

GEMS

Government **Energy**
Management Strategy



Queensland Government

foreward

The Government Energy Management Strategy (GEMS) is a key environmental initiative of the Queensland Government. The adoption of GEMS is one of the Government's contributions to reducing greenhouse emissions and thereby protecting the environment for future generations of Queenslanders.

The implementation of GEMS will:

- establish a clear strategic direction for energy management of Government buildings;
- promote smarter ways of managing energy across Government;
- ensure a consistent whole-of-Government coordinated approach to energy management;
- seek improved procurement practices in relation to energy;
- reduce overall costs to Government and the community due to efficiencies in energy management; and
- form part of broader environmental governance arrangements within Government.

GEMS will complement other environmental initiatives being established across Government such as the Greenhouse Strategy.

GEMS is a key Government strategy, which aims to reduce emissions and seek real improvements in energy efficiency and consumption

What is GEMS?

The Government Energy Management Strategy (GEMS) is a whole-of-Government approach to energy management (electricity, gas and water) across Queensland Government agencies.

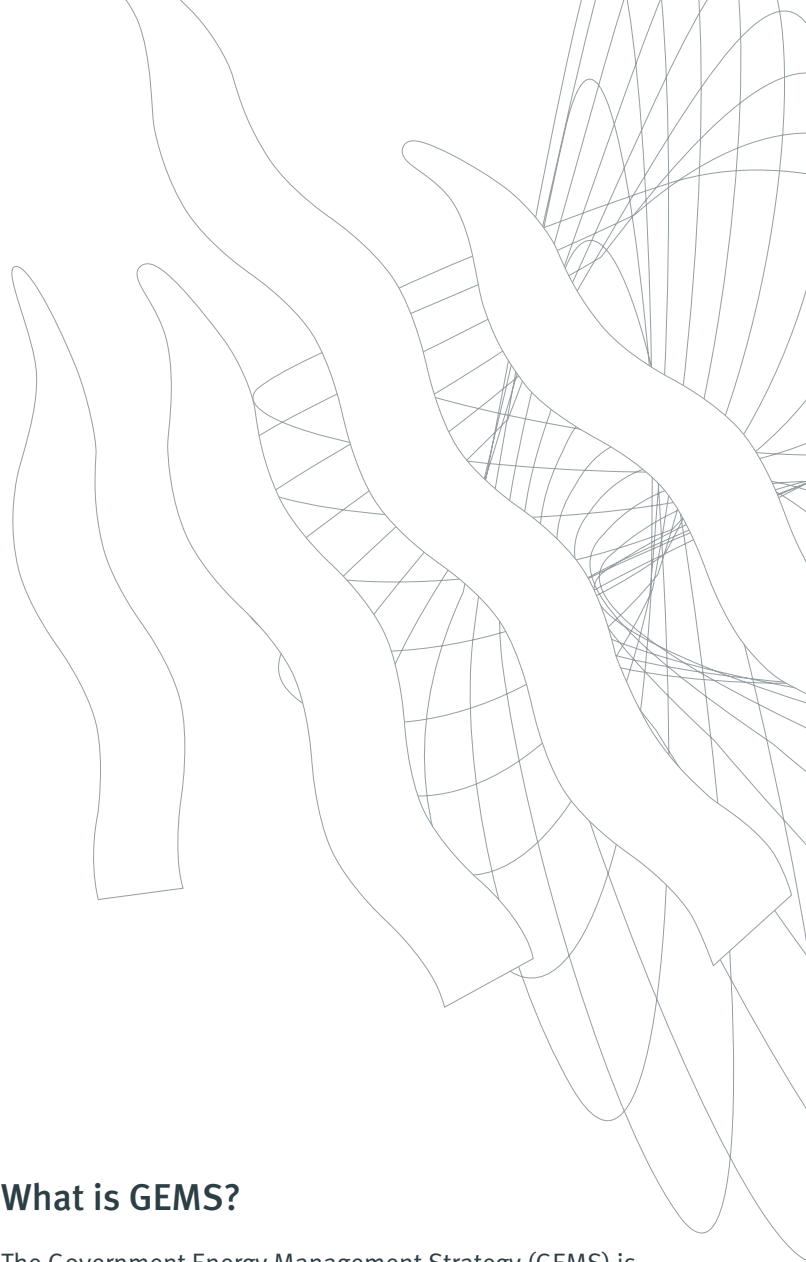
GEMS supports the Government's priority of Valuing the Environment through the implementation of energy management practices within Government agencies. It encourages agencies to adopt improved practices, which contribute to efficiencies in energy use, reduce greenhouse emissions and generate financial savings for the Government.

What is the objective of GEMS?

The objective of the strategy is to improve the efficiency of energy consumption and unit acquisition values which result in reduced annual energy expenditure for Government.

How is GEMS to achieve this?

A set of Governing Principles and Supporting Strategies have been developed, which will provide the framework within which Government and its agencies will pursue the achievement of the GEMS objective. These are detailed below:



Principle 1	Strategies
<p>Whole-of-Government energy efficiency targets which allow all agencies to contribute to the target.</p>	<ul style="list-style-type: none"> • Establish a whole-of-Government energy cost target: A \$20 million per annum saving in expenditure of the expected amount spent on energy by 30 June 2008 • Agencies collectively seek to achieve the following progressive benchmarks to obtain total forecast targets as follows: <ul style="list-style-type: none"> By 30 June 2005 \$2M pa By 30 June 2006 \$6M pa By 30 June 2007 \$12M pa By 30 June 2008 \$20M pa • Agencies to adopt triple-bottom line reporting procedures on an annual basis for initiatives taken to reduce energy consumption and reductions achieved in CO₂ greenhouse gas emissions as part of their annual asset strategic plan reporting. A proforma is being established to assist in identifying agency contributions to the targets.
Principle 2	Strategies
<p>Incentives provided to agencies to facilitate the adoption of improved energy management initiatives.</p>	<ul style="list-style-type: none"> • Provide support to agencies to direct energy efficiency cost savings to implement energy efficient strategies. • Establish arrangements to allow agencies to retain the savings achieved through implementation of energy efficiency initiatives, to address portfolio asset management priorities (e.g. high priority maintenance funding) or key service delivery priorities.
Principle 3	Strategies
<p>Support mechanisms provided to assist agencies implement energy management initiatives.</p>	<ul style="list-style-type: none"> • Establish a GEMS Unit which will develop a whole-of-Government approach to energy usage and conservation. • Provide guidance to agencies on key pilot projects which reduce unit consumption and/or provide dollar savings in the unit purchase price. • Assist agencies to facilitate a tender process at an individual agency or collective whole-of-Government level for preferred suppliers to audit, design, install, monitor and guarantee energy savings. • Assist agencies in implementing a generic smart metering program at key facilities to monitor electricity usage patterns to select best possible tariffs and position agencies to take advantage of potential savings through the bulk purchase of electricity.

Principle 4	Strategies
Energy management is part of an integrated whole-of-life asset management approach for all agency assets.	<ul style="list-style-type: none"> • Incorporate GEMS into the Government’s asset strategic planning process including: <ul style="list-style-type: none"> - Consideration of whole-of-life planning, encouraging the design of buildings with energy efficient initiatives such as the use of natural light and ventilation alternatives. Management issues such as the use of energy efficient plant and equipment, construction or acquisition of energy efficient buildings and linkages between energy efficiency initiatives and the health of the workplace environment; and - Assist agencies, as required, to reduce maintenance costs as a result of initiatives to install new energy efficient equipment.
Principle 5	Strategies
Best energy unit acquisition values and procurement of energy saving equipments are obtained by Government.	<ul style="list-style-type: none"> • Investigate and pursue opportunities, in consultation with Queensland Purchasing, for agencies to derive price reductions in the value of electrical, gas and water units consumed. • Evaluate the benefits of electrical load changes and shifting to maximise unit acquisition values (e.g. shifting of load to low tariff periods). • Investigate the installation of rainwater tanks for toilet flushing and garden irrigation.
Principle 6	Strategies
Best practice management of energy.	<ul style="list-style-type: none"> • Establish GEMS as a whole-of-Government approach to improving energy management by agencies. • Establish the GEMS Unit in the Department of Public Works to facilitate and provide support to agencies in the implementation of GEMS. • Facilitate behavioural changes across agencies to better manage energy (eg turning of lights and computers at night when buildings are not occupied and conserving water usage).

What are agencies required to do?

1. Establish energy consumption baselines, in consultation with the GEMS Unit within the Department of Public Works.
2. Incorporate energy management into whole-of-life approach to asset management.
3. Identify energy conservation initiatives and implementation plans and strategies including energy audits and development of energy conservation plans.
4. Monitor energy consumption.
5. Report annually of progress, as part of asset strategic planning process.