# **Department of Conservation and Land Management**

## **ENERGY MANAGEMENT PLAN**

#### **Background**

The urgent need for energy conservation and the reduction of greenhouse gases has been identified as an international concern that is recognised by both the Commonwealth Government and the Western Australian State Government.

In June 2002 the State Government introduced the Energy Smart Government Policy, which requires all State Government agencies in Western Australia to progressively reduce their stationary energy consumption by 12% from their 2001/02 baseline. Stationary energy is defined as electricity, gas and fuel used to generate electricity consumed in buildings and fixed plant.

In addition, in September 2004, the State Government released "Leading by example", a sustainability code of practice for Government agencies and resource guide for implementation. This document contains a number of actions to be undertaken by agencies.

Our agency has a leading role in conservation and sustainability and should be a leader in the reduction of energy consumption and greenhouse gases. It is therefore incumbent on the Department to meet and where possible exceed the mandatory energy reduction targets set by the Energy Smart Government Policy and be at the forefront of energy conservation initiatives.

The mandatory reduction targets set by the policy are:

5% by 2002/03

6% by 2003/04

8% by 2004/05

10% by 2005/06

12% by 2006/07

The Energy Smart Government Policy provides for agencies failing to meet the mandatory targets to receive financial penalties equivalent to the cost of the energy consumed in excess of the agencies' targeted consumption for the year. The penalties will apply unless an agency that exceeds its targeted consumption can provide an adequate reason for doing so.

#### **Departmental Policy**

The Department is committed to the implementation of sustainability principles in all business practices including the need for active energy conservation and will pursue the efficient, effective and economic use of energy in the planning and use of all Departmental facilities to meet or exceed energy reduction targets set in the Energy Smart Government Policy.

### **Strategies**

The Department has established an "Energy Smart Committee" to promote achievement of the energy reduction targets. The committee comprises the Director of Science, Director of Regional Services, Director of Corporate Services and the Project and Policy Officer, Regional Services with support from an Executive Officer and will develop and implement immediate, short term and long term measures to maximise energy conservation. and minimise greenhouse gas emissions.

#### Immediate Measures:

Implementation of a staff energy conservation awareness program to bring about improved staff understanding and behaviour in respect of energy conservation issues and to assist with the identification of opportunities for improvements (eg turn lights off, turn heaters and coolers down, elimination of unneeded appliances etc.).

#### Short Term Measures:

Implementation of measures that can be achieved within the next 12 to 18 months with little or no additional funding, eg:

- Replacing light globes with energy efficient globes;
- Occupancy sensors to have lights turned on and off automatically;
- Cleaning and periodic maintenance of air conditioning and refrigeration equipment such as coils, filters, vents etc.

### Long term Measures

These are measures that may be implemented over the next 5 years and which may require additional funding, eg:

- Acquisition of energy efficient materials;
- Modification of buildings through installation of solar efficient awnings, heat and light reflectors, skylights, internally partitioned zoning etc.;
- Replacement of older or inefficient plant and equipment;
- Replace network printers, photocopiers and faxes with a reduced number of multi functional devices;
- Sourcing of energy from more environmentally friendly sources.

#### The committee will also;

- Develop systems to monitor and report on energy conservation performance and communicate results widely to staff; and
- Promote where applicable incorporation of energy management requirements into organisational descriptions of staff duties.

Individual Directors are responsible for achievement of energy reduction targets within their areas of responsibility.

The manager at each Region / work centre shall appoint an energy conservation officer or a local energy conservation committee to drive local initiatives and undertake training to minimise energy consumption.

Regions and Branches operating out of their own discrete work centres are required to have a current Energy Conservation Plan specific to each region / branch.

# **Project Initiation and Coordination**

All staff have a responsibility for energy management since they all use energy. All staff should report wasteful activities and equipment and have an obligation to ensure energy consumption in their area is minimised.

- No Cost Energy Conservation Initiatives to be achieved through good housekeeping as
  a result of attitudinal and behavioural change of staff. The energy conservation officer /
  committee manager at each site is responsible for identification and implementation of
  such initiatives.
- Minimal Expenditure Energy Conservation Initiatives such as installation of simple control devices on lighting, plant and equipment to minimise excessive energy consumption. The energy conservation officer / committee manager at each site is responsible for identification of such initiatives and shall consult with the relevant line manager to identify funding opportunities within the cost centre to facilitate their implementation.
- Higher Expenditure Energy Conservation Initiatives such as the replacement of high
  cost inefficient equipment or systems. Staff shall put the proposal to their Manager who
  will seek appropriate technical assistance to investigate the feasibility of the proposal.
  Should preliminary investigations suggest the proposal is feasible the Manager shall put
  a formal proposal to the Energy Smart Committee. Subject to endorsement by the
  Energy Smart Committee, the Manager shall pursue funding to implement the proposal.

### **Funding**

Funding to implement initiatives to reduce energy consumption will be sourced from:

- Sustainable Energy Development Office (SEDO) grants schemes;
- SEDO Interest Free Loans Schemes: and
- Departmental funding, via cost centres or by application to the Executive Director (supported by a sound business case) via the Energy Smart Committee.

Applications for funding are to be endorsed by the Energy Smart Committee before being submitted to SEDO.

# **Energy Consumption Measurement and Reporting**

To assist with monitoring and management of energy consumption, each work centre or reporting centre shall maintain a system that provides comparisons of energy consumption by billing period against previous years.

Regions and Branches shall provide progress reports on consumption on request to the Energy Smart Committee in addition to regularly updating the web based Energy Data Gathering And Reporting (EDGAR) System used by SEDO to monitor agency performance.

# **Action Plan**

Action		Completion Date	Responsible
1.	Develop individual Regional / Branch Energy Management Plans	30 November 05	Relevant Regional / Branch Manager
2.	Appoint Regional / Branch Energy Conservation Officer	31 October 05	Relevant Regional / Branch Manager
3.	Develop ongoing energy conservation awareness program	31 December 05	Director, Strategic Development and Corporate Affairs
4.	Establish effective local energy consumption reporting and monitoring system	30 November 05	Relevant Regional / Branch Manager
5.	Review Energy Management Plan	30 June 06	Energy Smart Committee
6.	# Replacement of inefficient power generation systems in Pilbara	31 December 05	Director Regional Services

# A separate detailed action plan has been developed for this project

# Review

This Energy Management Plan shall be reviewed on an annual basis.

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Keiran McNamara EXECUTIVE DIRECTOR

29 September 2005