



Sustainable Energy Development Office **Government of Western Australia**

HIGHLIGHTS AND ACHIEVEMENTS 2005/2006

A new \$18m Rural Renewable Energy Program was launched providing rebates for renewable energy systems on the fringes of the main South West electricity grid. Projects that may be supported under the scheme include small to medium-sized solar and wind power systems and bio-energy projects that use plantation forestry or agricultural wastes for electricity generation.

Rebates of over \$10m were provided for renewable energy systems through the Solar Water Heater Subsidy and Renewable Remote Power Generation programs in 2005/06. These systems are estimated to reduce greenhouse gas emissions by 7,000 tonnes of carbon dioxide per annum.

A Renewable Energy Handbook for Western Australia was developed as a practical guide for developing commercial renewable energy projects in the State. The Handbook provides an overview of the relevant approvals required and a description of the wholesale electricity market and the different options for generators to sell their output. It also provides information on different renewable technologies in Western Australia.

Government agencies continue to set an example with the latest results showing a reduction in energy consumption of 7.8% for 60 of the 61 agencies participating in the Energy Smart Government program.

New and improved standards for residential and commercial buildings, more appliances covered by minimum energy performance standards and energy efficiency reporting requirements for large energy users are a few of the initiatives established through the National Framework for Energy Efficiency in 2005/06.

Major SEDO promotions, public relations and marketing activities

The Sustainable Energy Development Office continues to implement a communication and marketing strategy to accelerate the adoption of renewable energy and energy efficiency. The strategy is aimed at encouraging and assisting businesses, government agencies and communities in Western Australia to operate in ways that are environmentally and socially sustainable.

Reflecting the growing interest in sustainable living, the Sustainable Energy Expo saw a 15% increase in attendance with around 7,500 people attending the Expo in 2006.

The Sustainable Energy Expo, hosted by the Sustainable Energy Development Office and supported by the Western Australian Sustainable Energy Association and the Sustainable Transport Coalition of WA, brought together a wide range of products, services and information. This initiative was in response to increasing demand from the public for help on how to save energy and money.

More than 200 companies were at the show including approximately 60 commercial companies showcasing sustainable energy products and technologies.

The Property Council of WA (WA chapter) and the Sustainable Energy Development Office formed a partnership to promote energy efficiency to the property industry. The partnership was formalised with the signing of a Memorandum of Understanding at a ceremony held in December 2005 and comes after several years of the two agencies working towards common goals.

On 4 May 2006, the Minister for Energy, Francis Logan, officiated at a ceremony to mark the first Australian Building Greenhouse Rating Commitment Agreement for a commercial office tower in Western Australia. The owner, Industry Superannuation Property Trust, and the co-developer, the Pivot Group, have committed to designing, constructing and operating the building to achieve a 4 and a half star Australian Building Greenhouse Rating.

The Sustainable Energy Development Office hosted the first Energy Efficient Appliance Industry Forum held in Western Australia. Industry members indicated that they would like to talk to program staff directly involved in setting Australian Standards for electrical and gas appliances and administering the energy rating label. The forum provided an opportunity to learn more about the national Equipment Energy Efficiency Committee and their plans for the future.

The Sustainable Energy Development Office provides a number of programs to facilitate the adoption of renewable energy and energy efficient practices. The Sustainable Energy Development Office has a strong policy development role in renewable energy and energy efficiency.

Solar Schools Program

The Solar Schools program - a State Government election commitment and a key part of the State Government's plan to promote the importance of renewable energy - was launched this financial year. The program will help to educate the next generation of Western Australians about the benefits of renewable energy. Solar power systems will enable schools to meet part of their electricity needs, reduce their consumption of fossil fuels and reduce their greenhouse gas emissions.

Strategic Outcomes and Achievements in 2005/06

The State Government's \$1 million Solar Schools program was launched in November 2005. The first 25 schools to participate in the scheme have been selected. These schools will receive up to \$10,000 each to install solar power systems. The program encourages schools to find ways of reducing their energy consumption and to raise awareness of sustainable energy within the wider school community.

Forward Planning for 2006/07

Over the next three years, these 25 schools will form part of a larger group of 100 primary and secondary government schools that will install solar power systems under the program.

The Sustainable Energy Development Office will work with schools and other key stakeholders to ensure that solar power systems supported through the program deliver the maximum benefits, including sustainable energy education, reductions in fossil fuel energy use and increased awareness of sustainable energy in the broader community.

Solar Water Heater Subsidy

The Solar Water Heater Subsidy scheme provides rebates for solar water heaters installed in Western Australian homes. The scheme helps householders to reduce their energy bills, delivers greenhouse gas reductions and supports the solar water heater manufacturing industry in Western Australia.

Strategic Outcomes and Achievements

A new scheme was introduced in 2005/06. The scheme targets gas-boosted solar water heaters, which have the lowest greenhouse emissions of all common hot water systems. Between the new and the original scheme, rebates were provided for solar water heaters in over 3,000 homes in 2005/06. These systems are estimated to reduce greenhouse gas emissions by 5,000 tonnes of carbon dioxide per year, equivalent to taking 1,000 cars off the road.

Forward Planning for 2006/07

The Sustainable Energy Development Office is investigating the design and future operation of the scheme.

SEDO Grants Program

The SEDO Grants Program provides funding for innovative community-based sustainable energy projects and sustainable energy research and development initiatives.

Strategic Outcomes and Achievements

The SEDO Grants Program was substantially revised in 2005/06. Administration of the program was streamlined, new program guidelines were implemented and new evaluation processes were introduced. Grants totalling \$223,865 were approved for eight projects following the February 2006 funding round.

Forward Planning for 2006/07

The Office intends to further refine and better promote the program to ensure the best outcomes are achieved from the available funding. Funding rounds are scheduled for August 2006 and February 2007.

Renewable Energy

The Government's Plan for Renewable Energy committed to a number of actions, including a target for 6% of electricity sold on the main South West electricity grid to be generated from renewable sources by 2010 and the development of a Renewable Energy Strategy to take Western Australia beyond 2010.

In addition, the Government is providing a Renewable Energy Production Subsidy, a \$6 million support package providing short term assistance to new renewable energy

generators connected to the main electricity grid. It is a transitional arrangement operating during the period in which the new Wholesale Electricity Market is established and it is administered by the Sustainable Energy Development Office.

Strategic Outcomes and Achievements in 2006/07

A policy framework was developed for the Renewable Energy Production Subsidy and Stage One applications were sought from renewable energy generators commissioned between 1 November 2003 and 31 December 2005. The renewable energy industry has been very supportive of the Production Subsidy with seven Stage One applications received from generators in 2005/06 for payments totalling over \$1.3 million. Technologies supported by the subsidy include wind, landfill gas and wood waste.

Options for achieving the 6% target have been investigated and a background paper for the State Government's Renewable Energy Strategy has been prepared to inform the development of the Strategy.

The development of a Renewable Energy Handbook for Western Australia was completed this financial year. The handbook is a practical guide for those seeking to develop commercial renewable energy projects in the State. The handbook provides a step-by-step guide through the project development process, including the relevant approval processes. It also consolidates information on renewable energy and the electricity market in Western Australia and renewable energy incentive programs into a single source. The handbook is a valuable resource not only for the renewable energy industry but also for landholders, local government and the wider community.

Forward Planning for 2006/07

The development of a Renewable Energy Strategy will continue along with mechanisms to ensure the 6% target is achieved.

Stage Two applications for the Renewable Energy Production Subsidy from 'proposed' power stations, those commissioned between 1 January 2006 and 30 June 2007, will be requested later in 2006.

National Framework for Energy Efficiency

The implementation of Stage One of the National Framework for Energy Efficiency, an initiative of the Ministerial Council on Energy, has continued in 2005/06. The Framework aims to improve Australia's energy efficiency and productivity, which will also deliver environmental benefits.

The Sustainable Energy Development Office is represented on the seven working groups responsible for implementing the individual components of Stage One of the National Framework. With an allocated expenditure of around \$33 million over three years, the various initiatives in residential, commercial, government and industrial sectors have the potential to save 50PJ of energy per year by 2015.

Strategic Outcomes and Achievements in 2006/07

A number of key achievements were made over the year with the introduction of five star requirements for residential properties and new standards for commercial buildings, the acceleration of the equipment energy efficiency program and the

development of requirements for large energy using organisations to assess and report on the potential for energy efficiency at their operations.

Forward Planning for 2006/07

Implementation of Stage One of the National Framework will continue in 2006/07. In parallel with this, the Steering Committee overseeing the development of the National Framework have been tasked by the Ministerial Council on Energy with proposing new measures, including incentives, for consideration in Stage Two of the National Framework.

Energy Smart Communities

The Energy Smart Community initiative encourages sustainable energy through the provision of extensive information on options for reducing energy consumption in the home. It includes support for house energy ratings tools and other means of encouraging more energy efficient homes.

Strategic outcomes and achievements in 2005/06

The new second-generation house energy rating tool, *AccuRate*, was approved for use within Western Australia in early June 2006. Administration of Western Australian accredited assessors, authorised to use house energy rating tools, is about to be transferred to a newly established National Assessor Register.

The *Reach for the Stars* program, promoting high energy star-rated electrical and gas appliances, was continued throughout Western Australia. A survey of the program showed a high level of consumer awareness of the program with 99% of surveyed consumers recalling the energy rating label.

More than 3,600 calls were received through the Energy Smart Line telephone advisory service with market research indicating high satisfaction with the service. Demand for brochures distributed through the service was high among the general community and also from local government and community organisations. The number of visits to the SEDO website rose each month from 19,643 in July 2005 to 31,932 in June 2006, with a total number of visits for the year of 320,614.

A community seminar for householders to learn more about renewable energy and the TravelSmart program was held in 2005/06. This seminar built on other SEDO seminars on sustainable energy held in 2004/05.

Forward Planning for 2006/07

The second-generation version of the modified house energy rating tool *FirstRate* is planned for commercial release in late 2006.

The *Reach for the Stars* program will focus on promoting high energy star-rated electrical and gas appliances by working closer with manufacturers and distributors.

A sustainable energy seminar information kit is being developed for use by local government authorities and others, based on the successful community seminars held in regional and metropolitan areas in 2004/05.

Energy Smart Business

Business awareness of sustainable energy options is relatively low with many companies still considering energy use as a fixed cost. The Energy Smart Business initiative aims to facilitate better energy management by Western Australian businesses.

Strategic outcomes and achievements in 2005/06

Industry's use of the Australian Building Greenhouse Rating tool continued to grow during 2005/06 with two commitment agreements signed and twelve ratings achieved.

The Energy Smart Directory website was widely promoted and is now averaging 3,000 to 5,000 direct website hits each month. The website was also upgraded to improve its functionality.

Forward Planning for 2006/07

Increasing the uptake of tenancy ratings as an avenue to influence building energy efficiency will be a focus for the Australian Building Greenhouse Rating program.

The wider promotion to business and industry of information and tools, including the development of case studies for the Energy Smart Toolbox, will be a focus in 2006/07.

Energy Smart Government

The Energy Smart Government policy requires all general government sector agencies with 25 or more staff (FTEs) to reduce annual stationary energy consumption by 12% from 2001/02 levels by 2006/07. Agencies are also required to report their total energy costs, consumption, greenhouse gas emissions and key performance indicator data each year.

Strategic outcomes and achievements in 2005/06

Participating State government agencies achieved a reduction in energy consumption from the baseline of 4.3% in 2004/2005. The combined data for 60 of the 61 agencies participating in the program showed a 7.8% reduction in energy consumption, against the 8% target for 2004/05.

Overall, participating agencies achieved the following savings in 2004/2005 relative to the baseline:

- Energy consumption reduced by 4.3% to 2,728,999GJ
- Energy costs reduced by 5.5% to \$74.9 million
- Greenhouse gas emissions reduced by 4.2% to 511,662 tonnes.

The Government has saved \$7.7 million in energy costs and avoided the emission of nearly 40,000 tonnes of greenhouse gases in the first three years of the Energy Smart Government program. Almost half of the participating agencies have already met the final program target - two years ahead of schedule.

Many agencies also report performance indicators that give a measure of energy efficiency. This is particularly important for agencies that cannot achieve an overall reduction in energy consumption due to expansion in their operations. In 2004/05, 20 agencies, despite not meeting the 8% target, reported a significant improvement in the efficiency of energy use.

Over \$7 million of capital advance funding was approved for a variety of energy saving capital investment projects. All the available facilitation grant funding of \$350,000 was also approved to assist agencies with the identification and implementation of energy saving projects and initiatives.

Forward Planning for 2006/07

The Office will work closely with agencies over the coming year to increase the uptake of Capital Advances, particularly by the larger agencies. The development of policies and strategies to facilitate ongoing energy management within agency operations will also be a priority.

Renewable Remote Power Generation Program

The Renewable Remote Power Generation Program is an Australian Government funded initiative, which is implemented in Western Australia by the Sustainable Energy Development Office. Funding for the program is based on diesel excise paid in Western Australia.

Strategic Outcomes and Achievements in 2005/06

The Renewable Remote Power Generation Program continues to drive the uptake of renewable energy systems in regional areas. Rebates totalling \$8.7m were provided for 138 solar pumps and windmills, 125 small-scale solar and wind power systems and five larger wind power systems used in off-grid applications.

In addition to increasing the use of renewable energy, systems serving pastoral stations, Aboriginal communities and individual homes in remote areas also improve quality of life by providing a 24 hour power supply. These systems are becoming the power supply option of choice, with 40% of pastoral stations in Western Australia now having a renewable energy power system.

Forward Planning for 2006/07

Changes to the program introduced in 2005/06 will see rebates extended to small-scale, distributed renewable energy systems in rural areas on the fringes of the South West electricity grid. A Regional Energy Efficiency Program, providing incentives for people in off-grid areas to adopt energy efficient products and practices, will also be introduced following approval by the Australian Government.

The Office will review the performance of the program to date and develop a long-term strategy for its operation over the next four to six years to ensure the best outcomes are achieved.

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