

## QUESTION ON NOTICE

No. 578

asked on Tuesday, 17 April 2007

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**MS JONES** ASKED THE MINISTER FOR MINES AND ENERGY (MR WILSON)—

QUESTION:

What State Government initiatives are in place to diversify Queenslanders' use of energy supplies, in particular renewable energy sources?

ANSWER:

In line with its election commitments, the Queensland Government has allocated \$14.25 million for its Energy Choices program, which delivers opportunities for diversification of energy sources, improved energy efficiency and environmental benefits.

The program includes \$4 million for a Gas Installation Rebate Scheme to help encourage the use of gas for residential energy requirements, a \$5 million expansion to the existing EnergyWise energy efficiency program and \$5.25 million in further funding for the Government Energy Management Strategy (GEMS) to improve energy efficiency in Government buildings.

The Gas Installation Rebate Scheme will target replacement of existing electric appliances with gas appliances. A household changing from electricity to gas for heating water and cooking will reduce greenhouse gas emissions by approximately two tonnes a year. Over the three year program, the Gas Installation Rebate Scheme is expected to deliver approximately 15,000 tonnes of greenhouse gas savings, with additional savings for each year the gas appliance continues to operate.

The 13% Gas Scheme, which commenced on 1 January 2005, helps diversify Queensland's energy mix and reduce growth in greenhouse gas emissions from electricity generation. The scheme facilitates investment in gas-fired generation including highly efficient combined-cycle gas turbine plant, such as the Swanbank E and Townsville power stations, which produce less than 50 percent of the emissions of even the most efficient coal-fired plant (per unit of electricity). Since the year 2000 Queensland's gas-fired generating capacity has grown from about 900 megawatts (MW) to over 2,000 MW with significantly more currently on the drawing board.

Renewable energy will continue to play an important role in Queensland, and currently accounts for 5.2 percent of the State's generating capacity. Biomass (primarily bagasse from sugar cane milling) is the most important source of renewable energy in Queensland. Currently there is around 400 MW of biomass-fired electricity generating plant in Queensland.

The Government is encouraging the growth of the State's renewable energy industry through a number of cost-effective investments that address market needs.

These include investments in innovative applications for renewable energy technologies such as:

- the \$5.9 million Queensland Sustainable Energy Innovation Fund, which provides funding support for the research, development, demonstration and commercialisation of renewable energy technologies; and
- a \$5 million package of support for Ergon Energy's Townsville Solar City Project which has been selected as part of the Australian Government's Solar Cities Trial Project.

The Townsville Solar City Project will trial a combination of solar power, energy efficiency and demand side management technologies to deliver sustainable energy solutions in an urban grid-connected context. The project is expected to generate 11 gigawatt-hours of renewable energy throughout its life to 2013 and lead to a reduction in peak demand by 2,550 kilowatts. Participating Townsville area customers will spend \$1 million per annum less on their electricity purchases and save a cumulative 50,400 tonnes of greenhouse gas emissions – equivalent to taking 1,700 cars off the road.

The findings from the Townsville Solar City Project will help the Queensland Government develop a model of how solar energy and energy efficiency can deliver economic and environmental benefits.

The Queensland Government also supports other renewable energy generation projects through its Government Owned Corporations, including:

- Stanwell Corporation's \$19 million 12 MW Windy Hill wind farm in North Queensland;
- the recently completed \$22 million upgrade to Stanwell's 60 MW Barron Gorge Hydro Station which will extend the life of the plant for another 40 years;
- a \$15.5 million project to upgrade the capacity of the Kareeya Hydro Station from 72 to 84 MW;
- Australia's only wet geothermal plant in Birdsville, operated by Ergon Energy; and
- Ergon Energy's \$2.5 million project to develop Queensland's first solar farm at Windorah, utilising solar concentrator photovoltaic arrays. Construction is due to commence later this year.

The Government continues to support renewable energy generation through involvement in the National GreenPower Accreditation Program. As of December 2006, more than 90,000 Queensland households and businesses voluntarily purchased renewable energy products accredited by GreenPower.

Passage of the *Geothermal Exploration Act 2004* has led to a number of companies seeking tenure for geothermal exploration. The interest expressed in exploration is an encouraging early sign for the potential long-term development of geothermal energy production in the State.