

# **MANAGING ENERGY IN LOCAL GOVERNMENT**

**An energy efficiency workbook for CCP™ Australia councils  
developed by the Australian Greenhouse Office**

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# About the workbook

## Read this page!

This workbook will help you reduce greenhouse gas emissions through improving the energy efficiency of Council operations. It's designed to be useful and informative rather than prescriptive—to give you plenty of ideas and starting points rather than provide all the answers. See it as an evolving resource, a place you can collect all the extra information you're sure to come across as you move through the Cities for Climate Protection™ Australia program. The potential for sharing information is one of the key benefits of participating in the CCP™ Australia campaign and this workbook is only the beginning.

The workbook covers energy use by Councils, except transport energy. It does not cover greenhouse gas emissions related to materials or waste management; nor does it deal with the effects of Council activities on the energy consumption of the local community.

There are five sections: an introductory background section, three sets of information sheets, and a supplementary section to help you with calculations. The information sheets are a kind of toolkit of useful ideas, facts and figures to help you where you need it. You don't have to read all of them at once—you can sort through them and pick out the particular tools you want, depending on the job.

### **Section 1. Background**

This section is for all readers and is designed to be read right through. It describes the Cities for Climate Protection™ Australia campaign and introduces the relationship between improving energy efficiency and reducing greenhouse gas emissions.

### **Section 2. Council sheets**

This section covers the operational groups found in most local government organisations. For most areas of operations, you'll find:

- a summary of ways the group can influence patterns of energy use and greenhouse gas emissions;
- advice about particular opportunities and problems the group may face in developing and implementing strategies and action plans;
- suggested performance indicators; and
- references to other information sheets, examples and case studies in the rest of the workbook.

### **Section 3. Strategy sheets**

Information sheets that will help you harness your Council's normal business processes to maximise the effectiveness of your participation in the CCP™ campaign.

### **Section 4. Energy sheets**

More than 20 information sheets on everything from conducting an energy audit to efficient heating and cooling, lighting and office equipment, as well as special facilities such as depots, swimming pools and sewage treatment.

### **Section 5. Tools**

Calculation tools to help you work out energy consumption and greenhouse gas emissions.

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# SECTION 1

## Energy, greenhouse gas emissions and CCP™ Australia

### Government and community in partnership

Local governments around the world are responding to the threat of climate change by joining the Cities for Climate Protection™ campaign—an innovative program which helps local governments and their communities reduce greenhouse gas emissions.

Local governments are well placed, through their legislative responsibilities and links with the community, to influence the greenhouse gas emissions generated by their own activities, by local households and businesses, as a result of waste disposal, land use change and transport. Some people have suggested that local governments have the capacity to influence activities contributing up to 50 per cent of our national greenhouse gas emissions. When combined globally, the efforts of local governments and their communities can make a real difference.

Reducing greenhouse gas emissions also has other benefits for local governments and their communities—from improving local air quality and traffic congestion to reducing energy costs for residents and businesses to generating new jobs, industries and income for local government.

#### What is Cities for Climate Protection™ Australia?

Cities for Climate Protection™ provides local governments with a strategic framework for reducing greenhouse emissions. It is an international campaign with over 340 local governments from around the world participating. The campaign was initiated *by* and *for* local government.

Cities for Climate Protection™ Australia is an International Council for Local Environmental Initiatives (ICLEI) program delivered in collaboration with the Australian Greenhouse Office. During the first years of the campaign Environs Australia has acted as ICLEI's agent in Australia.

Councils that become CCP™ Australia participants commit to achieving the following milestones:

1. Establish an inventory and forecast for key sources of greenhouse gas emissions in the Council and community.
2. Set an emissions reduction goal.
3. Develop and adopt a local greenhouse action plan to achieve those reductions
4. Implement the local greenhouse action plan
5. Monitor and report on greenhouse gas emissions and implementation of actions and measures.

The emissions inventory covers greenhouse gas emissions from both Council's own operations and the activities of the community. The goal and action plan cover the actions Council proposes to take to reduce greenhouse gas emissions both in its own operations and within the community.

As a starting place, and to set an example, the first area of attention should be Council's own operations.

This workbook concentrates on the many ways in which Councils can reduce greenhouse gas emissions (and often save money and gain other benefits) through improving the energy efficiency of their operations.

### **Why take action on energy efficiency?**

Energy use is one of the largest sources of greenhouse emissions from local government activities (landfills is the other large source). To reduce greenhouse gas emissions, it is therefore important for Councils to look at the ways in which they use energy. In many cases, you may be consuming more energy than you need to—which is leading to the emission of unnecessary greenhouse gases and costing you money.

By focusing on ways in which you can increase the efficiency of your energy use, you are likely to reduce your operating costs. You will also set an example for the community by demonstrating ways in which activities can be done better.

Councils also have the opportunity to improve the energy efficiency of activities within the community—in homes, offices, industries and transport, but those opportunities are not covered in this workbook.

### **What other benefits are there?**

As well as reducing greenhouse gas emissions, strategies to improve energy efficiency have many other benefits, including:

- *Saving money:* Lower your own Council's energy bills.
- *Generating additional revenue:* The greenhouse reduction initiatives and expertise you develop can generate additional revenue for your Council—through running training programs, offering new services, etc.
- *Supporting new sustainable industries:* Directly supporting energy efficiency through Council policy and operations will help develop new markets and industries, providing local employment and business opportunities.
- *Improving air quality:* Relying less on fossil fuels for energy can reduce local air pollution and subsequent public health costs.
- *Creating social benefits:* Action on greenhouse can also produce many other benefits such as reduced traffic congestion and more efficient and therefore competitive local industry.
- *Demonstrating local leadership:* Councils have a legitimate and vital role in articulating their communities' views and acting upon their concerns.
- *Creating opportunities for partnerships* with industry, community and government at a local, regional, national and international level.

### **Strategy so successful, it's contagious**

From a local government point of view, it's easier to find reductions in energy costs than it is to find additional income. Through its ongoing Green Energy Project, **Newcastle City Council** has reduced its \$1 million 1995 electricity costs by \$350,000 (\$132,000 attributed to deregulated market savings and \$218,000 to efficiency improvement). This has resulted in a cumulative saving of \$593,000 since the project began in 1995—showing that there's money to be saved in reducing greenhouse gas emissions.

To fund the ongoing project Newcastle City Council established a revolving energy fund which reinvests all of the savings (deregulation and energy conservation) into funding further improvements.

The project is not only using the city's ratepayers money more effectively but also promoting local jobs and a sustainable future for the city: half of the \$400,000 invested over the past few years has gone to local electricians. Newcastle aims to become the South-east Asian centre of the sustainable energy industry.

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