sustainable Energy Development Office administers and promotes Western Australia's State funded Solar Water Heater Subsidy scheme. The scheme aims to increase the adoption of the most energy efficient hot water systems and assist the industry to increase its market share, particularly in the new home market. Rebates are available to householders for gas-boosted or electric-boosted solar hot water systems.
- In 2003/2004, \$526,000 was paid in rebates for 1,300 systems. Changes made to the scheme in February 2003 have led to a substantial increase in the uptake of Government rebates and have helped to substantially increase the uptake of solar hot water systems on new homes in Western Australia.