

AUSTRALIA

1. GOALS FOR EFFICIENCY IMPROVEMENT

1.1. Overall Energy Efficiency Improvement Goals

The Australian Government released the Energy White Paper 2015 (EWP 2015) to provide consumers with certainty and confidence in the energy policy. The EWP 2015 includes a strategic policy framework that addresses the challenges in Australia's energy sector and positions the economy for long-term transformation regarding the way it produces and uses energy.

As part of the EWP 2015, the government announced that it would develop a National Energy Productivity Plan (NEPP), including a energy productivity improvement target of 40% between 2015 and 2030. This is equivalent to a 402 petajoule (PJ) energy demand reduction compared to business-as-usual (BAU). Energy productivity will be measured as the number of Australian dollars of the GDP produced per PJ of primary energy.

Australia also has an emissions reduction target of 26% to 28% below 2005 levels by 2030.

The other strategic policy framework addressing Australian energy efficiency is the Clean Energy Future (CEF) program, which contains a number of elements, including a price on carbon as well as initiatives to encourage energy efficiency in Australia (refer to Section 1.6). Further details on the CEF program are available at www.cleanenergyfuture.gov.au.

1.2. Sectoral Energy Efficiency Improvement Goals

The EWP 2015 does not state sectoral targets although it does provide estimates of potential energy savings by sectors. If all energy efficiency potentials are achieved, then Australia would far surpass its energy productivity target.

1.3. Action Plans for Promoting Energy Efficiency

1.3.1. National Energy Efficiency Governance Arrangements

The Select Council on Climate Change (SCCC), formed in 2012, consists of Australian and State Government Ministers, New Zealand Ministers, and a representative from the Australian local government. The SCCC is currently responsible for overseeing the National Strategy on Energy Efficiency (NSEE).

The Standing Council on Energy and Resources (SCER) has the responsibility for the safe, prudent, and competitive development of Australia's energy markets. This includes energy market reform measures designed to increase demand-side participation through regulatory reforms of the electricity and gas markets.

1.3.2. National Energy Productivity Plan

The NEPP will replace the previous NSEE, but it will also be broader to consider all measures across energy market reforms, which can support energy consumers to manage their costs (such as pricing reform and fuel switching).

a) Objective

The key objective is to empower energy consumers in all sectors to make better energy decisions and effectively manage their energy costs. Attached to this overall objective is the 40% energy productivity target.

b) Applicable sectors

Actions developed under the NEPP will cover the residential, commercial, transport, and industrial sectors.

c) Outline

The NEPP will replace the previous NSEE, but it will also be broader to consider all measures across energy market reforms, which can support energy consumers to manage their costs (such as pricing reform and fuel switching).

The NEPP will support energy consumers (both large and small) and service providers to make better decisions on energy and effectively manage energy costs. It will include:

- Measures that support efficient decisions when selecting energy services such as smart meters, cost-reflective prices, access to information, and labels.
- Measures that support the development of better energy services through innovation and competition such as reducing barriers to entry in the market for new technologies and service options.
- Measures that ensure efficient minimum services and performance including those through standards for equipment, appliances, and buildings as well as financial resources and budget allocation.

d) Method for monitoring and measuring effects of action plans

Surveys, statistic compilations, end-use information, monitoring, and trend analysis are all undertaken. In addition, databases are maintained to assist in program evaluation, meeting international reporting obligations, and policy formation.

The Australian Government's Department of Industry, Innovation and Science (DIIS) is mainly responsible for energy efficiency monitoring and reporting. Its programs and measures include:

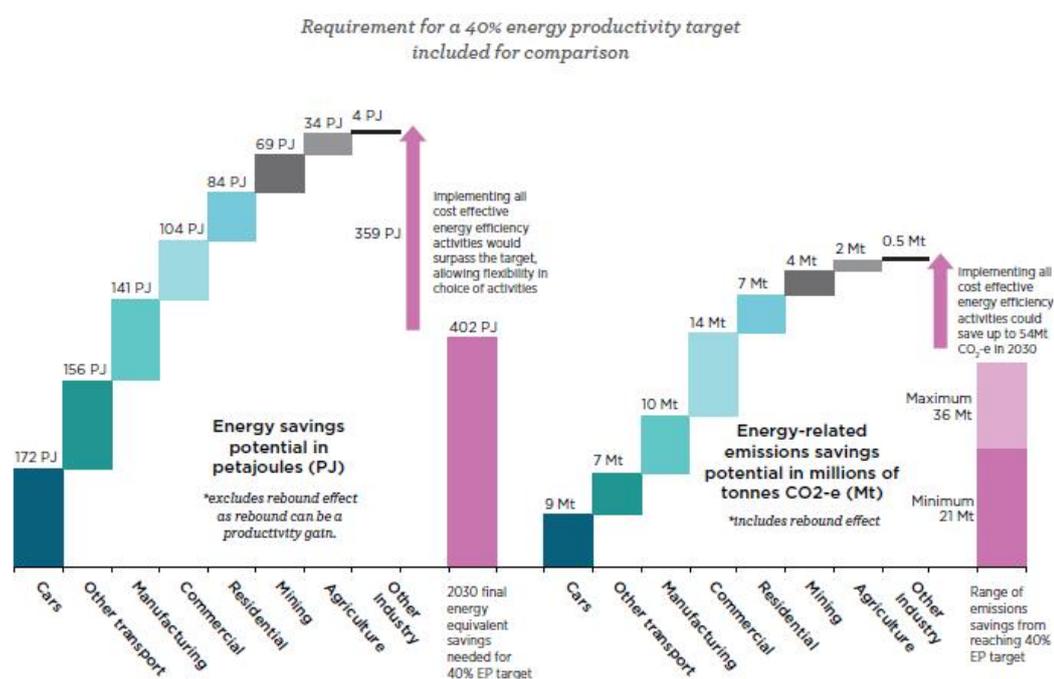
- The Department of Resources, Energy and Tourism (DRET) on behalf of the Equipment Energy Efficiency Program, monitors and reports information through its "Energy Use in the Australian Residential Sector 1986-2020" report. This report, the second economy-wide baseline study on residential energy use, covers private residential dwellings, including those that are separate (such as single-detached family homes) and attached (such as townhouses or apartments). The modeling incorporates Australian energy policy programs in place or finalized by mid-2007.
- The DRET is also responsible for the analysis regarding the projected effects of the Equipment Energy Efficiency Program over the 2000-2020 time period. The results are published in the report titled, "Prevention is Cheaper than Cure" Avoiding Carbon Emissions through Energy Efficiency, Projected Impacts of the Equipment Energy Efficiency Program to 2020.
- The Clean Energy Regulator administers the National Greenhouse and Energy Reporting Scheme (NGERS). The National Greenhouse and Energy Reporting Act established NGERS in 2008 under which corporations exceeding legislated thresholds must report their annual greenhouse gas emissions, energy production, and consumption. For the 2010-11 financial year and subsequent years, corporations must report if their group consumes more than 200 terajoules (TJs) of energy per year or if a facility in their group consumes more than 100 TJs of energy per year.
- The DRET administers the Energy Efficiency Opportunities (EEO) program under which companies and electricity generators using more than 0.5 PJs of energy per year must identify and report on energy efficiency opportunities both to the public and the government.
- Through the Commercial Building Disclosure Program, the DRET produces a public listing of energy performance regarding office buildings in Australia, along with an increasingly rich set of data analyses.

- The DRET commissions work on economy-wide energy intensity (undertaken by the Australian BREE). The most recent report titled, 'End Use Energy Intensity in the Australian Economy,' was published in 2012. A full list of publications is available at <http://www.bree.gov.au/publications/index.html>. The BREE also prepares the Australian Energy Statistics on behalf of the DRET.
- The Australian Bureau of Statistics also collects and publishes a wide range of energy-related statistics.

e) Expected results

Besides the overall objective and target, the NEPP has identified potential savings in all sectors (Figure 1). While there is no prescribed target for each sector, all of the savings are assumed to be achievable and cost-effective. Thus, the target will be achieved through a combination of approaches in all of these areas.

Figure 1. Energy saving opportunities in the Australian economy



Source: Department of Industry, Innovation and Science of Australian Government

f) Future tasks

Implementation the NEPP, which was published in 2015.

1.4. Institutional Structure

a) Name of organization

The Australian Constitution divides legislative powers between the national and state governments. As such, policy responsibility for energy efficiency varies between the levels of government.

At the economy level, the DIIS has direct responsibility for the development of energy efficiency policies and measures as well as the coordination of the implementation of the NEPP. A number of other government agencies have sectoral interests in energy efficiency, including the departments in charge of transport, industry, climate change, research and development, and education.

The NEPP is the main mechanism for coordinating energy efficiency policies and actions with the state and local governments through the Commonwealth of Australian Governments (COAG). At the state/territory level, there is a wide range of institutional structures. The following includes the agencies that are primarily responsible for energy efficiency:

- New South Wales: Department of Environment and Heritage.
- Northern Territory: Department of Lands, Planning and the Environment.
- Queensland: Department of Energy and Water Supply.
- South Australia: Department for Manufacturing, Innovation, Trade, Resources and Energy; Department of Environment, Water and Natural Resources; and the Essential Services Commission of South Australia.
- Tasmania: Department of Infrastructure, Energy and Resources.
- Victoria: Department of Primary Industries; Sustainability Victoria; and the Essential Services Commission.
- Western Australia: Public Utilities Office within the Department of Finance.
- Australian Capital Territory: The Environment and Sustainable Development Directorate.

b) Status of organization

All agencies report to the relevant Australian or state government minister.

c) Roles and responsibilities

They vary across departments.

d) Covered sectors

All sectors of the economy are covered.

e) Established date

Multiple jurisdictions.

f) Number of staff members

No information available.

1.5. Information Dissemination, Awareness-Raising, and Capacity-Building

a) Information collection and dissemination

The department manages a wide range of information, capacity-building, and knowledge-sharing web resources, including the following websites:

The Energy Efficiency Exchange (EEX) (eex.gov.au) ó supporting energy management and energy efficiency strategies for industry, covering a range of sectors and technologies.

YourEnergySavings.gov.au ó how to save energy, save money, and reduce one's impact at home, including information regarding all available government assistance.

YourHome.gov.au ó providing guidance on building and renovating homes in a sustainable manner.

The department manages the COAG website for the Equipment Energy Efficiency Program (energyrating.gov.au), which is in the process of being redeveloped. The department also developed a mobile application that allows consumers to compare the energy efficiency of labeled appliances through their smartphones.

In January 2012, Australia commenced the Industrial Energy Efficiency Data Analysis Project (IEEDAP), which is a collaborative project between the DRET and state and territory governments. The project provides detailed analyses regarding energy usage and energy savings opportunities by subsector, fuel type, and technology processes in a wide range of

industrial sectors. The data has been sourced from five years of mandatory company reports submitted under the EEO program, the NGERs, and various state-based programs. The findings from this project will be used by policymakers to better integrate information, incentives, and other policy programs in order to unlock energy savings potential. The findings are also disseminated to the industry in order to allow them to improve their identification and evaluation of energy-saving opportunities.

b) Awareness-raising

There are no economy-wide, energy efficiency awareness-raising programs. However, awareness campaigns may be undertaken within specific initiatives such as the phasing out of inefficient incandescent lighting. Some states do participate in awareness-raising activities.

c) Capacity-building

The NEPP includes a number of measures related to capacity building for the industry, including supporting businesses to improve their energy efficiency and assisting businesses to ensure that they have adequate knowledge and skills as well as the capacity to meet the challenges of operating in a low-carbon economy. Key elements of these measures include developing targeted outreach information and addressing skills gaps and shortages.

In addition, numerous associations and universities provide energy management-related courses.

A National Energy Efficiency Skills Initiative (NEESI) is being developed under the NSEE. The NEESI will build on the existing processes under the National Framework for Energy Efficiency (NLEE) to ensure that Australia will have the skills and knowledge required to move toward a low-carbon economy.

The Enterprise Connect Clean Technology Innovation Network works with firms to determine ways to cut energy, water, and material use; plan for change; and adopt new technologies that will reduce their energy use and environmental impact. It also supports new products, processes, and skills as well as builds relationships with research, education, and training providers.

1.6. Research and Development in Energy Efficiency and Conservation

In general, Australia undertakes a technology-neutral approach toward research and development funding, with researchers focusing on energy efficiency-related projects that compete with other projects for funding. However, there are a number of specific programs that support research and development in energy efficiency.

Clean Energy Finance Corporation

A new AUD \$10 billion Clean Energy Finance Corporation was established in July 2013, independent from the Australian Government. It will invest in the commercialization and deployment of renewable energy, low pollution, and energy-efficient technologies. The investments will be divided into two streams: a renewable energy stream and an energy-efficient, low-emissions technology stream, each with half of the allocated funding.

Industrial Energy Efficiency Analysis Project

As stated in Section 1.5, Australia commenced the Industrial Energy Efficiency Data Analysis Project (IEEDAP) in January 2012. This collaborative project between the DRET and state and territory governments provides detailed analyses of energy usage and energy savings opportunities by subsector, fuel type, and technology processes. The data, sourced from 5 years of mandatory reports submitted under the EEO program, the NGERs, and other state-based programs, focuses on the potential factors (both market and non-market) that affect the uptake of energy efficiency throughout various industrial sectors. The findings from this project will be used by policymakers to integrate information, incentives, and other policy programs in order to unlock energy savings potential and improve the identification and evaluation of energy-saving opportunities.

Clean Technology Program

The Clean Technology Program (CTP) provides over AUD \$1 billion in funding to help reduce emissions and improve the energy efficiency of manufacturing industries as well as support the development of new low-emission, energy-efficient products, processes, and services.

The Clean Technology Program comprises three components:

The Clean Technology Investment Program and the Clean Technology Food and Foundries Investment Program provide combined funding of up to AUD \$865 million to help manufacturing businesses invest in energy-efficient capital equipment and low-emissions technologies, processes, and products.

The Clean Technology Innovation Program is an AUD \$173 million competitive, merit-based grant program that helps Australian businesses undertake applied research and development, and proof-of-concept and early-stage commercialization activities in order to develop low-emission, energy-efficient technologies that reduce greenhouse gas emissions.

Steel Transformation Plan

The Steel Transformation Plan will provide assistance of up to AUD \$300 million over five years in order to encourage investment and innovation in the Australian steel manufacturing industry. This plan is designed to improve the environmental outcomes of steel manufacturing and promote the development of workforce skills.

Clean Energy Skills Program

Funding of approximately AUD \$32 million will help educational institutions and the industry develop the materials and expertise necessary to promote clean energy skills. The Clean Energy Skills Program will provide the foundation for a new type of workplace skills that will become increasingly valuable as Australia moves toward a clean energy economy. Tradespersons and professionals alike will be eligible for assistance under this program to develop the skills necessary to deliver energy efficiency services, clean energy projects, and low-pollution products to Australian households, communities, and businesses.

Energy Efficiency Information Grants

The Energy Efficiency Information Grants program will provide AUD \$40 million in grants over four years to industrial associations and non-government organizations that have established relationships with small businesses and community organizations. The main goals are to deliver information regarding the implications of the government's CEF program and how to reduce energy costs.

Low-Carbon Communities

The government's Low-Carbon Communities (LCC) program was expanded to provide funding through competitive grants to local councils and communities, improve energy efficiency in council and community-use buildings and facilities, and assist low-income households. Information on LCC programs is available at <http://ee.ret.gov.au/energy-efficiency/grants>.

2. MEASURES FOR ENERGY EFFICIENCY IMPROVEMENTS

2.1. Government Laws, Decrees, and Acts

2.1.1. Mandatory Disclosure of Commercial Building Energy Efficiency

a) Name

Building Energy Efficiency Disclosure Act 2010

b) Purpose

Commercial Building Disclosure (CBD) is an economy-wide program designed to improve the energy efficiency of Australia's large office buildings.

c) Applicable sectors

Commercial buildings sector.

d) Outline

Under the program, most sellers or lessors of office space of 2000 square meters or more are required to obtain and disclose a current Building Energy Efficiency Certificate (BEEC). The BEEC, which is valid for 12 months, must be publicly accessible on the online Building Energy Efficiency Register and include the following:

- A NABERS Energy Star rating for the building.
- An assessment of tenancy lighting in the area of the building that is being sold or leased.
- General energy efficiency guidance.

e) Financial resources and budget allocation

Funding of AUD 5 million was allocated to the program from 2009-10 to 2012-13.

f) Expected results

The Commercial Building Disclosure program will stimulate investment in energy efficiency improvements to existing commercial buildings. It will achieve this by providing purchasers and lessees with credible information about the energy efficiency of large, commercial office buildings at the point of sale, lease, and sublease. The program will lead to more informed purchasers and lessees as well as help transition the commercial office market to a low-carbon future.

The program also provides a wide range of public information that is useful to energy service providers in identifying markets for improved energy-performance services.

2.2. Regulatory Measures

2.2.1. Minimum Energy Performance Standards and Labeling

a) Name

Greenhouse and Energy Minimum Standards (GEMS) Act, 2012 (Gems Act)

b) Purpose

To specify mandatory requirements for the minimum energy performance standards and energy labeling of appliances, including offenses and penalties for non-compliance. Further information is available at www.energyrating.gov.au.

c) Applicable sectors

Appliances, lighting, and equipment in the residential, commercial, and industrial sectors.

d) Outline

The Greenhouse and Energy Minimum Standards Act 2012 (GEMS Act) provides the framework for mandatory minimum energy performance standards (MEPS) and energy efficiency labeling. It is preceded by the long-standing Equipment Energy Efficiency Program (the E3 Program), which was co-funded by the Australian Government, state and territory governments, and the New Zealand Government. Products are included in the program based on whether the community would benefit from their regulation.

The establishment of MEPS and labeling requirements in Australia is a cooperative process between the government and the industry. Technical and economic analyses are undertaken in

the development and negotiation of targets and timetables. MEPS, labeling, and test method standards that are called up by regulation are Australian (in conjunction with New Zealand, where appropriate), and they are set to be the equivalent of the world's best practices, where possible.

The energy-rating label allows consumers to compare the energy efficiency of domestic appliances, thereby providing manufacturers with an incentive to continuously improve the energy performance of their appliances. The label includes two main features. First, it rates the energy efficiency of an appliance on a scale of 1 to 10 stars or 1 to 6 stars (in half-star increments). In this case, the more stars, the more efficient it is compared with other models of similar size and capacity. Second, the label displays an estimated, energy consumption figure based on typical use of the appliance (usually kWh/year).

The star system is regularly regraded in order to achieve a better spread in energy-efficient products (taking into account improvements in energy efficiency that occur over time and to allow room for further improvement).

Labeling is mandatory for the following electrical products sold in Australia:

- Refrigerators and freezers
- Clothes washers
- Clothes dryers
- Dishwashers
- Air conditioners
- Televisions

The following products are also regulated on the basis of MEPS, which means that they have regulated minimum energy-efficiency labels:

- Refrigerators and freezers
- Mains pressure electric storage water heaters
- Small mains pressure electric storage water heaters (<80L) and low pressure and heat exchanger types
- Three-phase electric motors (0.73kW to <185kW)
- Single-phase air conditioners
- Three-phase air conditioners up to 65kW cooling capacity
- Distribution transformers
- Ballasts for linear fluorescent lamps. In addition to MEPS, ballasts must be marked with an energy efficiency index)
- Linear fluorescent lamps - from 550 mm to 1500 mm inclusive with a nominal lamp power >16W
- Commercial refrigeration (self-contained and remote systems)
- Incandescent lamps
- Compact fluorescent lamps
- External power supplies
- Set-top boxes
- Televisions
- Commercial building chillers
- Close control air conditioners
- Transformers and electronic step-down converters for ELV lamps

The Australian Government is also working to introduce Greenhouse and Energy Minimum standards that will act as an expansion to the existing MEPS program. In addition, it will cover additional products that either consume other types of energy (e.g., gas) or do not consume energy, but affect the energy efficiency of appliances (e.g., air-conditioner ducts, building insulation or window glass).

2.2.2. Building Energy Codes

a) Name

National Construction Code (NCC ó formerly, the Building Code of Australia) - Energy Efficiency Provisions

b) Purpose

The aim of the NCC - Energy Efficiency Provisions is to improve the energy efficiency of the design and construction of new buildings. The NCC Energy Efficiency Provisions project was endorsed under the NFEE. Details can be found at www.abcb.gov.au/.

c) Applicable sectors

Residential and commercial.

d) Outline

Energy efficiency provisions for housing were first introduced in 2003, following an extensive consultation process. The provisions are produced and maintained by the Australian Building Codes Board (ABCB) on behalf of the Australian Government and state and territory governments (through the COAG). The deemed to satisfy provisions vary according to the climate zone in which the building will be located. The original provisions included: the ability of the roof, walls, and floor to resist heat transfer; the resistance to heat flow and solar radiation of the glazing; the sealing of the house; the provision of air movement for free cooling, in terms of openings and breeze paths; and the insulation and sealing of air-conditioning ductwork and hot-water piping.

The provisions were developed to achieve a nominal level of energy efficiency equivalent to a 3.5- to 4-star rating under the Nationwide House Energy Rating Scheme (NatHERS) (www.nathers.gov.au), which includes a maximum rating of 10 stars. Following the implementation of the provisions, some states indicated that they wanted to increase the stringency of the provisions. As such, the provisions were developed by the ABCB to increase the nominal level of energy efficiency equivalent to 5 stars under NatHERS. Enhanced housing provisions were introduced in 2006. The most significant changes were made to the provisions on building fabric and external glazing.

In April 2009, COAG requested that the ABCB develop more stringent provisions to allow for a 6-star home rating to be included in the 2010 BCA. The new proposals were subject to a regulatory impact assessment (cost-benefit analysis) after which they were found to be cost-effective. In addition to enhanced provisions for the thermal shell of residential buildings, the new residential standards included requirements for hot water and lighting. The 2010 BCA energy efficiency provisions for residential and commercial buildings were agreed on by the states and territories after which they were adopted on May 1, 2010.

e) Financial resources and budget allocation

The NCC is regularly reviewed by the ABCB.

f) Expected results

Reduction in energy consumption predominantly associated with thermal comfort, lighting, and hot water in new residential and commercial buildings, i.e., heating and cooling energy consumption.

2.2.3. Fuel Efficiency Labeling

a) Name

Fuel Consumption Labeling Standard (ADR81/02) and Fuel Consumption Label

b) Purpose

Mandated fuel consumption labeling to enable new vehicle purchasers to compare vehicles on a common basis and incorporate vehicle fuel use in their decision-making processes. More information can be found at <http://www.greenvehicleguide.gov.au/GVGPublicUI/Information.aspx?type=FuelConsumptionLabel>.

c) Applicable sectors

Transport.

d) Outline

The fuel consumption labeling standard was introduced in 2004 (ADR81/01) and subsequently updated in 2008 (ADR81/02). The standard requires all new vehicles up to 3.5 tons (which includes passenger cars, four-wheel drive vehicles, and light commercial vehicles) to display a model-specific, removable fuel consumption label on the front windscreen.

The label indicates the fuel used (in liters) to travel 100 kilometers and the amount of CO₂ emissions (in grams) that the vehicle emits for each kilometer traveled.

In 2010, a revised version of the fuel consumption label was developed for ADR81/02 to suit electric vehicles and plug-in hybrids. The new label uses the same format as the existing label, but it was reframed as an Energy Consumption label in order to list the test results for energy consumption and range on the vehicle. The label also includes fuel consumption and CO₂ emissions, with pure-electric vehicles displaying ∞ and plug-in hybrids displaying their respective testing results. A cross reference to the Green Vehicle Guide website (www.greenvehicleguide.gov.au) is also provided to address the potential for CO₂ emissions during recharging.

Further measures are being developed under the NSEE.

e) Financial resources and budget allocation

No information available.

f) Expected results

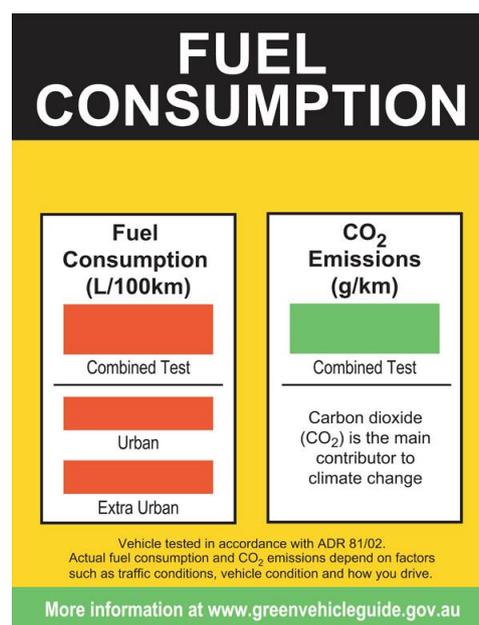
No information available.

2.3. Voluntary Measures

Australia has a number of voluntary initiatives for improving energy efficiency. For example, the Australia Energy Star Program provides an international standard for energy-efficient office equipment, including computers, printers, and photocopiers as well as home electronics such as televisions, audio products, and DVD players. Products that display the Energy Star label have energy-saving features enabled. See www.energystar.gov.au/ for more details.

A number of additional projects have been developed with the support of the Australian Government:

- CBD ó Commercial Buildings Disclosure Program
- WERS - Window Energy Rating Scheme



- EDG - Environmental Design Guides
- Building Design Association of Australia (BDAA) Marketing Sustainable Design Workshops
- Australian Council of Building Design Professions (BDP) Making Energy Pay
- Housing Industry Association (HIA) Greensmart Professional Accreditation Course;
- Master Builders Association (MBA) Energy Wise - Dollar Wise Training Course
- Lighting Best Practice Project
- WELS - Water Efficiency Labeling and Standards

2.4. Financial Measures Taken by the Government

2.4.1. Tax Measures

Expenditures on capital equipment, which may improve energy efficiency, are generally deductible under capital allowance provisions.

2.4.2. Low-interest Loans

Clean Energy Finance Corporation

The new \$10 billion Clean Energy Finance Corporation, independent from the Australian Government, will invest in the commercialization and deployment of renewable energy, low-pollution, and energy-efficient technologies as well as manufacturing businesses that provide inputs for these sectors. The investments will be divided into two streams: a renewable energy stream and a clean energy stream, each with half of the allocated funding. This program does not include investments in carbon capture and storage (CCS), which is already cared for through a number of other programs such as the Global CCS Institute and the CCS Flagships program. The Clean Energy Finance Corporation (CEFC) will integrate the work of Low Carbon Australia, which worked to promote innovative financing and other energy-efficient approaches, mostly in the commercial sector.

2.4.3. Subsidies and Budgetary Measures

There are a number of budgetary measures for energy efficiency improvement programs at the federal and state levels. One example is the following:

a) Name

Low-Carbon Communities

b) Purpose

Low-Carbon Communities, comprised of three main programs (i.e., the Community Energy Efficiency Program, the Low-income Energy Efficiency Program, and the Local Government Energy Efficiency Program), provides AUD 200 million in grants to support local councils and operators of community facilities to implement energy-efficient upgrades. It also supports low-income households (through trials of energy efficiency approaches) to determine more sustainable ways to manage their energy consumption. All of these programs also increase information on the effectiveness of various technologies and policy approaches.

c) Applicable sectors

Local government, community, sport and recreation, low-income households.

d) Outline

The Community Energy Efficiency Program (CEEP) will provide \$112 million in grants to 170 local governments and non-profit community groups for energy efficiency upgrades. These grants will improve the energy efficiency and amenity of council- and community-use buildings and facilities, particularly where this would benefit low, socio-economic and other disadvantaged communities or support energy efficiency in regional and rural councils.

Projects under the CEEP may consist of the installation or upgrade of energy efficiency technologies including cogeneration, tri-generation, and geothermal heating; street lighting, indoor and outdoor lighting; and heating, ventilation, and air conditioning (HVAC), draught sealing, double-glazed windows, insulation, solar hot-water systems, building management systems, and variable speed drives.

The Low-Income Energy Efficiency Program (LIEEP) is a competitive, merit-based grant program that provides grants to consortia of government, business, and community organizations in order to improve the energy efficiency of low-income households and enable them to better manage their energy use.

The Local Government Energy Efficiency Program (LGEEP) is a \$24 million non-competitive grant program that will help local governing authorities (LGAs) install solar and heat pump hot-water systems to improve energy use in their buildings and community facilities.

e) Expected results

The government's objective is to support local councils, communities, and households to reduce emissions and energy costs.

The objectives of the CEEP include: support various local councils and community organizations to increase the energy efficiency of different types of non-residential council- and community-use buildings, facilities, and lighting, especially where this would benefit low socio-economic and other disadvantaged communities; support energy efficiency in regional and rural councils; and demonstrate and encourage the adoption of improved energy management practices within councils, organizations, and the broader community.

The objectives of the LIEEP include: trial and evaluation of a number of different approaches in various locations that assist low-income households to be more energy efficient; and obtain information and analyze data to determine future energy efficiency policies and program approaches.

The objective of the LGEEP is to support LGAs to install energy efficient solar and heat pump hot-water systems in their buildings and community facilities, particularly where LGAs are situated in low socio-economic or otherwise disadvantaged areas.

2.4.4. Other Incentives

The Australian Government provides a number of rebates in order to improve energy efficiency in the agriculture, transport, residential, commercial, power, and government sectors.

For a detailed description of Australian rebates for individuals, please refer to <http://www.livinggreener.gov.au/rebates-assistance>. Regarding rebates for businesses, please refer to <http://www.business.gov.au/BusinessTopics/Grantsandassistance/Pages/default.aspx>.

2.5. Energy Pricing

The Australian Government, in conjunction with state and territory governments through the SCER, implemented the National Energy Customer Framework (NECF) to regulate the sale and supply of energy (both electricity and gas) to retail customers on July 1, 2012. The NECF commenced operation in Tasmania on July 1, 2012, in South Australia on February 1, 2013, and in New South Wales on July 1, 2013. Queensland announced that it will introduce the NECF in early to mid-2014. It is expected to be implemented in other participating jurisdictions as soon as practical. The adoption of the NECF will streamline the regulation of energy distribution and energy retail functions (except price regulation), thus creating efficiencies and including appropriate consumer protection.

States and territory governments apply price regulation to retail energy everywhere except Victoria (deregulation from January 1, 2009) and South Australia (deregulation from February 1, 2013).

2.6. Other Efforts for Energy Efficiency Improvements

2.6.1 Energy Efficiency in Government Operations Policy 2006

The purpose of this policy is to improve the energy efficiency of Australian government operations with particular emphasis on building energy efficiency. It is committed to progressive improvement of overall agency energy performance through minimum efficiency requirements and regular energy reporting.

A key objective of this policy is for government office buildings to achieve specific energy efficiency targets by 2011-12. Progress towards the targets is tracked on an annual basis, showing that the targets for tenants' light and power have been achieved, whereas the targets for central services have not been achieved.

A major component of the policy is the Green Lease Schedule (GLS) through which Australian Government tenants and their building owners commit to working collaboratively in order to maintain and maximize the energy efficiency of the building. The GLS management framework also enables agencies to incorporate required energy efficiency standards into their leases and other procurement activities.

2.6.2 Cooperation with Non-Government Organizations

The government cooperates with non-government organizations to stimulate energy efficiency improvements as appropriate.

2.6.3 Cooperation through Bilateral, Regional, and Multilateral Schemes

Australia is a member of the International Energy Agency and it is involved in various working groups, including the Energy Efficiency Working Party. It is also involved in discussions related to better data collection and the development of energy efficiency indicators.

The International Partnership for Energy Efficiency Cooperation (IPEEC) is a high-level international forum that provides global leadership on energy efficiency by identifying and facilitating government implementation of policies and programs that yield high energy efficiency gains. The IPEEC also aims to promote information regarding the best practices as well as facilitate initiatives to improve overall energy efficiency.

Founded in May 2009, the IPEEC is a voluntary forum of developed and developing countries that represent the major economies of the world. As of June 2013, the members of the IPEEC members include: Australia, Brazil, Canada, China, the European Union, France, Germany, India, Italy, Japan, Mexico, Russia, South Korea, United Kingdom, and the United States.

Relevant international standards are taken into account in the development of Australian MEPS.

2.6.4 Other Cooperation/Efforts for Energy Efficiency Improvements

The Australian Government is committed to engaging with the business sector and providing support to new technologies through public-private partnerships, including the \$10 billion CEFC. The objective of the CEFC is to overcome capital market barriers that hinder the financing, commercialization, and deployment of commercially oriented, energy-efficient, renewable, and low-emissions technologies.

The CEFC was built on the success of Low-Carbon Australia Limited (LCAL), formally the Australian Carbon Trust, which provided more than \$100 million in funding to promote investment in energy efficiency and building retrofits. Concurrent with the commencement of operation of the CEFC, in July 2013, the LCAL and the CEFC merged, which allowed the CEFC to leverage off the systems and the expertise of the LCAL, while providing certainty as well as the efficient delivery of financial support to the market.

The National Carbon Offset Standard (NCOS), which was introduced by the government on July 1, 2010, was administered by the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education as a result of the LCAL/CEFC merge. The NCOS's Carbon Neutral Program is a voluntary scheme that certifies products or organizations as "carbon neutral" and provides a trademark for participants to promote their carbon neutral status. This helps consumers and businesses trust such claims as well as provide them with another way to take effective action on climate change and energy efficiency.