

2002-2003 Annual Report Sustainable Energy Development Authority of NSW



**Photos - right to left**

The twin turbines of the Hampton Wind Park near Oberon

Winning Solar Month posters by NSW School children, who are learning about Solar power through the Solar in Schools program

Energy Smart Business Amcor hosts a seminar on energy efficiency at their Botany plant

Two locals learn the benefits of Energy Smart Living at the Coffs Harbour Energy Smart week.

An accredited Green Power generator near Singleton

Taking an array of sustainable energy solutions to the Land - at the Australian National Field day in Orange.

This North Sydney Building proudly displays its excellent greenhouse performance, as calculated through the Australian Greenhouse Building Rating scheme

# Contents

<b>Letter to the Minister</b> .....	<b>4</b>
<b>About Us</b> .....	<b>5</b>
<b>Our Executive Director's Report</b> .....	<b>6</b>
<b>Our Objectives and Our Results</b> .....	<b>7</b>
Facilitating a reduction in greenhouse gas emissions.....	7
Facilitating reductions in the cost of energy services.....	7
Developing industries that manufacture, supply and install sustainable energy services .....	7
Encouraging employment and export opportunities.....	8
Fostering improved and wider choice of energy products and services.....	8
Providing information on sustainable energy development issues .....	8
<b>Our Task</b> .....	<b>9</b>
The Enhanced Greenhouse Effect .....	9
The Environmental Picture – Climate Changed!.....	9
The Status of the Kyoto Protocol .....	9
<b>Our Operations</b> .....	<b>11</b>
<b>Programs</b> .....	<b>11</b>
Renewable and Low Emission Energy Supply .....	11
Commercial and Industrial Energy Efficiency .....	15
Residential Energy Efficiency.....	19
<b>Supporting Activities</b> .....	<b>23</b>
Communications and Marketing .....	23
Gateway Export Program .....	25
Market Development and Policy.....	26
Finances and Administration.....	27
Our Structure.....	28
<b>Our Finances</b> .....	<b>29</b>
Key Documents .....	30
Financial Statements .....	33
<b>Appendices</b> .....	<b>49</b>
Glossary.....	51

# Letter to the Minister

Solutions for the future  SEDA

The Hon. Robert John Carr, MP  
Premier of New South Wales  
Level 40, Governor Macquarie Tower  
1 Farrer Place  
SYDNEY NSW 2000

Dear Premier

I am pleased to submit the 2002/2003 Annual Report for the Sustainable Energy Development Authority for presentation to Parliament in accordance with the Annual Reports (Statutory Bodies) Act 1984 and the Public Finance and Audit Act 1983 and the regulations under these Acts.

Yours sincerely,



Mark Fogarty  
Executive Director  
October 30, 2003

# About Us

The Sustainable Energy Development Authority (SEDA) was established in 1996 to reduce energy related greenhouse gas emissions through the NSW Government's Sustainable Energy Development Act 1995. This legislation was part of a package of State electricity industry reforms designed to optimise the quality and service delivery in the NSW power structure.

SEDA's Act states its principal objectives as:

1. To bring about a reduction in the levels of greenhouse gas emissions and other adverse by-products of the production and use of energy; and
2. To facilitate the development, commercialisation, promotion and use of sustainable energy technology, particularly in those areas (other than fundamental research) where the development, commercialisation, promotion and use of that technology is impeded by lack of appropriate information or finance or by other barriers.

[Sustainable Energy Development Act, cl. 6]

SEDA's role is to ensure that increasing competition in the NSW electricity market delivers environmental as well as economic benefits, in consideration of the global threat of the enhanced greenhouse effect. Our contribution to this challenge is market facilitation for and commercialisation of the sustainable energy sector.

## Our Vision

A sustainable energy future that meets the energy needs of a thriving community without compromising the capacity of subsequent generations to meet their own needs.

## Our Mission

Delivering greenhouse gas reductions, environmental, economic and social benefits to the NSW community by accelerating the transition to sustainable production and use of energy.

## Our Partners

Pursuing market transformation is futile without the support and strength of NSW energy stakeholders. SEDA has sought partnerships, based on genuine shared outcomes and an equitable distribution of responsibility. Every day NSW's market transformation is voluntarily demonstrated by industry, other tiers of government and the community by NSW energy stakeholders.

SEDA is currently fostering over 500 active partnerships, with both clients and stakeholders. Our clients and stakeholders include every aspect of the production and use of energy in NSW, and ultimately our responsibility is to the NSW community, of today and tomorrow.

Since 1996, the work of SEDA and our partners has attracted over \$620 million in investment in NSW, delivered greenhouse gas reductions of more than 20 million lifetime tonnes of greenhouse gas, saved NSW energy users \$500million in lifetime energy costs and been recognised as a world leader in sustainable energy development.

## What Are Sustainable Energy Technologies?

Sustainable energy technologies are products, processes, practices and designs, which improve energy efficiency, facilitate the production of energy from renewable resources or facilitate the production and use of energy in ways that minimise levels of greenhouse gas produced.

Sustainable energy technologies covered in this report include solar thermal, solar photovoltaic, wind energy, biomass and waste-to-energy technologies, cogeneration, waste coal mine gases, small scale hydro-electric generation, energy efficient building design, water saving devices, compact fluorescent lighting options, insulation products and many more.

NSW has many natural resources that make it especially conducive to alternate forms of energy generation. Although coal will remain the main source of energy supply for the foreseeable future, expanding our capacity to generate energy from non-fossil-fuel streams provides economic opportunities and crucial environmental benefits and obligations.

# Our Executive Director's Report



With every new day, in every country of the world, the negative impacts of global climate change become more evident and our scientific basis for action strengthens. Higher water temperatures are bleaching coral reefs in much of world. A heatwave in Europe this year killed about 15,000

people in France. The US was hit by a record 562 tornadoes in May. Here a devastating drought which has led to a forecasted 21% decline in the gross value of farm production for 2002-03, was scientifically linked to the phenomenon of climate change. As we slowly recover from what is the worst drought in NSW's history, we gain an uncomfortable insight into future droughts as El Niño-Southern Oscillation (ENSO) events intensify with increasing levels of greenhouse gases in the atmosphere.

In its first two terms, this Government took major steps to establish NSW as Australia's leader in greenhouse gas abatement. We were the first Government in Australia to set binding greenhouse emission benchmarks for electricity retailers to reduce the emission of greenhouse gases from the consumption of electricity. We also opened the world's first carbon trading market to make possible investment in carbon sinks to offset greenhouse emissions.

Now, with NSW firmly committed to Kyoto ratification and the establishment of the NSW Greenhouse Office, the Government is poised for a "third wave" of greenhouse reduction initiatives. Although NSW faces challenges in planning to meet future energy needs, these challenges provide an unprecedented opportunity to steer the State towards becoming a modern, environmentally sustainable economy.

Meeting these challenges provides a chance to engage the NSW public in energy choices and offers the Government - and business community - the opportunity to promote environmentally friendly energy solutions while reaping energy savings. In turn, this more energy efficient economy will provide a platform to attract greater and on-going investment in NSW.

I congratulate all those business, organisations and individuals who have already joined us in bringing sustainable energy solutions into NSW. Already the Sustainable Energy Industry in NSW is growing at a rate of 16% per annum and is estimated to be contributing over \$4 billion annually to the State economy. Over the last 8 years the our sustainable energy programs have:

- attracted over \$620 million of investment in to the state;
- delivered lifetime energy savings for the NSW community worth over \$500 million; and
- reduced greenhouse gases by over 20 million lifetime tonnes of carbon dioxide.

The NSW Government is continuing to seek out new markets and opportunities for demand and supply side sustainable energy solutions. We look forward to the continued commitment and dedication of our partners in capitalising on these opportunities and delivering continued greenhouse reductions, energy savings and improved environmental protection for the people of NSW.

**Mark Fogarty**  
Executive Director

# Our Objectives and Our Results

## Facilitating a reduction in greenhouse gas emissions

- During the reporting period SEDA programs and activities reduced greenhouse gas emissions in excess of 6.732 million lifetime tonnes of carbon dioxide equivalent (CO<sub>2</sub>e), capturing \$71 million investment in the sustainable energy industry and saving NSW households and businesses over \$170 million on energy bills

## Facilitating reductions in the cost of energy services

- The Energy Smart Homes Policy is saving NSW residents over \$88 million in reduced energy bills by encouraging the adoption of minimum energy performance standards for homes
- The Distributed Energy Solutions service is reducing capital and generation costs and delivering greenhouse reductions by implementing demand management technologies in several Sydney projects
- Our Energy Smart Business programs showed that sustainability can be profitable, helping to save NSW businesses over \$15 million in energy costs annually
- Expansion of the Solar in Schools program to another 20 schools to give 20,000 NSW schoolchildren direct experience of renewable energy generation, also winning a 2003 Banksia National Environmental Award in the category Government Leading by Example for a Sustainable Future
- SEDA administered a record \$2 million in solar power rebates in NSW, providing 356 property owners the opportunity to save on their energy bills and reduce greenhouse gas emissions by 8782 lifetime tonnes
- The uptake of greenhouse friendly hot water systems hit record highs with 2,323 hot water discounts redeemed by residents living in Energy Smart homes in Energy Smart Council areas

## Developing industries that manufacture, supply and install sustainable energy services

- Since 1996 we have approved financial assistance to 51 sustainable energy projects, investing \$23.6 million and attracting an additional \$144.5 million from the private sector in sustainable energy infrastructure in NSW
- Over 300 Sustainable Energy practitioners attended the 2002 Energy Smart Green Globe awards to recognise excellence in the NSW sustainable energy industry, and applaud the achievements of over 70 winners in 8 different categories
- In order to develop a more efficient and lower greenhouse Commercial building sector SEDA accredited 30 NSW assessors and 100 national assessors in the Australian Building Greenhouse Rating Scheme ensuring a better commercial building sector, and broadening the market for sustainable energy products and services
- The Sustainable Energy Industry in NSW is growing at a rate of 16% per annum and estimated to be contributing over \$4 billion annually to the State Economy
- The renewable investment program has financially assisted the construction of 4 new renewable energy generation projects, saving 2.5 million tonnes of greenhouse gas over their lifetime
- The Live Energy Smart Program joined with 10 product partners in the promotion of energy efficient technologies including, solar hot water, low flow showerheads, compact fluorescent lamps, whitegoods and insulation
- The Energy Smart Allies program swelled to over 375 product and service providers of sustainable energy solutions listed in an internet network
- Through the establishment of the House Energy Rating Management Body, We have facilitated the training and accreditation of over 270 National House Energy Rating Software (NatHERS) assessors

## Encouraging employment and export opportunities

- A survey of the NSW Sustainable Energy Industry found the export capabilities of the NSW sustainable energy industry was estimated to exceed \$75 million per annum in 2001/02
- We welcomed six separate delegations from international governments to investigate our diverse and rapidly growing sustainable energy industry
- We visited, China, Japan, Switzerland and the Philippines to promote and develop relationships for export of NSW sustainable energy products and services

## Fostering improved and wider choice of energy products and services

- Expansion of the National Green Power Accreditation program, encouraging 82,000 household and 3000 business customers to undertake voluntary renewable energy purchases, and bringing over \$100 million in investment in NSW renewable energy projects
- Following decisions by the NSW and Victorian Governments for electricity retailers to disclose greenhouse gases on electricity bills, SEDA and the Sustainable Energy Authority of Victoria established a website to provide consumers with information on greenhouse gas emissions associated with the supply of electricity and options to reduce emissions <http://www.greenhousegases.gov.au>
- A point of sale awareness campaign involving manufacturers covering 50% of the home electronics market, promoting Energy Star Home Appliances, provided greater consumer choice for low energy use options
- Supporting a range of bioenergy projects in NSW including through the provision of seed funding to a biogas projects on the NSW Central coast, and a biofuels project at Berkley Vale
- The Live Energy Smart program partnered with some of the State's largest appliance retailers to promote and distribute accredited sustainable energy products to the NSW community
- The provision of unbiased and up-to-date information from our cheerful Energy Smart Consultants to over 8,000 NSW energy consumers on their product options

## Providing reliable, useful and timely information and advice on issues relating to sustainable energy development

- The continuing provision of free energy advice to NSW consumers through the Energy Smart Information Centre reaching record productivity this year with 600 energy enquiries a month
- Our series of technical seminars and forums, now based at SEDA's dedicated inhouse seminar centre, provided low cost and high quality information and contacts to over 1200 sustainable energy industry participants
- We hosted Solar Month 2003, a communication program to increase the number of educated, aware solar advocates in NSW. Over 3000 people attended 26 events across NSW
- We commissioned the Sustainable Energy Jobs Report, by the Allen Consulting Group— which found that with a broad package of measures in place to boost sustainable energy production and use of energy the “economic activity in NSW could increase by more than \$500m annually, with up to 4,000 new jobs created”
- Currently the NSW sustainable energy industry directly employs nearly 5,500 full-time equivalent staff in 2001/02, and achieved total annual sales of \$1.5 billion with a growth rate of between 8%-13% per annum. Including indirect effects, the total economic contribution of the sustainable energy industry is estimated at between \$2.8 billion and \$4 billion in 2001/2, and estimated to stimulate a total of between 11,600 and 18,200 jobs throughout the State.
- In order to ensure immediate and ongoing access to high-quality wind data from a growing range of NSW monitoring sites, We have provided Wind Data Licences and Regional Wind Reports to a diverse range of wind energy stakeholders, including developers, banks, investors, suppliers, manufacturers, landholders, councils, regulators, government, media, power retailers, generators and traders
- Our EnergySmartZone internet-based education resource was used by over 50 schools to incorporate energy efficiency education into primary school curricula

# Our Task

## The Enhanced Greenhouse Effect

The glass walls and roof of a greenhouse allow most of the sun's light in, but do not allow most of the heat energy to escape, so that the temperature is warmer inside the greenhouse than outside. The earth's atmosphere, in particular the gas carbon dioxide (CO<sub>2</sub>), acts like a greenhouse, trapping heat and making the earth warmer. It is a natural process, without which the earth would be an icy 33°C colder.

However, human activity is adding an excess of CO<sub>2</sub> to the atmosphere, enhancing the greenhouse effect and resulting in rising global temperatures and climate change. The burning of fossil fuels, like oil and coal as sources of energy, releases CO<sub>2</sub> into the atmosphere and accounts for about one quarter of the greenhouse gas production in the developed world.

SEDA's mission, to reduce greenhouse gas emissions from the production and use of energy, presents a considerable challenge, as energy is essential to virtually all activities in a modern economy. However inherent in this challenge is a tremendous opportunity to transform our energy market to a sustainable and secure, low carbon leader, whilst fostering a new industry in developing and adopting clean energy technologies and improving environmental protection.

## The Environmental Picture – Climate Changed!

According to the World Meteorological Organisation the global average land and sea surface temperatures in May 2003 were the second highest since records began in 1880. According to recent climate change scientific assessment reports of the joint WMO/UNEP Intergovernmental Panel on Climate Change (IPCC), '...most of the observed warming over the last 50 years is likely to have been due to the increase in greenhouse gas concentrations' and 'global average temperatures and sea levels are expected to rise' throughout the twenty first century and beyond. The impacts of this temperature rise are already being witnessed across the globe.

Record extreme events (high temperatures, low temperatures and high rainfall amounts and droughts) occur every year, but in recent years the number of such extremes have been increasing. In June, record high temperatures exceeding 40°C were recorded across southern France. In Switzerland, the month of June was the hottest in at least the past 250 years. In the United States, there were 562 tornados during May, which resulted in 41 deaths and establishing a record for the number of tornados in any month.

In India, this year's pre-monsoon heat wave brought peak temperatures of between 45°C and 49°C killing at least 1400 people. In Sri Lanka, heavy rainfalls from Tropical Cyclone 01B exacerbated already wet conditions, resulting in flooding and landslides and killing at least 300 people. The infrastructure and economy of southwestern Sri Lanka was heavily damaged. A reduction of 20-30% is expected for the output of low-grown tea in the next three months.

Last year NSW experienced the worst drought since reliable records began in 1910. The average Australian rainfall for the nine months March-November 2002 was the lowest ever during this period. The drought was concentrated around NSW, with the Murray Darling Basin bearing the full brunt of this reduced rainfall.

The 2002 drought has had a more severe impact in NSW than any other drought since 1950, because the temperatures in 2002 were higher than ever before. These higher temperatures caused a marked increase in evaporation rates, which sped up the loss of soil moisture and the drying of vegetation and watercourses. This is the first drought in Australian history where the impacts of human induced climate change have been clearly observed, and found to be key in the severity of the drought, impacting not only our environment, but our State economy as well.

## The Status Of The Kyoto Protocol

With over 185 members, the United Nations Framework Convention on Climate Change (UNFCCC) seeks to stabilise atmospheric concentrations of greenhouse gases at safe levels. It requires all countries to limit their emissions, gather relevant information, develop strategies for adapting to climate change,

and cooperate on research and technology.

Australia has signed and ratified the Convention, which entered into force in 1994. The Convention's entry into force means that it now forms part of international law and the law of those countries that have ratified it - including Australia. Thus, the objective set out in Article 2 of the Convention ('stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic [ie. human] interference with the climate system') is a binding obligation in international law.

In 1997, the international community adopted the Kyoto Protocol to the UNFCCC. The Protocol builds on the Convention by setting clear targets for reducing emissions. The Protocol has not yet entered into force but support for this is growing. In order for the Protocol to enter into force, 55 countries must ratify it and these must include industrialised countries that, together, account for at least 55% of carbon dioxide emissions in 1990. The European Union, New Zealand and Japan have already ratified the Protocol, whilst China has announced their intention to ratify. Currently the fate of the Protocol lies in the hands of the Russian Government.

The Australian Federal Government has indicated that it does not intend to ratify the Kyoto Protocol without the USA, which opposes the implementation of the Protocol. Despite this position, it is inevitable that some accounting for carbon cost will be imposed during the lifetime of current investment decisions.

# Our Operations

## Programs and Activities in Renewable and Low Emission Energy Supply

The Renewable Energy Team runs programs to gradually shift in the composition of NSW's electricity supply from energy generated in the burning of fossil fuels to renewable and low carbon forms of energy generation. The team focuses in particular on wind and solar energy, waste to energy, bioenergy, and the capture of waste coal mine gas.

During 2002/2003, the Renewable Energy Team ran several programs focused on delivering low or no emission energy supply and supporting renewable energy development. Key approaches were fostering partnerships with appropriate industry and community groups, providing financial and in-kind assistance to sustainable energy projects, providing community and industry education and obtaining commercial returns from our program initiatives (where appropriate) to increase available funding for future support of sustainable energy development in NSW. The team also continued its management of the national Green Power program, which enables consumers to choose to buy renewable energy for their power supply, increasing the demand for renewable energy in Australia.

During this reporting period six new low carbon power generation projects were committed as a result of SEDA's programs, resulting in reductions of over 4.5 million tonnes of greenhouse gas emissions over their lifetime. SEDA's renewable and low emission programs also attracted a total of \$14 million of private sector capital to rural and regional NSW during this time.

### Bioenergy Program

#### Goal

To deliver 3.9 million tonnes of greenhouse reduction, through the development of a sustainable bioenergy industry, targeting municipal and regional biomass resources in NSW.

#### Result

In 2002/2003 SEDA assisted the expansion of a biodiesel production plant, at Berkeley Vale with Australian Biodiesel Consultancy, and supported two biogas projects in partnership with AGL Energy. Lifetime greenhouse gas reductions captured by these projects is calculated to be over 2.5 million tonnes of CO<sub>2</sub> equivalent.

Regional bioenergy can be produced from residues and by-products from agricultural and forestry activities, or crops and plantations from the agricultural sector. Capturing these resources to produce renewable energy results in significant ongoing greenhouse gas reductions, and can also address associated problems with waste disposal, such as land filling, associated costs and methane emission. Other benefits of developing regional bioenergy include diversifying farm practice, nutrient recycling, and salinity remediation.

Municipal bioenergy can be produced from residues and by-products of landfill, greenwaste, mixed municipal solid waste, sewage wastes, and commercial wastes. Capturing these resources to produce renewable energy delivers in significant ongoing greenhouse gas reductions, and can also address associated problems of waste disposal, such as landfill methane release.

Since inception of this program, SEDA has fostered a steady increase in bioenergy resources and generation in NSW, releasing 3 regional and 2 urban bioenergy resource assessments, and providing financial assistance to 12 urban bioenergy projects (6 landfill gas) and 8 regional projects. In order to address the barriers of awareness and provide authoritative industry education SEDA has conducted a series of seminars and forums on this emerging energy technology during the reporting period, and is currently finalising a Bioenergy Handbook to be released to the industry early in 2004.

## Waste Coal Mine Gas Program

### Goal

To encourage the use of waste coal mine gas (methane emitted by coal mining) for greenhouse reduction and energy generation in all viable NSW mines with an aim to achieve 2.7 million tonnes of lifetime CO<sub>2</sub> equivalent abatement through the introduction of this technology into NSW mines during the reporting period.

### Results

Waste coal mine gas currently accounts for more than 7% of the State's greenhouse gas emissions. The capture and use of methane as a fuel assists coal mining companies to eliminate significant greenhouse pollution and use a waste product. SEDA is managing a 4-year \$2.5 million fund to encourage coalmines to help protect the environment by installing the latest technology to reduce methane gas emitted from mining operations. Through this fund SEDA finalised feasibility study reports for Metropolitan Mine (near Helensburgh) and the Bulga and United mines (near Singleton) to ascertain whether the use of waste coal mine gas for energy generation could be technically and commercially viable, and what would be the most viable method of use.

SEDA also incorporated the sale of NSW Greenhouse Gas Abatement Certificates (NGACs) into its feasibility study assessments, (thereby improving the viability of potential long-term projects) and improving industry awareness of this additional income stream. SEDA has since assisted these mines to investigate project opportunities relating to the feasibility study findings. However, no project was committed during the reporting period.

SEDA also assisted the development of a 10MW Rotary Kiln demonstration plant with partners Liquatech and CSIRO. The potential for lifetime greenhouse gas reductions from this demonstration plant is estimated to be around 2 million tonnes of CO<sub>2</sub> equivalent. In addition, SEDA continued to consult with state based and international industry stakeholders, promoting awareness of new technologies, funding opportunities and opportunities for new waste coal mine gas projects.

## Solar Power Programs

### Goal

To deliver greenhouse abatement of 20,000 lifetime tonnes by increasing the capacity of solar power in this state through the provision of capital funding, administering and offering rebate schemes, promoting public awareness and providing support and advocacy to the solar industry in NSW.

### Result

This Program report comprises SEDA's solar programs, and the Photovoltaic Rebate Program (PVRP) and the Remote Renewable Power Generation Program (RRPGP), which SEDA administers in NSW on behalf of the Australian Greenhouse Office. To date NSW is the leading State in accessing PVRP funding for solar installations.

During the reporting period 40,000 tonnes of greenhouse gas abatement was achieved through the installation of Solar Power generation in NSW replacing coal-fired and diesel generated power. This result was due to changes in the administration of the Federal Government program, causing a "rush" of installations, and the successful expansion of the Solar in Schools program in NSW Schools.

Grid-connected, building integrated solar power is the fastest-growing sector of solar market worldwide. It offers good long term potential to provide sustainable energy, especially as a distributed generator. It is currently a small fraction of the NSW solar market, and so SEDA again focused our programs and initiatives to address the high-cost and low awareness barriers to capture this potential growth.

Once again Solar Month, a series of events in April 2003, successfully linked community groups, property developers, energy retailers, other government agencies and the building industries with a diverse group of solar power providers, installers and consumers. Over 3,000 people participated in a series of 26 activities and information-access opportunities in locations all over the State.

SEDA also supported the Shellharbour Workers' Club in the development of a 22kW solar power system integrated into an architectural and sculptural verandah. SEDA's \$90,000 grant will help the Club to reduce greenhouse gas emission while providing better facilities for their patrons. This project was officially opened by the Premier in July 2003.

SEDA's Solar in Schools program was recognised by the Banksia Environmental Foundation, by winning the "Government Leading By Example" category in this national environmental award scheme. All 43 participating schools were congratulated for installing and advocating solar energy in their local communities. An additional 20 schools were selected to receive solar power generators and teaching resources for their schools in the coming reporting period. This initiative is highly successful in raising community awareness and acceptance of solar power technology and Green Power across the state.

## Hydro Development Program

### Goal

To encourage the development of small scale hydro generation projects on existing dams and structures in NSW.

### Result

After six years of dedicated assistance to the development of small-scale hydro generation projects via this program the hydro industry in this State is mature and generally does not require funds for the commercialisation of new technology. For this reason SEDA does not focus on the funding of hydro projects.

Nevertheless there are still a number of potentially worthwhile hydro projects in NSW that will emerge as a result of SEDA's hydro resource data on potentially viable hydro projects, or through changes to the water management in the State.

For example, the Snowy Water Inquiry recommended the release of a greater and increasing volume of water from Jindabyne Dam. To enable these releases to be made, the dam spillways has to be modified. During the reporting period SEDA provided funding assistance to this hydroelectric project on a dam spillway at the Jindabyne, in regional NSW. The financial assistance from SEDA enabled the capacity of the power station to be doubled from one 1 MW generator to two such generators. This project will to produce clean power, and result in the reduction of 56,000 tonnes of greenhouse gas over the lifetime of the project.

## Wind Energy Program and Windbusiness Unit

### Goal

To stimulate the appropriate development of commercial wind energy projects in NSW, by providing high quality data raising awareness of wind amongst key stakeholders, and ensuring the incorporation of stakeholder concerns in the planning processes.

### Result

Wind is the fastest growing energy technology in the world and NSW is taking steps to capture its advantages for job creation, investment and the environment. While wind energy developments have recently been focused in Victoria and South Australia, in NSW SEDA is promoting acceptance of wind energy amongst energy generators, retailers, investors, land holders, local government, planning bodies and the general community. During the reporting period, SEDA has identified approximately 600 MW of wind power projects under active development around the State.

During the reporting period SEDA continued to manage and collate data from Australia's most extensive wind monitoring network, with 32 towers and 38 monitoring sites across the State. In November 2002 the NSW Minister for Energy released the NSW Wind Atlas, a snapshot of wind speed around the State compiled from data collected from SEDA's extensive network of wind monitoring towers. The Atlas is freely available to anyone with an interest in wind power, including developers, government, the electricity industry, landowners and the broader community.

A Landowners Information pack aimed to promote wind power to landowners followed this useful resource. The information explores development processes to assist rural residents with any commercial dealings. This resource was widely distributed, and also targeted to those "windy" areas in the State, as identified in the Wind Atlas.

During the reporting period SEDA also released a wind manufacturing study, and prepared a submission with the Department of State and Regional Development with regards the potential for manufacturing and export operations. SEDA is also assisting State Forests to investigate the installation of wind power on land managed by State Forests.

The SEDA WindBusiness unit produces accurate, detailed, long-term data to assist the industry in NSW choose favourable sites, and harness the maximum energy available at any site. WindBusiness products and services are designed to save time, money and reduce risks for investors and wind energy developers. The business unit operates on a cost recovery basis and any returns to SEDA are channeled into developing the wind industry as a whole.

During the reporting period a variety of wind prospecting products were released including the Regional Wind Report, for initial selection of appropriate sites, and the NSW Wind Energy Synopsis, which forms a summary of useful and relevant information concerning NSW sites. A number of these products, and also wind data licenses, were sold during the reporting period.

## Renewables Investment Program

### Goal

To confer \$2 million in financial assistance to a diverse range of renewable energy projects through the eighth and ninth funding rounds of this program.

### Result

SEDA's Renewables Investment Program (RIP) encourages the growth of renewable energy capacity in this state by allowing project developers to undertake marginal projects, while ensuring SEDA fulfils a vital role in the development of the renewable energy industry in NSW.

At the close of the reporting period total funding of \$2.3 million had been awarded through this funding mechanism to two biogas cogeneration projects on the central coast, and a mini-hydro generator at Lake Jindabyne. In addition a successful biofuel production plant at Berkeley Vale, which was previously assisted under the scheme, committed to upgrade to full-scale production, increasing its production levels by a factor of 50.

The projects submitted to this funding program are judged on their greenhouse gas reduction potential, innovation and demonstration of new technology, sustainability impacts, potential for long term market transformation and economic and employment benefits for NSW. These four projects will deliver greenhouse gas reductions of more than 2.5 million tonnes of CO<sub>2</sub> equivalent savings over their lifetimes.

This reporting period saw the continued development of the Renewable Energy sector in NSW. Since 1996 SEDA has approved financial assistance to 45 sustainable energy projects, investing \$23.6 million and attracting an additional \$144.5 million from the private sector in sustainable energy infrastructure in NSW.

## Green Power Accreditation Program

### Goal

- To increase the number of Green Power customers thereby driving investment in renewable energy through voluntary renewable energy purchase.
- To ensure the Green Power market can meet this growing demand by supervising the accreditation of sufficient new Green Power generators to supply 298 MW of new installed capacity.

### Result

During the reporting period total customer numbers increased 22%, reaching the programs highest level of 85,000 energy customers signed up to Green Power. Installed new capacity for Green Power now exceeds 387 MW, over reaching our 2003 target by 23%. At current levels of growth we estimate that the market will require 450MW of accredited Green Power by 2005.

SEDA established the Green Power Accreditation program in 1997 to accredit and promote renewable energy in NSW. Today Green Power is a national program, administered by SEDA and governed by the National Green Power Accreditation Steering Group. Today the total energy sales for the lifetime of the Program are over 1800 gigawatt hours (GWh).

During the reporting period the program also approved 25 new Green Power generators, providing an estimated total 'new' capacity of 197MW, 10 MW of which in NSW. Two new Green Power products offered by national energy retailers, and restructuring of four existing Green Power products were approved, bringing the total number of accredited products to 17.

Rapid market development has occurred in the renewable energy sector in Australia over the past year, and SEDA has undertaken ongoing and considered stakeholder consultation and discussion to maintain the highest level of international standards for the national Green Power Program.

In January 2003, one year after the introduction of contestability to the retail electricity market, the NSW Government established the NSW Greenhouse Gas Abatement Scheme. The introduction of this scheme has impacted on the viability of Green Power projects in NSW. SEDA successfully streamlined reporting requirements and implemented a compliance mechanism to ensure that Green Power sales remain additional to this new layer of green energy legislation and to maintain the continued growth of the renewable energy industry in NSW.

During the reporting period 80% of all Green Power sales are required to come from 'new' Green Power approved generators. Consequently new installed capacity is increasing. Since 1997 over 145 'new' Green Power projects have been approved proposed or commissioned. During the reporting period four new NSW generators were accredited including: the 2.5MW Eastern Creek Landfill Power Station; the 14kW solar array on the Sydney Entertainment Centre; the 3.9MW Camellia Biogas Facility and the 3.5MW Nowra Green Energy Facility. Together these projects achieve almost 2 million lifetime tonnes of greenhouse gas reductions for NSW.

SEDA also undertook marketing activities with Green Power partners to raise awareness of renewable energy purchase, focusing strongly on business sectors, with the distribution of the Green Power Guide for Business. This interactive CD-ROM purchasing guide communicates the benefits of demonstrating corporate environmental responsibility by supporting renewable energy. SEDA and The Body Shop again implemented a national campaign to inform consumers of their right to choose renewable energy, building on the success and recognition of the previous year.

To manage a national program, and ensure that over 96% of the grid connected population is able to nominate the source of their electricity, requires stringent and rigorous program and relationship management. SEDA's Green Power team released four quarterly reports detailing growth and developments in the program, auditing 12 energy retailers around the country. The Annual Green Power Audit was completed with all NSW retailers complying with the requirements of the program.

## Programs and Activities in Commercial and Industrial Energy Efficiency

Business spends over \$6 billion each year on energy in NSW resulting in 65 million tonnes of greenhouse gases being released into the atmosphere. SEDA's Business Energy Efficiency Team focuses on reducing energy use and greenhouse gas emissions across all sectors of business and government, working with over 350 partners and key stakeholders in the commercial and industrial sector. The team comprises professional project managers with core capabilities in facilitating energy management within organisations by targeting specific sectors with suitable technologies and ensuring that energy efficiency experts provide the services required by our partners.

The Business Team is a core component of SEDA's activities delivering social, economic and environmental outcomes to our diverse range of stakeholders. Expanding and supporting the sustainable energy industry is a major objective. Through the Energy Smart Business program partners have so far invested an impressive \$65 million into the industry supplying energy efficiency solutions.

During the reporting period the NSW business sector committed to improve efficiency, reduce overheads and become more competitive resulting in cumulative savings of 4.8 million tonnes of lifetime greenhouse gas emissions for the whole of the program and annual savings of 1 million lifetime tonnes.

During the reporting period SEDA commenced measuring the market transformation impacts of the Australian Building Greenhouse Rating scheme, and we plan to extend this methodology to other programs to ensure program impact and success. SEDA also made significant modifications to its programs and service delivery to ensure that our award-winning programs are aligned with the new NSW Greenhouse Gas Abatement Scheme. SEDA was recognised as one of the first Accredited Abatement Certificate Providers (AACP) under the scheme.

## Energy Smart Business Program

### Goal

To partner with NSW business to improve energy efficiency, thereby reducing greenhouse gas emissions by a further 950,000 committed lifetime tonnes of greenhouse gas emissions while improving energy performance and encouraging \$13 million investment in the sustainable energy industry.

### Result

During the reporting period Energy Smart Business partners achieved a reduction of 960,000 committed lifetime tonnes of greenhouse gas emissions, narrowly missing our annual target. Partners committed to investing over \$12.6 million in the sustainable energy industry during the reporting period.

Eleven new NSW businesses, included Australian Insurance Group, Colonial First State Investments, BP Solar and Pfizer joined the program to invest in greenhouse and energy saving projects. Together, program partners have created an estimated 108 new jobs in the greenhouse abatement industry. Since the inception of SEDA's flagship business program, lifetime savings of \$240 million are being delivered to Energy Smart partners and the internal rates of return on these investments are an impressive 37% on average.

SEDA has successfully converted its Energy Smart Business program from a free to a fee-paying service. This change in program focus required considerable strengthening of our sales and marketing output throughout the financial year.

During the year, the team worked to integrate the Energy Smart Business program with the newly established NSW Greenhouse Gas Abatement Scheme. This is highly attractive to our Energy Smart Business partners and, along with the assistance provided to those interested in selling their emissions savings through the scheme, has been helpful in attracting new partners to the program.

During the reporting period, a contract was signed with an external consultant to provide ongoing sustainable energy management criteria to ensure partner companies can continue to achieve energy savings and emissions reductions beyond their specific Energy Smart Business project work. Efforts were also made to integrate water savings and waste minimisation information and expertise via other NSW Government programs into our Energy Smart Business seminars and program information to provide an overall sustainable business framework.

The dedicated website for the Energy Smart Business and other programs ([www.energysmart.com.au/wes](http://www.energysmart.com.au/wes)) was revamped and improved to provide a wide range of information about SEDA's programs, promotion of our partner companies and case studies of their initiatives, energy efficiency tips, a free toolbox to evaluate office energy efficiency and up-to-date information about our seminars and conferences. The marketing and communications team launched an Energy Smart Business Communications Kit to assist partners to communicate about their participation in the program internally to employees and externally to stakeholders such as media, the community and shareholders.

The annual Energy Smart Green Globes awards night in October 2002 attracted over 300 attendees to recognise Energy Smart Business partners acknowledged for their commitment to implementing energy efficiency projects, and meeting the program's milestones. In addition the team ran seven seminars, conferences and business site visits to improve industry knowledge covering topics such as energy management software, employee communication, businesses risk management and successfully funding cogeneration projects.

## Energy Smart Government

### Goal

To provide support, advice and tools for NSW Government agencies to meet the Premier's 25% energy reduction targets as set out in the Government Energy Management Policy (GEMP).

### Result

During the reporting period \$11.8 million was committed for investment into Government energy efficiency projects through two strategic tools for addressing market barriers to energy efficiency; Energy Performance Contracting (EPCs) and the Government Energy Efficiency Investment Program (GEEIP). These projects will deliver guaranteed savings of over 18,000 tonnes of greenhouse gas emission and \$1.84 million in annual savings.

The Energy Smart Government program works with NSW Government agencies to reduce energy related greenhouse gas emissions. This requires a high level of interdepartmental liaison and co-operation. Significant gains were made in the NSW health care sector in particular.

In the period under review SEDA continued support for the development and growth of the Energy Performance Contracting industry in NSW. SEDA also hosted its fourth Government Greenhouse Forum, which attracted around 150 attendees to hear the latest news on greenhouse issues and how they impact the NSW Government. The Forum also contained a Trade Show to bring Government energy managers into contact with the emerging sustainable energy industry.

Communication to our Government energy managers was enhanced through the launch of a new website and the continued publication of the monthly GEMP Gazette e-newsletter to bring Government energy managers news and information about greenhouse issues in the NSW Government.

SEDA also commenced a regional energy efficiency pilot in Broken Hill, investigating energy efficiency opportunities in 44 government buildings in Broken Hill. The energy review identified over \$125,000 in annual energy savings in these facilities.

As for SEDA's own GEMP commitments, our showcase environmental office fit out maintained a five star energy rating under the Australian Building Greenhouse Rating, denoting exceptional performance in energy management.

## Australian Building Greenhouse Rating Scheme

### Goal

- To establish the Australian Building Greenhouse Rating scheme (ABGR) as the peak benchmarking tool for commercial office energy / greenhouse performance and work with building owners and managers to benchmark and improve greenhouse performance to attract tenants.
- To identify and work with large NSW tenants to use the scheme as a selection criteria for commercial office space.

### Result

The ABGR scheme is now an internationally recognised, national performance benchmark and marketing scheme to identify the greenhouse and energy efficiency performance of commercial office buildings and encourage reduced greenhouse emissions through energy efficiency upgrades. One star represents poor performance and five stars exceptional greenhouse performance. Three stars represent current best market practice.

The scheme also now applies to new buildings through the recently established ABGR Commitment Agreement, which allows a developer to promote a 4, 4.5 or 5 star new office project to tenants from the outset. The Commitment Agreement requires the developer to measure the building after twelve months of operation and report the results publicly. This gives tenants confidence that the developer has delivered on the building's design intent.

SEDA is the national administrator for ABGR as well as the implementer of the scheme in NSW. SEDA received \$132,000 funding from the Energy Efficiency and Greenhouse Gas Working Group for the reporting period to ensure that the scheme is promoted nationally, applied consistently, with minimum duplication and easy start up for those states and territories with limited resources. During the year SEDA organised three meetings of the ABGR National Steering Committee in Sydney and Melbourne. Additional data collection and benchmarking exercises were completed in Western Australia and Queensland to ensure that the scheme's benchmarks reflected the real performance of office buildings in those states. A similar exercise was commenced in the Northern Territory.

A national training program for third party accredited assessors saw a major expansion of the ABGR scheme during the 2002-3 financial year. SEDA completed the documentation necessary to train third party assessors, enabling them to offer accredited ABGR ratings across Australia. Previously three assessors undertook ratings for SEDA in NSW and three assessors worked for the Sustainable Energy Authority in Victoria. The Accredited Assessor Training Program was conducted in Sydney, Melbourne, Perth and Brisbane with the strong support of the Sustainable Energy Development Office in Western Australia, the Sustainable Energy Authority in Victoria and the Queensland EPA. In NSW of the 46 people who undertook the training 36 are eligible to become ABGR accredited assessors. A further 62 people undertook training nationally, with 40 eligible to become accredited assessors. Accredited ABGR ratings are now available to tenants, owners and managers across Australia at rates set by the market.

The ABGR website was upgraded to allow the new assessors to lodge their rating results electronically. In NSW the new assessors completed 41 accredited ratings of existing buildings. The NSW ratings included all the office buildings in the NSW Crown Portfolio.

In partnership with the Parramatta City Council, SEDA completed the first stage of the Parramatta CBD Greenhouse

Leaders Project. This innovative CBD initiative was developed to deliver improvements in the energy efficiency and greenhouse performance of existing office buildings using ABGR. As a result of SEDA's strong relationships with major property owners, eight of Australia's largest property owners -- AMP Henderson, ANZ Property, Colonial First State Property, Deutsche Asset Management, Investa Property Group, Industry Superannuation Property Trust, Mirvac and Stockland -- agreed to participate and contribute financially to the Parramatta pilot project. In addition, Henderson & Horning, asset managers for a consortium of private owners of a smaller building and Parramatta City Council's administration building, agreed to take part. The four largest office towers in Parramatta are now part of the project.

On the new building side industry proponents signed three Commitment Agreements with SEDA enabling them to promote their new development from the outset. A Commitment Agreement was signed with Deutsche Office Trust for its building, 30 the Bond, in Millers Point, which will be the new Lend Lease headquarters and is expected to be Australia's first 5 stars CBD office building. Another was signed for the joint venture development managers of the new KPMG headquarters in Sussex Street in Sydney (4.5 stars) as well as for Grocon Pty Ltd's Civic Tower development on the Masonic Centre in Sydney's southern CBD (4.5 stars). Industry leaders have responded positively to the challenge set by the ABGR performance benchmark. Previously the best performance of new buildings was 4 stars. Each of these new projects represents industry seeking to deliver buildings well above current best market practice. The new Lend Lease building signifies market transformation because 30 The Bond relies on the introduction of chilled beam air conditioning technology, a first in a commercial office building in Australia.

ABGR has been adopted as the energy efficiency and greenhouse performance benchmark in new sustainability rating tools being developed such as the Green Building Council's green star tool and the Federal Government's National Australian Building Environment Rating system.

During the year SEDA prepared a Market Transformation assessment of the ABGR program, including development of an industry survey to assess the extent of the market's use of the scheme. This will establish a baseline for assessing the impact of the scheme over time and help SEDA identify new strategies to achieve the goals of the program. The assessment will be completed in the 2003/4 year.

Finally, the ABGR program established a national communications plan for the program and completed nine case studies of buildings that have been rated both positively and negatively by the scheme. These were made available to program partners and to mainstream property and trade media achieving significant profile for the ABGR program.

## Cogeneration Programs

### Goal

To increase the efficient use of gas fired cogeneration in NSW by increasing installed capacity by 6 MW.

### Result

Cogeneration is a high efficiency energy system that produces both electricity and useful heat from only one fuel source, offering significant greenhouse and dollar savings for commercial operations. Due to the majority of opportunities for cogeneration existing within the commercial/Industrial or Government sector – this program was transferred from the Renewable Energy Supply team six months into the reporting period. Abatement achieved under this program is now recorded under the Business and Government program reports.

During the reporting period, Australia's first high efficiency microturbine was installed and commissioned at the University of Newcastle's Medical supply building, with funding support from SEDA, increasing the State's cogeneration capacity by 30 kW. Also the Griffith Base hospital Cogeneration was committed and is currently nearing completion.

In order to develop more Cogeneration projects in the State, SEDA engages consultants to provide, at no cost to the site owner, a feasibility study assessing the viability of cogeneration at potential sites in NSW. These studies identify what barriers exist and how they can be addressed. If cogeneration is found to meet or exceed the nominated financial hurdle rate, then the site is required to proceed to expression of interest for a project. Five studies were completed during the reporting period, with 23 feasibility studies commissioned at the close of the reporting period.

SEDA successfully renegotiated partnerships to co-fund studies for all areas of the State with Energex for metropolitan areas of the state and with Australian Pipeline Trust for their Central West Pipeline service area. We continued working with Country Energy in the remaining areas of regional NSW.

Information and awareness has again been identified as a barrier to the uptake of cogeneration energy solutions. During the reporting period SEDA initiated a number of talks and information for industry associations including Australian Business Limited, Hospital Engineers, Australian Institute of Food Science and Technology, Plastics and Chemical Institute, Hotel Engineers, Australian Soft Drink Association. In addition a directory was compiled of cogeneration equipment and service providers for distribution to potential customers of cogeneration.

## Distributed Energy Solutions Business Unit

### Goal

To work with NSW electricity retailers and network operators to deliver greenhouse gas emission reductions.

### Result

The Distributed Energy Solutions Business Unit is a partially self-funding business unit that markets SEDA's programs and

services to utilities on a commercial basis. The business unit assists network operators to reduce peak electricity demand in constrained areas and helps electricity retailers meet their obligations under the NSW Greenhouse Gas Abatement Scheme.

Dr Tom Parry, the head of the Independent Pricing and Regulatory Tribunal, launched the unit in November 2002. SEDA quickly secured two contracts from NSW energy businesses, one each from both the retail and network operators. Both contracts are subject to commercial confidentiality, and are progressing well.

SEDA participated as a member of the working group for the development of the Demand Side Abatement rule under the NSW Greenhouse Gas Abatement Scheme and participated in a Trial Accreditation of SEDA as an Abatement Certificate Provider.

SEDA also conducted several seminars to facilitate the creation of NSW Greenhouse Gas Abatement Certificates (NGACs) by providing services to create and sell abatement certificates from demand side abatement projects under the NSW Greenhouse Gas Abatement Scheme.

## Programs and Activities in Residential Energy Efficiency

NSW households are responsible for emitting more than 15 million tonnes of greenhouse gases into the atmosphere each year and costing consumers more than \$1.6 billion a year in electricity bills. Currently there are over 40,000 new households constructed in NSW each year. On average all-electric households are responsible for almost 9 tonnes of greenhouse gas emissions annually; and hybrid gas and electric homes over 5 tonnes. Energy use in the home is increasing as the market penetration of energy intensive appliances increases.

During 2002/2003, the Residential Energy Efficiency Team ran programs focused on those technology groups that are the greatest contributors to domestic greenhouse emissions, including building design, space heating and cooling, water heating, refrigeration and appliances. The overriding objective for these programs is to empower consumers with appropriate

information and other incentives to increase the market share of these technologies, thereby reducing the overall demand for energy in NSW homes.

During this reporting period the uptake of efficient technologies and practices in the residential sector due to SEDA activities successfully achieved lifetime energy savings for NSW householders by \$88 million and reduced 737,000 lifetime tonnes of greenhouse gas emissions.

## Energy Smart Homes Program

### Goal

- To increase the adoption of the Energy Smart Homes policy by an additional 37% of the NSW local council areas;
- To ensure 75% of new development, including alterations and additions, meets the minimum energy performance standards in this policy.

### Result

At the end of the reporting period 56 councils covering 75% of NSW residential development applications had adopted the ESH Policy which equates to 63,000 new dwellings built in NSW under 'Energy Smart' provisions, and those built between 1998 and 2002 are achieving collective savings of 98,600 tonnes of CO<sub>2</sub> per annum.

SEDA's Energy Smart Homes Program is a voluntary program designed to assist NSW Councils adopt and implement a model energy efficient housing policy by providing reliable and consistent energy rating tools and minimum energy performance standards for new homes, alterations and additions. Critically it is the voluntary acceptance of the policy at this high level that is successfully transforming the market and establishing a new baseline for minimum energy performance across the entire housing industry. Energy efficiency provisions, building on the ESHP, are expected to soon become standard across all of NSW through an amendment to the Building Code of Australia next year.

The program assists local governments to mandate the Energy Smart Homes Policy for their communities, and its success highlights the effectiveness of SEDA's partnerships approach. Activities that complement the adoption and implementation of the minimum energy performance requirements include:

- Training in energy efficiency and renewable energy principles by NSW Councils through the provision of Council Support Managers and Energy Smart communication materials;
- Delivering Energy Smart Homes Policy Training and Industry Forums throughout regional and urban NSW; and
- Hosting Energy Smart recognition events and seminars in regional locations with Councils and industry associations to promote energy efficiency.

The program has been a comprehensive success, and will continue to be relevant for existing buildings, with services to councils relating to solar access for lots and Energy Smart Policy continuing. While transition to a new Government initiative, BASIX, will enable a broader sustainability focus in new homes, SEDA will expand our focus to NSW's 2.3 million existing homes. SEDA is drawing from our Energy Smart Homes Program and ABGR scheme for commercial office buildings, and working with industry, councils and corporate partners to deliver an Energy Smart Home Rating scheme. This will complement BASIX and, together, provide a breadth of services for both new and existing households.

In addition SEDA has consolidated our successful council relationships into a dedicated Energy Smart Councils program. Services to support the adoption of energy efficient street lighting, energy performance contracting, solar power policies, and other measures are offered to councils to achieve greenhouse gas reduction. In addition, initiatives that achieve broader greenhouse gas awareness and abatement on a regional basis are being pursued in Western Sydney and Broken Hill.

## The Energy Smart Hot Water Program

### Goal

To foster the uptake of greenhouse friendly hot water systems in council areas that have implemented the Energy Smart Homes Policy by offering discounts for 1,000 solar or heat pump hot water systems.

### Result

To support the adoption by councils and residents of the greenhouse friendly hot water requirement of the Energy Smart Homes Policy. Greenhouse friendly systems include gas, solar and heat pump technologies, and provide substantial savings in comparison to electric storage systems which are installed in almost 70% of NSW homes.

A \$500 to \$700 discount was offered on eligible solar and heat pump water heaters and was jointly funded by SEDA and participating water heater manufacturers. The discount was available to residential development applicants in Council areas that have adopted the ESHP.

In the reporting period 2,323 hot water discounts were redeemed by residents. Demand for the discount has escalated due to the dramatic adoption of the Energy Smart Homes Policy. The discount demand was particularly high in the central and north coast where there are substantial residential developments not served by reticulated gas.

## Energy Smart Products

(a consolidation of the Live Energy Smart campaign)

### Goal

To increase the demand for and purchase of Energy Smart Products and to increase the number of Energy Smart Product partners through the successful delivery of sales and marketing benefits.

### Results

During the reporting period NSW households saved \$2 million in lifetime energy saving and reduced lifetime greenhouse gas by almost 1 million tonnes through the purchase and installation of Energy Smart products.

SEDA works closely with the manufacturers and retailers of home appliances to inform consumers of the economic and environmental benefits of choosing energy efficient products. There are 10 current partners representing solar and heat pump hot water systems, AAA-rated showerheads, lighting, whitegoods and insulation. Independent market research carried out at the end of the reporting period found that 64% of consumers surveyed had an awareness of Energy Smart Products and 83% ranked a high importance of Energy Smart messages for the householder and the community at large.

Live Energy Smart (LES) is an umbrella program that provides a unified approach to the manufacturer-to-consumer distribution chain for sustainable energy technologies. Companies who manufacture eligible Energy Smart products use SEDA's Energy Smart logo, providing leverage to encourage greater consumer uptake of Energy Smart products. Joint promotions between SEDA and its Energy Smart Product Partners continued to be a highly visible and exciting distribution method for the Energy Smart message. A spring 2002 promotion with Whirlpool in 70 regional Re-travision stores delivered TV, radio, newspaper, and point of sale presence for Energy Smart, and increased sales of

energy and water efficient washing machines.

SEDA's Energy Smart Home won the people's choice award for the best stand at the Sydney Home Ideas and Lifestyle Show, for the second year in a row. In 2002/03 alone, over 96 industry, council and community Energy Smart events were supported by SEDA. The energysmart.com.au website had almost 30,000 hits and interest will continue to grow as the hot water calculator and Energy Smart Home Rating go online.

## Energy Smart Education

### Goal

To sign up 50 NSW schools to participate in an online educational resource to improve attitude and behaviour towards energy usage.

### Result

SEDA continued to provide the EnergySmartZone to NSW primary schools, which is a unique online educational tool for Year 5 and 6 students. The program meets the syllabus requirements of the subject Human Society and Its Environment and is clearly focused on assisting schools to meet the requirements of the Department of Education and Training's (DET) Environmental Education Policy for Schools.

The EnergySmart Zone also assisted schools to make real energy savings, positioning them as strong contenders in DET's 2003 School Energy Challenge, a competition rewarding NSW schools that implemented energy efficiency measures.

In April 2003, 58 schools from metropolitan and regional NSW registered to participate in the EnergySmart Zone, with 569 students and 17 schools completing the program. The website received a total of 2145 individual visitor sessions. The winning school, St Joseph's Primary School in Taree, thoroughly enjoyed the Zone:

*'The kids are thrilled with their win! We learned heaps and stuck with the challenge and were pleased with our efforts and results'.*

Functioning as a web-based interactive learning tool, the EnergySmartZone uses team activities and quizzes guided by fun characters to promote the benefits of energy efficiency and stimulate interest levels in sustainable energy development. Students compete in teams, submitting their research for

assessment. The Zone's outcomes include increased teacher, parent and child awareness of energy efficiency and renewable energy sources. The resource is being reviewed in line with participating schools' feedback and changes in scheduling arrangements have been proposed for the next school year.

## Energy Smart Installers Program

### Goal

To increase the uptake of energy efficient technologies in the home by undertaking the delivery of 1000 direct-install Energy Saving Kits to low-income housing in the lower Hunter.

### Results

SEDA has been promoting residential energy efficiency retrofit services since 1997, including its Community Housing Energy Program (CHEP), which has assisted almost 8000 households in NSW public and community housing.

In October 2001, SEDA in conjunction with the Community Home Energy Efficiency Partnership (CHEEP) and Energy Australia commenced the REFIT pilot project in the Lower Hunter (Newcastle, Lake Macquarie, Cessnock and Port Stephens). The project provided a free energy and water audit, as well as the installation of energy and water efficient technologies including a AAA showerhead, two compact fluorescent light globes, two tap aerators, one toilet cistern weight and a door snake, into low-income households (combined net income of \$500 or less per week) in the private rental market. The project was completed in December 2002. In all, 1,124 households were serviced.

The program successfully delivered real benefits to disadvantaged customers through reductions in their energy consumption and also provided a clearer understanding of the energy consumption habits of disadvantaged customers. On average, recipient's bills were decreased by \$15 per month. The overwhelming majority (92%) of recipients agreed that they would install more energy and/or water efficient devices if they moved to a new home and that the program has encouraged them to continue using energy and water efficient devices in the future.

The total greenhouse gas abatement is 5,665 lifetime tonnes of CO<sub>2</sub>e. Energy Australia is broadening the direct install program to progress attainment of its abatement targets under the NSW Greenhouse Gas Abatement Scheme.

## Energy Star Home Electronics

### Goal

To bolster commitment from Home Electronics manufacturers representing 50% of the market to meet Energy Star compliance standards.

### Result

The objective of the National Energy Star Home Electronics Program is to ensure that all home electronic products (TV, VCR, Audio and DVD) manufactured and bought in Australia are Energy Star compliant. Energy Star products consume approximately 75 % less energy while in standby mode than standard products, thereby saving greenhouse gas emissions.

SEDA is managing this program on behalf of the National Appliance and Equipment Energy Efficiency Committee (NAEEEC) and is working with home electronics manufacturers, distributors / retailers and consumers to promote the financial and environmental benefits of Energy Star TVs, VCRs, Audio and DVD products.

During the reporting period SEDA targeted retail stores to promote the logo at point of sale, as part of a broader communications campaign. Retravision signed on as the National partner in this endeavour. The main activities of this campaign were the development and distribution of an information kit, consumer competition, a retailer staff incentive and a media relations campaign, resulting in greater awareness of the logo which was well received by all partners and retailers. This program is currently in transition stage, but it is envisaged that there will be further communications activities as part of the Federal Government's National Standby strategy.

These leading manufacturers have voluntarily agreed to participate in the program: Grundig, LG, Panasonic, Philips, Pioneer, NEC, Sony, Samsung, Sharp and TEAC. It is estimated that these manufacturers currently possess approximately 50% of the home electronics market.

## Communications And Marketing

The goal of the Communications and Marketing team at SEDA is to bring about the attitudinal and behavioural change needed for the commercial success of sustainable energy technologies. The team comprises a matrix of program-specific professionals who develop and implement communication activities with a focus on program stakeholders and clients.

A core measure of our program success is the co-ordinated delivery and quality of SEDA's successful education and marketing initiatives. We have strived for prudence, economy and effectiveness in all initiatives, to gain recognition of the NSW Government's greenhouse leadership through the Live Energy Smart, Work Energy Smart and Green Power brands in the energy and consumer market place.

Market research undertaken to test the effectiveness of this approach revealed that SEDA has a brand that is nationally recognised in the Australian energy industry, and is recognised as the body that helped establish the national sustainable energy industry. Significantly SEDA's main brand characteristics Leadership, Commitment, Independence meet public expectations of the role of government dealing with the environment.

During 2002/03, SEDA completed a major strategic review of its corporate direction, which culminated in the release of its 2003-2005 Corporate Plan in January 2003. The process involved a thorough process of program review and stakeholder consultation and led SEDA to adopt the theme of "Partnerships for Prosperity in NSW". The Corporate Plan outlines SEDA's achievements, objectives, strategies and performance targets for the next three-year period.

### Seminars

#### GOAL

To provide a broad range of high-quality low-cost industry education, on a cost recovery basis.

#### RESULT

SEDA's Seminar and Events unit runs high quality seminars on a cost recovery basis to support the SEDA program areas. The seminars encourage knowledge sharing and networking, and heighten awareness of NSW government initiatives.

During the reporting period SEDA's Seminar Co-ordinator ran a total of 18 seminars, reaching over 1200 sustainable energy industry participants. Over \$150,000 in revenue was achieved and subsequently channeled into the provision of further educational initiatives.

The seminar topics included waste coal mine gas capture and use, municipal waste to energy, regional sustainability initiatives, cogeneration, commercial and street lighting, energy financial management, maintaining your energy savings and more.

The 2003 Business Energy Efficiency seminar series was supported by major sponsor Swiss Re, the global reinsurance firm who are strongly commitment to sustainability, and to educating their clients and the wider business community of the business risks of climate change.

Qualitative market research conducted in 2003 among key SEDA stakeholders produced the following responses, which confirm the success of the seminars business unit:

*"Its seminars are very useful. SEDA educates its network of managers. The energy saving programs wouldn't survive without SEDA's involvement - "council doesn't have the time or resources to do this itself."*

*"SEDA has built and run its network through its facilitation role. It's a streamlined process that draws on the best available expertise and puts its network in touch with the ideas and information."*

In planning and conducting all events and public communications initiatives SEDA adhered to our evolving Ethnic Affairs Priority Plan and our Disability Action Plan. In 2003 SEDA also partnered with Auspower Green Events to purchase an equivalent amount of Green Power required to run all seminars held in 2003, effectively eliminating greenhouse emissions caused through the delivery of our events.

### Energy Smart Information Centre

#### GOAL

To provide free high quality energy advice to all NSW residents and thereby grow the market for sustainable energy technologies.

## RESULT

SEDA's Energy Smart Information Centre (ESIC) provides free practical advice on all energy efficient or renewable energy applications for the residential energy consumer. Available five days a week, via email, fax, toll free telephone enquiries, or in person, the Centre fielded over 5800 enquiries during the reporting period, and mailed requested energy information packages to over 2000 NSW energy consumers.

A clients survey conducted 12 months after moving this centre from the Sydney Building Information Centre to the SEDA offices revealed no loss in customer satisfaction or service delivery, with 83% of respondents rating the value of this service to the community very highly.

During the year ESIC also increase community outreach activity, whereby the Energy Smart Consultants were available to attend community, and industry events to spread the Energy Smart word. Over 40 events attended included the Sydney Home Show, workshops with Rotary, Ryde TAFE, University of NSW, Sydney University, the CSIRO Double Helix Club, and industry groups; including the Urban Developers Industry Association, Building Designers Association, Alternative Technology Association and numerous local government events.

## Energy Smart Allies

### GOAL

To engage and monitor the growth of the sustainable energy industry of NSW.

### RESULT

The Energy Smart Allies program keeps lines of communication open between SEDA and sustainable energy companies, to drive industry development and obtain stakeholder feedback on industry issues. SEDA manages an online directory, produces and distributes a monthly newsletter to participating Allies and provides networking and education opportunities.

During the reporting period the number of Energy Smart Allies rose from 315 to 375. This database network formed the basis of an economic impact survey of the nation's sustainable energy industry, with the co-operation of SEDA's corresponding organisations in other states. The Australian Sustainable Energy Survey 2002 was released in January 2003. In NSW total annual sales in 2001/2 were \$1.5 billion with a growth rate of between 8%-13% per annum.

Including indirect effects, the total contribution of the sustainable energy industry is estimated at between \$2.8 billion and \$4.0 billion in 2001/2. The NSW sustainable energy industry directly employed nearly 5,500 full-time equivalent staff in 2001/2, and it is estimated to stimulate a total of between 11,600 and 18,200 jobs throughout the State. The value of exports from sustainable energy companies in NSW in 2001/2 was estimated to exceed \$75 million per annum.

## Sustainable Energy Gateway – Export Program

The NSW sustainable energy Industry enjoys annual sales of \$1.5 billion, and is growing annually at 8%-13% per annum. The value of exports from sustainable energy companies in NSW in 2001/2 was estimated to exceed \$75 million per annum. Hence SEDA has established the Australian Sustainable Energy Gateway as a dedicated export program to facilitate growth of this nascent industry by identifying and securing export opportunities in international markets, particularly in developing countries.

The Gateway is a two-way service, that assists international players identify key technologies or companies located in NSW, and assists NSW companies identify markets and opportunities overseas. SEDA offers capacity building, technology transfer, and inbound and outbound delegations and trade mission services on a commercial basis.

SEDA has already established development agreements with corresponding government authorities in Taiwan, South Korea and recently China following a highly successful sustainable energy delegation in May 2002. During the reporting period SEDA hosted a variety of inbound study tours and delegations including:

- A bagasse cogeneration study tour for the Chinese Renewable Energy Industry Association on behalf of the United Nations Environment Program
- Presentation to the Provincial Electricity Authority of Thailand July 2003
- Presentation to the Beijing Municipal Institute for City Planning and Design and Planning, July 2002
- Presentation to the Chinese Ministry of Land Resources, August 2002
- Presentation to the Solar Energy Research Institute, Korean Ministry of Commerce, Industry and Energy Delegation October 2002
- Presentation to the China Coal Thermal Association, March 2003

### SEDA also presented at

- The International Conference on Recent Renewable Policy Development sponsored by the Beijing State Development Planning Commission (SDPC) in Beijing July 2002
- The Clean Energy Conference in Bagalore India, in February 2003; and
- The World Sustainable Energy Awards in Austria in March 2003

SEDA will continue to target international trade and development programs to assist with sponsoring study tours for foreign delegations to research of our State's impressive sustainable energy infrastructure and development.

## Market Development And Policy

While SEDA does not have regulatory powers, it does have a crucial role in informing and advising policy makers and stakeholders on directions to expand the sustainable energy market in NSW. In 2002/03 SEDA made numerous contributions to developing this market.

SEDA continued to encourage greater awareness of the potential for demand management (DM) by contributing to the major IPART Inquiry into the Role of Demand Management in NSW, promoting the DM Code of Practice for Electricity Distributors and through the work of SEDA's Distributed Energy Solutions Business Unit.

Building on its two earlier reports, *Electricity Labelling: Enhancing Competition and Consumer Choice through Information Disclosure* (1999) and *Implementing Electricity Labelling in NSW* (2001), SEDA cooperated with the Sustainable Energy Authority of Victoria to establish a website to provide consumers information on greenhouse gas emissions associated with the supply of electricity and options to reduce emissions (see [www.greenhousegases.gov.au](http://www.greenhousegases.gov.au)). This website was created following decisions by the NSW and Victorian Governments for electricity retailers to disclose greenhouse gases on electricity bills.

On behalf of the Western Sydney Environment Taskforce, SEDA coordinated the Draft Western Sydney Sustainable Energy Plan (WSSEP) to promote greater understanding of the potential for sustainable energy in western Sydney. SEDA continued to conduct sessions of our innovative Carbonopoly emissions trading interactive simulation with interested government, business and community stakeholders.

Following its seminal survey of the NSW sustainable energy Industry in 1999, SEDA initiated and coordinated a national industry survey involving all States, Territories and the Federal Government. The study found 2100 companies involved nationally in the sustainable energy industry contributing an estimated \$9.6 billion per annum to the Australian economy and directly employing over 16,000 people. Sales are growing at 16% per annum and employment at 10% per annum and the export of goods and services to the global market place topped \$355 million in 2001/2. The study also found that NSW stills retains the largest share of the industry by employment, sales and exports, but that other states' industries are expanding at a faster rate.

Complementing the industry survey, SEDA commissioned a major study by the Allen Consulting Group to investigate the potential for the sustainable energy industry to contribute to job creation and economic growth in NSW and to identify key strategies to foster this growth. Guided by a Steering Committee of key NSW business and labour organisations, the study found that a concerted range of measures to support the sustainable energy industry could lead to a net increase of 4100 jobs and boost to the NSW Gross State Product of more than \$500 million per annum. This report was complemented by a detailed case study of the potential to establish a wind turbine manufacturing plant in NSW. The Sustainable Energy Jobs Report is available on the SEDA website at: [www.seda.nsw.gov.au/pdf/PDF\\_GH\\_DIS\\_PAGE6\\_182.pdf](http://www.seda.nsw.gov.au/pdf/PDF_GH_DIS_PAGE6_182.pdf)

## Our Finances And Administration

In line with SEDA's Act and its strategic business plan, SEDA is to employ the available funds to optimise the commercialisation of sustainable energy technologies. SEDA's financial and investment management strategy incorporates:

- an innovative program of projects to transform the marketplace in favour of sustainable energy technologies
- a focus on long term partnerships with organisations in the residential, commercial, industrial and government sectors
- appropriate risk identification and management
- leveraging SEDA finances to generate optimal private investments in the sustainable energy industry
- and where possible, to earn income from SEDA's commercial relationships, to meet the self-generated income targets as detailed in our Operational Business Plan

### Financial Assistance and Investment

In 2002/03 grants totaled a gross amount of \$2.212m, down on last year's gross total by approximately 47% (\$4.72m). The grants were allocated mainly through SEDA's Coal Seam Methane program (\$0.6m) and in the Energy Smart residential program (\$0.7m).

Concessional loans to industry totaled \$2.150m in 2002/03. The funds were allocated under SEDA's Renewable Energy Programs. SEDA's concessional loans include loans mainly secured by company or bank guarantees and a fixed or floating charge over the assets. These loans are also in general, repayable in installments between one to 15 year terms with a weighted effective interest rate ranging from 4.3% to 5.6% for fixed and variable interest loans.

### Program Expenditure

In addition to grants, SEDA's direct program expenditures relate to fees for program implementation, education and marketing services.

Fees for program implementation increased by 8% from the previous year to \$3.999m reflecting a continuing shift toward commercial evolution of SEDA's programs.

Education and marketing expenditure totaled \$754,000 to implement SEDA's continued marketing and communications strategies including Green Power and Live Energy Smart. This is a

decrease of approximately 45% from the previous reporting period as SEDA adjusted its marketing strategies to incorporate the "It's a Living Thing" awareness campaign.

### Revenues

SEDA's revenues totalled \$2.368m which represented an increase of \$0.391m on the previous year. This income was earned from interest received, provision of services and product sales, license fees and program contributions.

### Forward Budget

Treasury allocation for 2003-2004 is \$9.839 million. SEDA expenditure for this period will include this amount plus self generated funds.

### Assets and Liabilities

SEDA's total assets are \$13.338m. This increase was largely due to an increase in cash on hand of \$0.637m from \$0.458m to \$1.095m thanks to improved cash management by SEDA's financial services team and an increase of non-current other financial assets of \$0.992m from

\$8.582 m to \$9.574 m as a result of new loans made by SEDA.

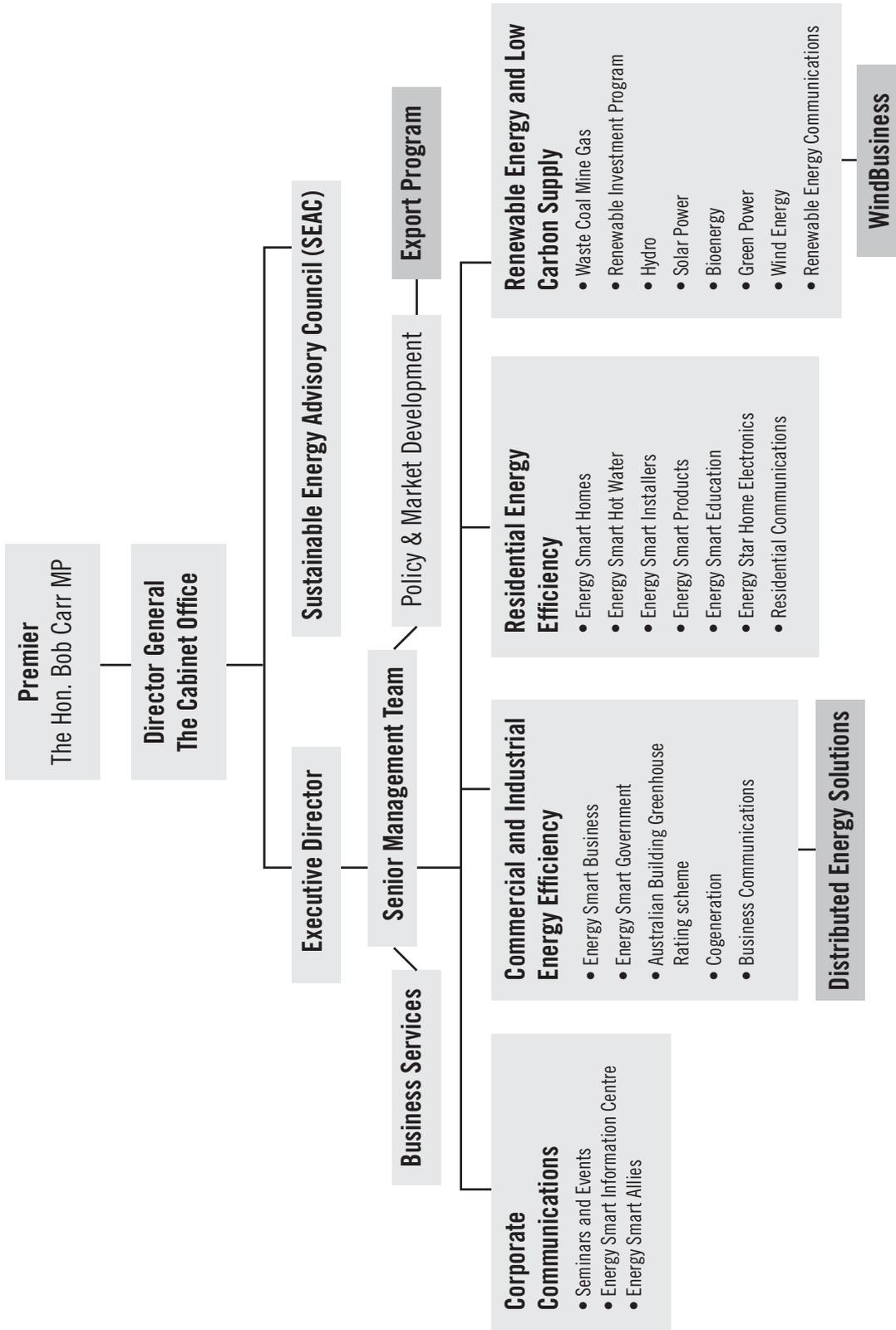
### Administration

The Business Services Team manages administration, finances, legal contracts, some human resource procedures and information systems services, while also coordinating communication with relevant government agencies in relation to SEDA's reporting obligations and administrative procedures. The team comprises the finances team, the executive assistant, two administrative officers closely aligned with program areas and a receptionist.

In terms of financial reporting, Business Services produced monthly Treasury reports within 14 days from the month end through the year. The Authority received an unqualified report on the financial statements for the year ended June 2003.

SEDA's information technology system was subject to ongoing maintenance and upgrades. As a result there was no significant IT incidents or loss of data. During the reporting period the individual training needs of SEDA's staff were met on a request basis.

# Our Structure



# Equal Employment Opportunity

## A. Trends in the Representation of EEO Groups

EEO Group	Benchmark or Target	% of Total Staff			
		2000	2001	2002	2003
Women	50%	66%	54%	60%	58%
Aboriginal people and Torres Strait Islanders	2%	0%	0%	0%	0%
People whose first language was not English	20%	7%	5%	2%	2%
People with a disability	12%	0%	0%	0%	0%
People with a disability requiring work-related adjustment	7%	0%	0%	0%	0%

## B. Trends in the Distribution of EEO Groups

EEO Group	Benchmark or Target	Distribution Index			
		2000	2001	2002	2003
Women	100	n/a	n/a	n/a	n/a
Aboriginal people and Torres Strait Islanders	100	0	0	0	0
People whose first language was not English	100	n/a	n/a	n/a	n/a
People with a disability	100	0	0	0	0
People with a disability requiring work-related adjustment	100	0	0	0	0

### Notes:

- Staff numbers are as at 30 June.
- Excludes casual staff
- A Distribution Index of 100 indicates that the centre of the distribution of the EEO group across salary levels is equivalent to that of other staff. Values less than 100 mean that the EEO group tends to be more concentrated at lower salary levels than is the case for other staff. The more pronounced this tendency is the lower the index will be.
- In some cases the index may be more than 100 indicating that the EEO group is less concentrated at lower salary levels.
- The Distribution Index is not calculated where EEO group or non-EEO group numbers are less than 20.

## SUSTAINABLE ENERGY DEVELOPMENT AUTHORITY

### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED 30 JUNE 2003

Pursuant to Section 41C (1C) of the Public Finance and Audit Act 1983, I state that:

- a) the accompanying financial statements have been prepared in accordance with the applicable Australian Accounting Standard, the requirements of the Public Finance and Audit Act 1983, the Public Finance and Audit Regulations, the Financial Reporting Directions published in the Financial Reporting Code for Budget Dependent General Government Sector Agencies, the Treasurer's Directions and other authoritative pronouncements of the Australian Accounting Standards Board (AASB) and Urgent Issues Group (UIG) Consensus Views;
- b) the Statement of Financial Performance presents a true and fair view of the results of the Authority for the year ended 30 June 2003; and
- c) the Statement of Financial Position gives a true and fair view of the state of affairs of the Authority as at 30 June 2003; and
- d) there are no circumstances which would render any particulars included in the financial statements to be misleading or inaccurate.



MARK FOGARTY  
EXECUTIVE DIRECTOR  
16 October 2003

**Sustainable Energy Development Authority**

**ABN 80 526 465 581**

Level 6, 45 Clarence Street Sydney

PO Box N442 Grosvenor Place NSW 1220 Australia

**Telephone** + 61 2 9249 6100 **Facsimile** + 61 2 9299 1519 **Email** [seda@seda.nsw.gov.au](mailto:seda@seda.nsw.gov.au) **Web Site** [www.seda.nsw.gov.au](http://www.seda.nsw.gov.au)



GPO BOX 12  
SYDNEY NSW 2001

## INDEPENDENT AUDIT REPORT

### SUSTAINABLE ENERGY DEVELOPMENT AUTHORITY

To Members of the New South Wales Parliament

#### Audit Opinion

In my opinion, the financial report of the Sustainable Energy Development Authority:

- (a) presents fairly the Authority's financial position as at 30 June 2003 and its financial performance and cash flows for the year ended on that date, in accordance with applicable Accounting Standards and other mandatory professional reporting requirements in Australia, and
- (b) complies with sections 41B and 41BA of the *Public Finance and Audit Act 1983* (the Act).

The opinion should be read in conjunction with the rest of this report.

#### The Executive Director's Role

The financial report is the responsibility of the Executive Director of the Sustainable Energy Development Authority. It consists of the statement of financial position, the statement of financial performance, the statement of cash flows, the program statement - expenses and revenues, the summary of compliance with financial directives and the accompanying notes.

#### The Auditor's Role and the Audit Scope

As required by the Act, I carried out an independent audit to enable me to express an opinion on the financial report. My audit provides *reasonable assurance* to Members of the New South Wales Parliament that the financial report is free of *material* misstatement.

My audit accorded with Australian Auditing and Assurance Standards and statutory requirements, and I:

- evaluated the accounting policies and significant accounting estimates used by the Executive Director in preparing the financial report, and
- examined a sample of the evidence that supports the amounts and other disclosures in the financial report.

An audit does *not* guarantee that every amount and disclosure in the financial report is error free. The terms 'reasonable assurance' and 'material' recognise that an audit does not examine all evidence and transactions. However, the audit procedures used should identify errors or omissions significant enough to adversely affect decisions made by users of the financial report or indicate that the Executive Director had failed in his reporting obligations.

My opinion does *not* provide assurance:

- about the future viability of the Authority,
- that the Authority has carried out its activities effectively, efficiently and economically,
- about the effectiveness of its internal controls, or
- on the assumptions used in formulating the budget figures disclosed in the financial report.

#### **Audit Independence**

The Audit Office complies with all applicable independence requirements of Australian professional ethical pronouncements. The Act further promotes independence by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General, and
- mandating the Auditor-General as auditor of public sector agencies but precluding the provision of non-audit services, thus ensuring the Auditor-General and the Audit Office are not compromised in their role by the possibility of losing clients or income.



M P Abood CPA  
Director of Audit

SYDNEY  
20 October 2003

## Sustainable Energy Development Authority

### Statement of Financial Performance for the Year Ended 30 June 2003

	Notes	Actual 2003 \$'000	Budget 2003 \$'000	Actual 2002 \$'000
<b>Expenses</b>				
Operating expenses				
Employee related	3(a)	3,620	3,597	2,952
Other operating expenses	3(b)	1,839	1,704	1,560
Maintenance		10	10	13
Depreciation and amortisation	3(c)	309	208	311
Grants and subsidies	3(d)	1,412	2,224	3,645
Other expenses	3(e)	4,753	4,980	5,372
<b>Total Expenses</b>		<u>11,943</u>	<u>12,723</u>	<u>13,853</u>
Less:				
<b>Retained Revenue</b>				
Sale of goods and services	4(a)	640	1,890	811
Investment income	4(b)	345	186	292
Grants and contributions	4(c)	362	1,577	576
Other revenue	4(d)	1,021	410	298
<b>Total Retained Revenue</b>		<u>2,368</u>	<u>4,063</u>	<u>1,977</u>
<b>Gain / (loss) on disposal of non-current assets</b>	5	-	-	-
<b>Net Cost of Services</b>	18	<u>9,575</u>	<u>8,660</u>	<u>11,876</u>
<b>Government Contributions</b>				
Recurrent appropriation	6	9,362	9,362	9,338
Capital appropriation	6	1,000	1,000	2,011
Acceptance by the Crown Entity of employee benefits and other liabilities	7	336	226	253
<b>Total Government Contributions</b>		<u>10,698</u>	<u>10,588</u>	<u>11,602</u>
<b>SURPLUS / (DEFICIT) FOR THE YEAR FROM ORDINARY ACTIVITIES</b>		<u>1,123</u>	<u>1,928</u>	<u>(274)</u>
<b>SURPLUS / (DEFICIT) FOR THE YEAR</b>		<u>1,123</u>	<u>1,928</u>	<u>(274)</u>
<b>TOTAL REVENUES, EXPENSES AND VALUATION ADJUSTMENTS RECOGNISED DIRECTLY IN EQUITY</b>				
<b>TOTAL CHANGES IN EQUITY OTHER THAN THOSE RESULTING FROM TRANSACTIONS WITH OWNERS AS OWNERS</b>	15	-	-	-
		<u>1,123</u>	<u>1,928</u>	<u>(274)</u>

The accompanying notes form part of these statements

## Sustainable Energy Development Authority

### Statement of Financial Position as at 30 June 2003

	Notes	Actual 2003 \$'000	Budget 2003 \$'000	Actual 2002 \$'000
<b>ASSETS</b>				
<b>Current Assets</b>				
Cash	8	1,095	2,433	458
Receivables	10	896	1,366	1,251
Other financial assets	9	1,074	1,029	1,021
<b>Total Current Assets</b>		<u><b>3,065</b></u>	<u><b>4,828</b></u>	<u><b>2,730</b></u>
<b>Non - Current Assets</b>				
Other financial assets	9	9,574	8,662	8,582
Property, Plant and Equipment - Plant and Equipment	11	699	811	969
<b>Total Non - Current Assets</b>		<u><b>10,273</b></u>	<u><b>9,473</b></u>	<u><b>9,551</b></u>
<b>Total Assets</b>		<u><b>13,338</b></u>	<u><b>14,301</b></u>	<u><b>12,281</b></u>
<b>LIABILITIES</b>				
<b>Current Liabilities</b>				
Payables	13	639	744	739
Provisions	14	168	145	147
<b>Total Current Liabilities</b>		<u><b>807</b></u>	<u><b>889</b></u>	<u><b>886</b></u>
<b>Non-Current Liabilities</b>				
Provisions	14	13	-	-
<b>Total Non - Current Liabilities</b>		<u><b>13</b></u>	<u><b>-</b></u>	<u><b>-</b></u>
<b>Total Liabilities</b>		<u><b>820</b></u>	<u><b>889</b></u>	<u><b>886</b></u>
<b>Net Assets</b>		<u><b>12,518</b></u>	<u><b>13,412</b></u>	<u><b>11,395</b></u>
<b>Equity</b>				
Accumulated Funds	15	12,518	13,412	11,395
<b>Total Equity</b>		<u><b>12,518</b></u>	<u><b>13,412</b></u>	<u><b>11,395</b></u>

The accompanying notes form part of these statements

## Sustainable Energy Development Authority

### Statement of Cash Flows For the Year Ended 30 June 2003

	Notes	Actual 2003 \$'000	Budget 2003 \$'000	Actual 2002 \$'000
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>				
<b>Payments</b>				
Employee related		(3,508)	(3,500)	(2,805)
Grants and subsidies		(1,412)	(2,224)	(3,645)
Other		(7,773)	(7,147)	(8,153)
<b>Total payments</b>		<u>(12,693)</u>	<u>(12,871)</u>	<u>(14,603)</u>
<b>Receipts</b>				
Sale of goods and services		865	1,890	703
Interest received		318	221	285
Other		2,687	2,287	2,479
<b>Total receipts</b>		<u>3,870</u>	<u>4,398</u>	<u>3,467</u>
<b>Cash flows from Government</b>				
Recurrent appropriation		9,362	9,362	9,338
Capital appropriation		1,000	1,000	2,011
Cash reimbursements from the Crown Entity		239	226	169
<b>Net Cash Flows from Government</b>		<u>10,601</u>	<u>10,588</u>	<u>11,518</u>
<b>NET CASH FLOWS FROM OPERATING ACTIVITIES</b>	<b>18</b>	<u>1,778</u>	<u>2,115</u>	<u>382</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>				
Advance repayments received		1,048	910	3,294
Purchases of Plant and Equipment		(39)	(50)	(367)
Advances made		(2,150)	(1,000)	(3,550)
<b>NET CASH FLOWS FROM INVESTING ACTIVITIES</b>		<u>(1,141)</u>	<u>(140)</u>	<u>(623)</u>
<b>NET INCREASE / (DECREASE) IN CASH</b>				
Opening cash and cash equivalents		637	1,975	(241)
		458	458	699
<b>CLOSING CASH AND CASH EQUIVALENTS</b>	<b>8</b>	<u>1,095</u>	<u>2,433</u>	<u>458</u>

The accompanying notes form part of these statements

## Sustainable Energy Development Authority

### Summary of Compliance with Financial Directives

	2003				2002			
	RECURRENT APP'N	EXPENDITURE/ NET CLAIM ON CONSOLIDATED FUND	CAPITAL APP'N	EXPENDITURE / Net Claim on ConFund	RECURRENT APP'N	EXPENDITURE	CAPITAL APP'N	EXPENDITURE
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Original Budget</b>								
<b>Appropriation/Expenditure</b>								
Appropriation Act	9,362	9,362	1,000	1,000	9,338	9,338	2,011	2,011
Additional Appropriations								
s21A PF&AA-special appropriation	-	-	-	-	-	-	-	-
s24 PF&AA-transfers of functions between departments	-	-	-	-	-	-	-	-
s26 PF&AA-Commonwealth specific purpose payments	-	-	-	-	-	-	-	-
	9,362	9,362	1,000	1,000	9,338	9,338	2,011	2,011
<b>OTHER APPROPRIATIONS/ EXPENDITURE</b>								
Treasurer's Advance	-	-	-	-	740	-	-	-
Section 22-expenditure for certain works and services	-	-	-	-	-	-	-	-
Transfers to/from another agency (s25 of the Appropriation Act)	-	-	-	-	-	-	-	-
	-	-	-	-	740	-	-	-
<b>Total Appropriations / Expenditure/Net Claim on Consolidated Fund (includes transfer payments)</b>	9,362	9,362	1,000	1,000	10,078	9,338	2,011	2,011
<b>Amount drawn down against Appropriation</b>	-	9,362	-	1,000	-	9,338	-	2,011
<b>Liability to Consolidated Fund</b>	-	-	-	-	-	-	-	-

The Summary of Compliance is based on the assumption that Consolidated Fund moneys are spent first (except where otherwise identified or prescribed). The Treasurer's Advance of \$740,000 in Year 2002 was a provisional appropriation by the New South Wales Treasury to accommodate the New South Wales Government proposed expenditure commitment being a funding proposal under the Federal Government Greenhouse Gas Abatement Program. As the funding proposal was not successful the proposed program was not implemented and the funds were not drawn down,

# Sustainable Energy Development Authority

## Notes to and forming part of the Financial Statements

### (1) REPORTING ENTITY

The Sustainable Energy Development Authority was established under the The Sustainable Energy Development Act 1995 No96 (the Act).

The Act established a Sustainable Energy Fund which is to be administered by the Authority. In the course of carrying out its functions under the Act, the Authority provides energy development assistance that includes the ability to make grants, subsidies and loans.

Program control of the Sustainable Energy Development Authority is exercised through the use of one Budget Program, 'Reduce Adverse Environmental Impacts of Energy Use'. This is further achieved through the following portfolios:

**(a) Energy Efficiency** – targets specific sectors of energy consumption (eg industrial, commercial, residential) or specific technology (eg water heaters, air conditioning) or practice (lighting installation management); and encourages more efficient delivery of energy services.

**(b) Co-generation and fuel substitution** – promotes the use of fossil fuel to generate electricity and heat at the same time, such that the overall efficiency of fuel use is high, or use of non toxic waste materials from agricultural or manufacturing processes for power generation and concurrent heat production.

Fuel substitution process for power generation and concurrent heat production involve programs concerned with the substitution of more carbon intensive energy forms (eg coal generated electricity) with less carbon intensive energy forms (eg natural gas).

**(c) Renewable Energy** – expands, strengthens and aids in the development of the market for renewable energy technologies.

**(d) Core** – essential support programs encompassing energy policy development, information, education and training and advisory services.

**(e) Business Services** – provides the overall corporate support services for the Authority.

As the Authority has only one program the *Financial Reporting Code for Budget Dependant General Government Sector Agencies* does not require details of expenses and revenues to be produced in a Program Statement as this information is already available in the Statement of Financial Performance.

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### (a) Basis of Accounting

The Authority's financial statements are a general- purpose financial report which has been prepared on an accruals basis and in accordance with:

- Applicable Australian Accounting Standards;
- Other authoritative pronouncements of the Australian Accounting Standards Board (AASB);
- Urgent Issues Group (UIG) Consensus Views;
- The requirements of the Public Finance and Audit Act and Regulations; and
- The Financial Reporting Directions published in the Financial Reporting Code for Budget Dependent General Government Sector Agencies or issued by the Treasurer under section 9(2)(n) of the Act.

Where there are inconsistencies between the above requirements, the legislative provisions have prevailed. In the absence of a specific Accounting Standard, other authoritative pronouncement of the AASB or UIG Consensus View, the hierarchy of other pronouncements as outlined in AAS 6 "Accounting Policies" is considered. The financial statements are prepared in accordance with historical cost. All amounts are rounded to the nearest one thousand dollars and are expressed in Australian currency. The accounting policies adopted are consistent with those of the previous year.

#### (b) Administered Activities

There are no administered activities.

## Sustainable Energy Development Authority

### (c) Revenue Recognition

Revenue is recognised when the Authority has control of the good or right to receive, it is probable that the economic benefits will flow to the Authority and the amount of revenue can be measured reliably. Additional comments regarding the accounting policies for the recognition of revenue are discussed below.

#### (i) Parliamentary appropriations and Contributions from Other Bodies

Parliamentary appropriations and contributions from other bodies (including grants and donations) are generally recognised as revenues when the agency obtains control over the assets comprising the appropriations / contributions.

Control over appropriations and contributions is normally obtained upon the receipt of cash.

An exception to the above is when appropriations are unspent at year-end. In this case, the authority to spend the money lapses and generally the unspent amount must be repaid to the Consolidated Fund in the following financial year. As a result, unspent appropriations are now accounted for as liabilities rather than revenue.

The Authority has no unspent appropriations for the year ended 30 June 2003.

#### (ii) Sale of Goods and Services

Revenue from the sale of goods and services comprises revenue from the provision of products or services ie user charges. User charges are recognised as revenue when the Authority obtains control of the assets that result from them.

#### (iii) Investment income

Interest revenue is recognised as it accrues.

### (d) Employee Benefits and other provisions

#### (i) Salaries and Wages, Annual Leave, Sick Leave and On-Costs

Liabilities for salaries, wages and annual leave are recognised and measured in respect of employees' services up to the reporting date at nominal amounts based on the amounts expected to be paid when the liabilities are settled.

Unused non vesting sick leave does not give rise to a liability as it is not considered probable that sick leave taken in the future will be greater than the benefits accrued in the future.

The outstanding amounts of payroll tax, workers' compensation insurance premiums and fringe benefits tax, which are consequential to employment, are recognised as liabilities and expenses where the employee benefits to which they relate have been recognised.

#### (ii) Accrued salaries and wages-reclassification

As a result of the adoption of Accounting Standard AASB 1044 "Provisions, Contingent Liabilities and Contingent Assets", accrued salaries and wages and on-costs have been reclassified to "payables" instead of "provisions" in the Statement of Financial Position and the related note disclosures, for the current and comparative period.

On the face of the Statement of Financial Position and in the Notes, reference is now made to "provisions" in place of "employee entitlements and other provisions". Total employee benefits (including accrued salaries and wages) are reconciled in Note 14 "Provisions".

#### (iii) Long Service Leave and Superannuation

The Authority's Liabilities for long service leave and superannuation are assumed by the Crown Entity. The Authority accounts for the liability as having been extinguished resulting in the amount assumed being shown as part of the non-monetary revenue item described as "Acceptance by the Crown Entity of Employees Benefits and other Liabilities".

Long service leave is measured on a short-hand basis. The short-hand method is based on the remuneration rates at year end for all employees with five or more years of service. It is considered that this measurement technique produces results not materially different from the estimate determined by using the present value basis of measurement.

## Sustainable Energy Development Authority

The Superannuation expense for the financial year is determined by using the formulae specified in the Treasurer's Directions. The expense for certain superannuation schemes (ie Basic Benefit and First State Super) is calculated as a percentage of the employees' salary. For other superannuation schemes (ie State Superannuation Scheme and State Authorities Superannuation Scheme), the expense is calculated as a multiple of the employees' superannuation contributions.

### (iv) Other Provisions

Other provisions exist when the Authority has a present legal, equitable or constructive obligation to make a future sacrifice of economic benefits to other entities as a result of past transactions or other past events. These provisions are recognised when it is probable that a future sacrifice of economic benefits will be required and the amount can be measured reliably.

Any provisions for restructuring are recognised either when a detailed formal plan has been developed or will be developed within prescribed time limits and where the Authority has raised a valid expectation in those affected by the restructuring that it will carry out the restructuring.

### (e) Insurance

The Authority's insurance activities are conducted through the NSW Treasury Managed Fund Scheme of self insurance for Government agencies. The expense (premium) is determined by the Fund Manager based on past experience.

### (f) Acquisition of Assets

The cost method of accounting is used for the initial recording of all acquisitions of assets controlled by the Authority. Cost is determined as the fair value of the assets given as consideration plus the costs incidental to the acquisition.

Fair value means the amount for which an asset could be exchanged between a knowledgeable, willing buyer and a knowledgeable, willing seller in an arm's length transaction.

### (g) Plant and Equipment

Plant and equipment costing \$5,000 and above are individually capitalised except for items of Computer hardware which are all capitalised.

### (h) Depreciation of Non-Current Physical Assets.

Depreciation is provided for on a straight line basis for all depreciable assets so as to write off the depreciable amount of each asset as it is consumed over its useful life to the entity. All material separately identifiable component assets are recognised and depreciated over their shorter useful lives, including those components that in effect represent major periodic maintenance. Depreciation of each class of depreciable assets are as follows: Furniture and Fittings 20% pa, Office Equipment 20% pa, Computer Equipment 25% pa. Other includes the Photovoltaic Systems 5% p.a. and the Wind Monitoring Towers 23% p.a. (increased from 20% p.a. following a reassessment of the towers useful life). The NSW Government has subsequently given funding to SEDA to June 2007 and consequently the Authority will review the useful life and associated depreciation rates for all other assets to ensure the life of these assets reflects the time over which the Authority will exist.

### (i) Revaluation of Non-Current Physical Assets.

SEDA was established in 1996 (through the NSW Government Sustainable Energy Act 1995) to reduce energy associated gas emissions. The first full year of operation was the year ended June 1997. In accordance with the Financial Reporting Code for Budget Dependant General Government Sector Agencies and Treasury Circular 91/20 each class of non-current physical assets are to be revalued every 5 years. Such a revaluation would normally have been conducted during the year ended June 2002. Previously SEDA's future existence had been uncertain and on that basis the revaluation was deferred. The NSW Government has subsequently given funding to June 2007. The Authority has reviewed each class of asset and has concluded that given the life expectancy of the Non-Current Physical Assets, the carrying value of these assets is a reasonable approximation of fair value.

## Sustainable Energy Development Authority

### (j) Leased Assets

A distinction is made between finance leases which effectively transfer from the lessor to the lessee substantially all the risks and benefits incidental to ownership of the leased assets, and operating leases under which the lessor effectively retains all such risks and benefits. Operating lease payments are charged to the Statement of Financial Performance in the periods in which they are incurred. The Authority has no finance leases.

### (k) Receivables

Receivables are recognised and carried at cost. Bad debts are written off as incurred.

### (l) Trust Funds

The Authority received monies in a trustee capacity as set out in Note 22. As the Authority performs only a custodial role in respect of these monies, and because the monies cannot be used for the achievement of the Authority's own objectives, they are not brought to account in the financial statements.

### (m) Payables

These amounts represent liabilities for goods and services provided to the Authority.

### (n) Accounting for the Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where: the amount of GST incurred by the Authority as a purchaser that is not recoverable from the Australian Taxation Office is recognised as part of the cost of acquisition of an asset or as part of an item of expense.

Receivables and payables are stated with the amount of GST included.

### (o) Budgeted amounts

The budgeted amounts are drawn from the budgets as formulated at the beginning of the financial year and with any adjustments for the effects of additional appropriations, s 21A, s 24 and/or s 26 of the Public Finance and Audit Act 1983. The budgeted amounts in the Statement of Financial Performance and the Statement of Cash Flows are generally based on the amounts disclosed in the NSW Budget Papers, (as adjusted above). However, in the Statement of Financial Position the amounts vary from the Budget Papers, as the opening balances of the budgeted amounts are based on carried forward actual amounts ie. per the audited financial statements (rather than carried forward estimates).

## Sustainable Energy Development Authority

	2003 \$'000	2002 \$'000
<b>3. EXPENSES</b>		
<b>(a) Employee related expenses</b>		
Salaries and wages ( including recreation leave)	2,986	2,455
Long Service Leave	68	42
Superannuation	326	259
Workers' compensation insurance	21	12
Payroll tax and fringe benefit tax	186	134
Other	33	50
	<u>3,620</u>	<u>2,952</u>
<b>(b) Other operating expenses</b>		
Auditor's remuneration-audit of the financial reports	15	12
Bad and doubtful debts	6	5
Operating lease rental expense		
- minimum lease payments	538	316
Insurance	6	5
Travel	148	168
Communications and information technology	254	284
Miscellaneous office expenditure and stores	140	214
Staff training, development and conferences	206	159
Other business services	332	200
Other expenses	194	197
	<u>1,839</u>	<u>1,560</u>
<b>(c) Depreciation and Amortisation</b>		
<b>Depreciation</b>		
Computer equipment	25	29
Fixtures and fittings	-	61
Office machines and equipment	6	29
Other	278	192
	<u>309</u>	<u>311</u>
<b>(d) Grants and Subsidies</b>		
<b>Energy Efficiency Program</b>		
Energy Efficiency - commercial /industrial/government	22	40
Energy Smart - domestic sector	737	750
	<u>759</u>	<u>790</u>
<b>Renewable Energy Technology Program</b>		
Bioenergy technology	247	386
Green power direct marketing	23	18
Programs / Wind, Hydro and SolarThermal Electric	(554)	100
Photovoltaics technology	222	746
Coal Seam Methane	600	1,450
	<u>538</u>	<u>2,700</u>
<b>Cogeneration Program</b>		
Cogeneration Technology	12	72
<b>Core Program</b>		
Energy efficiency	103	83
	<u>1,412</u>	<u>3,645</u>
<b>(e) Other Expenses</b>		
Education and marketing	754	1,674
Fee for service program delivery	3,999	3,698
	<u>4,753</u>	<u>5,372</u>

## Sustainable Energy Development Authority

	2003 \$'000	2002 \$'000
<b>4 REVENUES</b>		
<b>(a) Sale of goods and rendering of Services</b>		
<b>Sale of goods</b>		
Photovoltaic Systems output	12	12
Software and associated brochures to achieve energy efficiency	-	72
Assessment Reports	79	4
<b>Rendering of Services</b>		
Home Electronics Program	-	29
Residential Programs	6	59
AGO PV Rebate Program	13	129
Building Greenhouse Rating Scheme	205	212
Energy Star Program	50	29
Commercial/Industrial/Government Photovoltaic Program	166	126
	109	139
	<u>640</u>	<u>811</u>
<b>(b) Investment Income</b>		
Interest from NSW Treasury Cash Management System	126	170
Interest on Loans	219	122
	<u>345</u>	<u>292</u>
<b>(c) Contributions</b>		
Residential Program Contributions	66	91
Wind Monitoring Program Contribution	8	163
Co-generation Development Program	46	48
Green Power marketing and accreditation contributions	147	274
Waste Coal Seam Methane contribution	95	-
	<u>362</u>	<u>576</u>
<b>(d) Other Revenue</b>		
Green Globe Award	21	-
Sustainable Energy Export	29	53
License Fees	77	70
Seminars	124	137
Benchmarks	113	-
Wind Licence Fees	226	-
Wind	185	-
Distributed Energy Systems	50	-
Other	196	38
	<u>1,021</u>	<u>298</u>

## Sustainable Energy Development Authority

	2003 \$'000	2002 \$'000
<b>5 GAIN/(LOSS) ON DISPOSAL OF NON-CURRENT ASSETS</b>		
Gain/ (loss) on disposal of plant and equipment		
Proceeds from disposals	-	-
Written down value of assets disposed of	-	-
Net gain/ (loss) on disposal of plant and equipment	-	-
	<u>          </u>	<u>          </u>
Gain/ (loss) on sale of non-current assets	<u>          </u>	<u>          </u>
<b>6 APPROPRIATIONS</b>		
<b>Recurrent Appropriations</b>		
Total recurrent drawdowns from Treasury (per Summary of Compliance)	9,362	9,338
Less: Liability to Consolidated Fund (per Summary of Compliance)	-	-
	<u>9,362</u>	<u>9,338</u>
Comprising:		
Recurrent appropriations (per Statement of Financial Performance)	9,362	9,338
Transfer Payments	-	-
	<u>9,362</u>	<u>9,338</u>
<b>Capital Appropriations</b>		
Total capital drawdowns from Treasury (per Summary of Compliance)	1,000	2,011
Less: Liability to Consolidated Fund (per Summary of Compliance)	-	-
	<u>1,000</u>	<u>2,011</u>
Comprising:		
Capital appropriations (per Statement of Financial Performance)	1,000	2,011
Transfer Payments	-	-
	<u>1,000</u>	<u>2,011</u>
<b>7 ACCEPTANCE BY THE CROWN ENTITY OF EMPLOYEE BENEFITS AND OTHER LIABILITIES</b>		
The following liabilities and / or expenses have been assumed by the Crown Entity :		
Superannuation	257	199
Long Service Leave	63	42
Payroll tax	16	12
	<u>336</u>	<u>253</u>

## Sustainable Energy Development Authority

	2003	2002
	\$'000	\$'000
<b>8 CURRENT ASSETS-CASH</b>		
Cash at bank and on hand	1,095	458
	<u>1,095</u>	<u>458</u>

For the purposes of the Statement of Cash Flows ,cash includes cash on hand,cash at bank and bank overdraft.

Cash assets recognised in the Statement of Financial Position are reconciled to cash at the end of the financial year as shown in the Statement of Cash Flows as follows:

Cash (per Statement of Financial Position)	1,095	458
Closing cash and cash Equivalents (per Statement of Cash Flows)	<u>1,095</u>	<u>458</u>

### 9 CURRENT / NON-CURRENT ASSETS-OTHER FINANCIAL ASSETS

#### Current

##### Other Loans and Deposits

Cogeneration program	261	361
Renewable Energy Technology Program	634	530
Energy Efficiency	179	130
	<u>1,074</u>	<u>1,021</u>

#### Non-Current

##### Other Loans and Deposits

Cogeneration program	1,722	1,946
Renewable Energy Technology Program	5,759	5,492
Less Diminution of Value	(57)	-
Energy Efficiency	1355	320

#### Shares

Convertible Redeemable Preference Shares	765	794
Ordinary Shares	30	30
	<u>9,574</u>	<u>8,582</u>

#### Significant terms and conditions

Loans are usually secured by bank or company guarantees or fixed or floating charge over the assets and are repayable in installments over periods as indicated in Note 23. Convertible Redeemable Preference Shares are subject to a repayment program over 8 years with interest @ 3% calculated daily and payable on 1st January and 30th June each Year. The Authority has made a partial reduction in the value of one Non-Current Loan.This reduction reflects a possible change in circumstances associated with the terms of repayment.These issues are currently subject to negotiation between the parties.

### 10 CURRENT ASSETS-RECEIVABLES

Interest from NSW Treasury cash management system	73	109
Interest on loans	96	33
Debtors	501	488
Prepayments	35	47
GST Receivable	191	574
	<u>896</u>	<u>1,251</u>

## Sustainable Energy Development Authority

### 11 NON-CURRENT ASSETS-PROPERTY, PLANT AND EQUIPMENT

#### Plant and Equipment

	Furniture & Fittings \$'000	Office Equipment \$'000	Computer Equipment \$'000	Other \$'000	Total \$'000
<b>2003</b>					
Carrying amount at start of year	3	16	46	904	969
Additions	-	-	-	39	39
Disposals	-	-	-	-	-
Acquisitions through administrative restructures	-	-	-	-	-
Net revaluation increment less revaluation decrements	-	-	-	-	-
Depreciation Expense	-	(6)	(25)	(278)	(309)
Carrying amount at end of year	<b>3</b>	<b>10</b>	<b>21</b>	<b>665</b>	<b>699</b>
<b>2002</b>					
Carrying amount at start of year	64	27	61	761	913
Additions	-	14	17	336	367
Disposals	-	-	-	-	-
Acquisitions through administrative restructures	-	-	-	-	-
Net revaluation increment less revaluation decrements	-	-	-	-	-
Depreciation Expense	(61)	(25)	(32)	(193)	(311)
Carrying amount at end of year	<b>3</b>	<b>16</b>	<b>46</b>	<b>904</b>	<b>969</b>

The "Other" category of Non-Current Assets consists of Wind Monitoring Towers as part of the NSW Wind Resource Mapping Program and the Photovoltaic systems.

## Sustainable Energy Development Authority

	2003 \$'000	2002 \$'000
<b>12 NON-CURRENT ASSETS-PROPERTY, PLANT AND EQUIPMENT</b>		
Plant and Equipment At Fair Value	2,038	1,999
	<u>2,038</u>	<u>1,999</u>
Less Accumulated Depreciation	1,339	1,030
	<u>1,339</u>	<u>1,030</u>
<b>Total Property, Plant and Equipment at Fair Value</b>	<u>699</u>	<u>969</u>

The Authority continues to derive service potential and economic benefit from assets with a cost value of \$573,856. These assets have been fully depreciated.

Computer Equipment	49 Items	\$220,413
Furniture & Fittings	16 Items	\$277,415
Office Equipment	5 Items	\$76,028
Other	<u>1 Item</u>	<u>-</u>
<b>Total</b>	<b><u>71 Items</u></b>	<b><u>\$573,856</u></b>

### 13 CURRENT LIABILITIES- PAYABLES

Creditors	384	632
Accrued expenses	29	38
Contributions in Advance	126	-
Accrued salaries, wages and on-costs	100	69
	<u>639</u>	<u>739</u>

### 14 CURRENT / NON-CURRENT LIABILITIES-PROVISIONS

#### Current

Employee benefits and related on-costs	168	147
Recreation leave	<u>168</u>	<u>147</u>

#### Non Current

Employee benefits and related on-costs	13	-
	<u>13</u>	<u>-</u>

### 15 CHANGES IN EQUITY

Balance as at the beginning of the financial year	11,395	11,669
Surplus / (deficit) for the year	1,123	(274)
Balance as at the end of the financial year	<u>12,518</u>	<u>11,395</u>

### 16 CONTINGENT LIABILITIES

As at 30th June 2003, the Authority had an estimated potential liability of \$137,500 resulting from an estimated 550 units at a rebate of \$250 each from future claims under the Energy Smart Hot Water Discount Scheme for approved units purchased & installed prior to this date. This program is a partnership contract with a major manufacturer of Energy Smart water heaters to encourage the installation of low greenhouse gas emission hot water heaters in NSW homes.

As at 30th June 2002, the Authority had no Contingent Liabilities.	138	-
	<u>138</u>	<u>-</u>

## Sustainable Energy Development Authority

	2003 \$'000	2002 \$'000
<b>17 COMMITMENTS FOR EXPENDITURE</b>		
<b>(a) Capital Commitments</b>		
Aggregate capital expenditure contracted for at balance date and not provided for:		
Not later than one year	-	-
Later than one year and not later than five years	-	-
Later than five years	-	-
Total (including GST)	<u>-</u>	<u>-</u>
<b>(b) Operating Lease Commitments</b>		
Future non-cancellable operating lease rentals not provided for and payable:		
Not later than one year	793	724
Later than one year and not later than five years	170	777
Later than five years	-	-
Total (including GST)	<u>963</u>	<u>1,501</u>

**(c) Contingent Assets**

A contingent asset for the amount of \$ 87,341 represents the GST that is expected to be recoverable from the Australian Taxation Office.

**18 RECONCILIATION OF CASH FLOWS FROM OPERATING ACTIVITIES TO NET COST OF SERVICES**

Net cash used on operating activities	(1,778)	382
Cash Flows from Government / Appropriations	10,362	11,349
Depreciation and amortisation	309	311
Acceptance by the Crown Entity of employee entitlements and other liabilities	336	(253)
(Increase) / decrease in provisions	(34)	(46)
Increase / (decrease) in receivables and prepayments	(355)	(66)
Increase / (decrease) in creditors	(100)	199
Repayment of Grants & Subsidies	835	-
<b>Net cost of services</b>	<u>9,575</u>	<u>11,876</u>

**19 BUDGET REVIEW****NET COST OF SERVICE**

A reduction of \$780,000 in Total Expenses and a reduction of \$1,695,000 in Total Retained Revenue results in a variance in Net Cost of Services of \$915,000 compared to 2002/2003 budget. The budget figure reflected the relatively low Net Cost of Services forecasts used when Controlled Net Cost of Services limits were adopted as the primary budget control for NSW budget dependant agencies in 2001. These forecasts did not allow for the Authority to spend all revenue it generated through self funding and fee for service activities. The Authority's Controlled Net Cost of Services limits are subject to a current review led by the NSW Cabinet Office of the Authority's role in the context of the proposed establishment of the NSW Greenhouse Office.

**ASSETS & LIABILITIES**

Net assets decreased compared to budget by \$894,000. This variance comprises of a decrease in Cash of \$1,338,000 and an increase of \$45,000 in Other Financial Assets offset by a decrease in Receivables of \$470,000 to give an overall decrease in Current Assets of \$1,763,000. In addition there was a increase in Non-Current Assets of \$800,000 attributable mainly to an increase of \$912,000 in Other Financial Assets. Current Liabilities decreased by \$82,000 comprising of a reduction of \$105,000 in payables and offset by an increase of \$23,000 in employee benefits.

**CASH FLOWS**

There was a net decrease in cash compared to budget of \$1,338,000. Cash flows from Operating Activities were impacted by a reduction in Revenue receipts and by a decrease in Grants made. Cash flows from Investing Activities were influenced by increased loan repayments offset by an increase in loans transacted.

## Sustainable Energy Development Authority

### 20 PROGRAM OF THE AUTHORITY

#### 48.1.1 Reduce Adverse Environmental Impacts of Energy Use

The program objectives are to reduce greenhouse gas emissions and other adverse by-products of the generation and use of energy. To encourage the development, commercialisation, promotion and use of sustainable energy technology.

### 21 AFTER BALANCE DATE EVENTS

There are no events occurring after reporting date which provide new information that relates to conditions existing at the reporting date.

### 22 TRUST FUNDS

The Authority holds money in a Trust Fund which is used for the Australian Greenhouse Office photovoltaics rebate scheme. These monies are excluded from the financial statements as the Authority cannot use them for the achievement of its objectives. The following is a summary of the transactions in the trust account:

Cash balance at the beginning of the financial year	1,148	808
Add: Receipts	1,498	1,924
Less: Expenditure	(2,220)	(1,584)
Cash balance at the end of the reporting period	<u>426</u>	<u>1,148</u>

### 23 FINANCIAL INSTRUMENTS

Financial instruments are carried in the Accounts at net fair value unless otherwise stated.

#### Interest rate risk

Interest rate risk is the risk that the value of the financial instruments will fluctuate due to changes in market interest rates.

The Authority's exposure to interest rate risk and the effective interest rates of financial assets and liabilities, both recognised and unrecognised as at 30 June 2003 are as follows:

	Floating Interest Rate		1 year or less		over 1 to 5 years		over 5 years		Non-interest bearing		Total carrying amount as per Statement of Financial Position		Weighted average effective interest rate	
	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Financial assets</b>														
Loans-non-interest	-	-	514	253	190	955	-	100	-	-	704	1,308	N/A	N/A
Loans-fixed interest	-	-	450	697	2,666	2,367	2,176	-	-	-	5,292	3,064	4.3%	4.3%
Loans-variable interest	-	-	110	70	1,877	2,930	1,870	1,408	-	-	3,857	4,408	5.6%	5.6%
Shares	-	-	110	30	544	460	140	334	-	-	794	824	3.0%	3.0%
Receivables	-	-	-	-	-	-	-	-	861	1,307	861	1,307	N/A	N/A
Cash	1,095	458	-	-	-	-	-	-	-	-	1,095	458	3.8%	3.5%
<b>Total</b>	<b>1,095</b>	<b>458</b>	<b>1,184</b>	<b>1,050</b>	<b>5,277</b>	<b>6,712</b>	<b>4,186</b>	<b>1,842</b>	<b>861</b>	<b>1,307</b>	<b>12,603</b>	<b>11,369</b>	-	-
<b>Financial liabilities</b>														
Creditors	-	-	-	-	-	-	-	-	639	739	639	739	N/A	N/A
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>639</b>	<b>739</b>	<b>639</b>	<b>739</b>	<b>-</b>	<b>-</b>

#### Credit risk

Credit risk is the risk of financial loss arising from another party to a contract or financial position failing to discharge a financial obligation thereunder. The Authority's maximum exposure to a credit risk is represented by carrying amounts of financial assets in the Statement of Financial Position.

**END OF AUDITED FINANCIAL STATEMENTS**

# Appendices

## Access

The Sustainable Energy Development Authority is located at **Level 6, 45 Clarence Street, Sydney**. Office hours are 8.30am – 5.30pm Monday to Friday.

Postal address:

**PO Box N442, Grosvenor Place NSW 1220 Australia.**

**Telephone: (02) 9249 6100 Facsimile: (02) 9299 1519**

**E-mail: .....seda@seda.nsw.gov.au**

**Web site: ....http://www.seda.nsw.gov.au**

## Occupational Health and Safety (OH&S)

An OH&S Audit was completed during the financial year and the findings were satisfactory. SEDA's OH&S Plan will ensure that all obligations under the Act continue to be met. There were two Workers' Compensation claims for injuries incurred off SEDA's premises during the reporting period. SEDA has recently appointed a committee of OHS officers to ensure staff are provided with a safe and happy work environment in keeping with OH&S standards. Currently 60% of SEDA staff are women, and we continue to exceed the NSW Government's benchmark for women in the workforce.

## Equal Employment Opportunity (EEO)

SEDA is an equal opportunity employer and maintains a work environment free of discrimination. For 2002/2003, SEDA's EEO strategies include keeping abreast of developments and recommendations contained in the current Review of Merit Selection in the NSW Public Sector produced by the Office of the Director of Equal Opportunity in Public Employment (ODEOPE).

## Industrial Relations

There were no industrial disputes involving SEDA employees during the reporting period. There were no exceptional movements in wages, salaries or allowances

## Consultants Engaged

A consultant is a person or organisation who is engaged by SEDA to provide expert advice on a temporary, fixed term or ad hoc basis for a specific task under a contract for service.

There were no consultancies over \$30,000 during the reporting year. SEDA's total expenditure on consultancy engagements was \$2000 in the category of environmental consulting.

## Government Energy Management Policy

In planning and selecting office space SEDA has shown particular care in energy use using state of the art lighting systems, best appliances in their size and class and by ensuring that features such as Energy Star are enabled on all office equipment. SEDA has maintained its five star rating under the Building Greenhouse Rating Scheme.

## Risk Management and Insurance

SEDA has comprehensive insurance coverage through the NSW Treasury Managed Fund. This coverage includes insurance for Workers' Compensation, motor vehicles, property, liability and miscellaneous risks. Risk assessment and management are built into SEDA's business process through its Program Development and Management Tracking system. This enables each SEDA project to be rigidly scoped, developed and regularly monitored throughout implementation. At the project scoping and development phase, risk assessment is undertaken through an early and thorough identification of the major barriers and risks to the project.

## Disability Action Plan

The Authority has implemented a Disability Action Plan, which now forms part of the induction process for all staff.

## Multicultural Affairs

SEDA has ensured the principles of the Ethnic Affairs Priority Statement are followed in all communications activities and initiatives. SEDA is currently undertaking a research project with other State government agencies to ascertain the level of environmental behaviours and attitudes in the non-English speaking background community. SEDA also aims to take into account the cultural diversity of its staff in the Authority's working arrangements.

## Overseas Representation

Paula Cribb, Marketing Manager of the National Green Power Accreditation Program was a key note speaker at the European Conference on Green Power Marketing in Switzerland 2002. This trip was funded by the European Conference organisers.

Alison Reeve, Solar Power Program Manager, was selected to represent SEDA through a presentation at the International Energy Agencies Photovoltaic Systems Working Group Conference in Japan in May 2002

Alasdair Lawrence, Export Manager, travelled to China in July 2002, to attend the International Conference on Recent Renewable Policy Development sponsored by the Beijing State Development Planning Commission (SDPC) in Beijing. His visit was privately funded. Alasdair also attended the Clean Energy Conference in Bangalore India, in February 2003, where his costs were borne by the conference organisers.

Mark Fogarty, Executive Director was invited to give a paper to the World Sustainable Energy Awards in Austria in March 2003. His costs were funded by the conference organisers. Mark was also invited by the Asian Development Bank to give a presentation on the Clean Development Mechanisms of the Kyoto protocol in December 2001. This trip was funded by the Asian Development Bank.

## Executive Director and Governance

Mark Fogarty, Executive Director, joined SEDA on January 30, 2000,

from the Australian Industry Group, where he was Director of Energy and Environment. Mark is a member of the Sustainable Energy Advisory Council (SEAC), a consultative body also established under the Sustainable Energy Development Act of 1995. SEAC's role is to advise SEDA's Minister on the development, commercialisation, promotion and use of sustainable energy technology, or any other matter the Minister may refer to the Council for advice. After the conclusion of the Council's term in November 2003 no new members were appointed. The other members of the Senior Management Team include Associate Director, Chris Dunstan BA, BEc MEd, Associate Director Ian Higgins BA, MBA, Chief Financial Officer, John Cahill, CPA, MCom, Susan Koreman BAp Sc (Mech Eng), Matthew Harnak BEng (Mech) (Hons) GradDip Mgt and Suzanne Dunford, BA Comm.

Under the Sustainable Energy Development Act 1995 responsibility for the operation of SEDA rests with the Executive Director, who reports to the Minister for Energy. Following the State election in April 2003 ministerial responsibility for SEDA now rests with Premier Carr.

The Executive Director oversees the implementation of the Authority's legislative responsibilities and business strategies approved by the Minister and the day-to-day operations of the Authority. In respect of Corporate Governance, the Authority must ensure that its operations are consistent with the SEDA Act, the Public Finance and Audit Act, the other relevant finance and employment related legislation.

SEDA is focused on responsible management, and increased transparency and accountability to the NSW community. We constantly look for initiatives to improve our standard of compliance while efficiently and effectively delivering on our legislated objectives. During the Reporting period SEDA was reviewed by the Council on the Quality and Cost of Government, and as yet there have been no findings from that review.

### Payment of Accounts

All accounts received were paid within 30 days as required by Treasury Directions. This has been SEDA's target in previous years and will continue to be the performance target in 2003-2004. There were no funds granted to non-government community organisations.

#### ACCOUNTS PAID ON TIME WITHIN EACH QUARTER

Quarter	Total Accounts Paid on Time		Total Amount Paid	
	Target %	Actual %	\$	\$
September Quarter	100%	100%	2,862,122	2,862,122
December Quarter	100%	100%	3,028,306	3,028,306
March Quarter	100%	100%	2,685,511	2,685,511
June Quarter	100%	100%	7,062,170	7,062,170

There were no problems affecting the prompt processing of payments during the year. There was no instance where interest was incurred due to the delay in making payment.

### Investment Performance

SEDA does not offer concessional funding or financial assistance, as outlined in the financial reports.

### Land Disposal

SEDA does not own property.

### Research and Development

SEDA's Act precludes the undertaking of Research and Development.

### NSW Government Action Plan for Women

The NSW Government is committed to access, equity, rights and participation for women in the NSW Public Service. SEDA has reflected the spirit of this plan through our family friendly work policies and our Human Resources Handbook.

### Credit Card Certification

SEDA has two credit cards; one in the control of the Executive Director and one in the control of the Office manager. Credit Card usage is conducted in accordance with Premier's Memoranda and the Treasurer's Directions. There was no credit card certification completed during the reporting period.

### Publications

SEDA's Annual report cost approximately \$5600 to design and print. There were no other external costs involved with the production of this report. SEDA's Annual report is always available from the home page of the SEDA website in PDF format.

During 2002/2003, SEDA produced several key publications including:

- The SEDA Annual Report 2001-2002
- The SEDA Corporate Plan 2002-2005
- The Australian Sustainable Energy Survey 2002
- Who Buys Solar Power Systems?

SEDA also maintains the following websites;

- <http://www.seda.nsw.gov.au>
- <http://www.energysmart.com.au>
- <http://www.greenpower.com.au>
- <http://www.energysmartallies.com>
- <http://www.abgr.com.au>

### Privacy and Freedom of Information

SEDA's Privacy Management Plan is still in development. There was one request for information under the Freedom of Information Act during the year, which was answered within the prescribed time, and did not cause any major impact on SEDA activities. Applications for access to SEDA's documents under the Freedom of Information Act should be made by post to:

**The Executive Director  
Sustainable Energy Development Authority  
PO Box N442, Grosvenor Place NSW 1220**

or in person to the Authority at:

**Suite 602, Level 6, 45 Clarence Street, Sydney NSW 2000**

## Electronic Service Delivery

SEDA's progress in electronic service delivery was reviewed by the Department of Information and Technology during the reporting period, and found to be satisfactory in consideration of our limited resources.

## Waste Management

Environmentally responsible work practices are an integral part of SEDA's operation. SEDA recycles paper, toner cartridges, plastics and glass. Recycled paper is purchased for use in all publications and office communications. In the interest of waste avoidance SEDA also provides all staff with mugs to get their morning coffees and all SEDA's printers are set to optimise paper reuse. SEDA's management of waste and recycling activities are aligned with the objectives of the NSW WRAPP.

## Complaints

SEDA's Energy Smart Information Centre records all public enquiries including complaints. On average one complaint is received at SEDA every two weeks – usually regarding rebate programs.

# Glossary

1 kilowatt (kW)	= 1,000 watts
1 megawatt (MW)	= 1,000 kW
1 gigawatt (GW)	= 1,000 MW
<b>Electricity Consumption Units</b>	
kWh	kilowatt-hour
MWh	megawatt-hour
GWh	gigawatt-hour
<b>Common abbreviations</b>	
REC	Renewable Energy Certificate
MRET	Mandatory Renewable Energy Target
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide equivalent
LTT	lifetime tonnes (of CO <sub>2</sub> emitted during a project's life)
Energy Supply LTT	Hydro Electricity.....30 years Bioenergy.....15 years Solar PV.....20 years Solar Thermal.....7 years Wind Energy.....20 years
Residential LTT	Building Envelope.....40 years Energy Smart Hot Water system.....10 years Energy Star Home Electronics.....3 years
Business LTT	Energy Smart Business (3-15 yrs).....10 years average Energy Smart Government (3-15 yrs).....10 years average Cogeneration.....20 years Energy Star Office Equipment.....3 years

