

## **REPORT TO COUNCIL**

**Meeting Date:** 24 JUNE 2009

**Subject:** COMMUNITIES FOR CLIMATE PROTECTION PROGRAMME -  
MILESTONE 3 (CORPORATE)

**File No.:** 360/15/2/4

Report by Mrs Yvette Paterson dated 4 June 2009.

1. **SUMMARY OF REPORT**

To complete Milestone 3 (Corporate) of the Communities for Climate Protection Programme Council must adopt a Plan which sets out how Council is going to reduce greenhouse gas emissions from its activities. An action plan has been developed and is attached for Council's approval.

2. **RECOMMENDATION**

THAT COUNCIL ADOPTS THE SOUTHLAND DISTRICT COUNCIL CORPORATE CLIMATE CHANGE ACTION PLAN AND NOTES THAT THIS MEETS PART OF THE REQUIREMENTS OF MILESTONE 3 OF THE COMMUNITIES FOR CLIMATE PROTECTION - NEW ZEALAND PROGRAMME.

Signature

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Author

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Executive Staff

3. **REPORT**

3.1.1 **Background**

Southland District Council is a participant in the Communities for Climate Protection® - New Zealand (CCP-NZ) Programme, an international campaign to assist local Councils to reduce greenhouse gas emissions. CCP-NZ is a New Zealand Government initiative delivered by ICLEI - Local Governments for Sustainability - Oceania (ICLEI Oceania).

Southland District Council resolved to participate in the CCP-NZ programme on 31 August 2005 and committed to completing the five milestones of the programme:

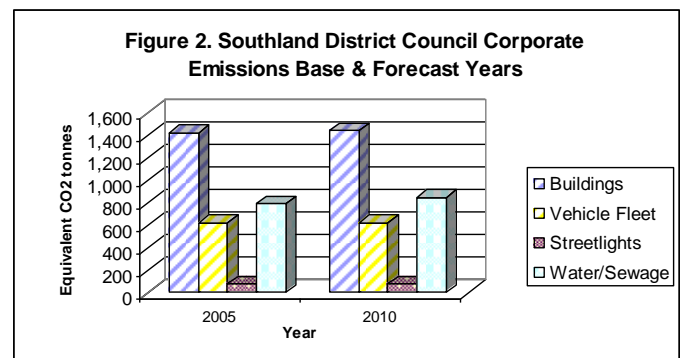
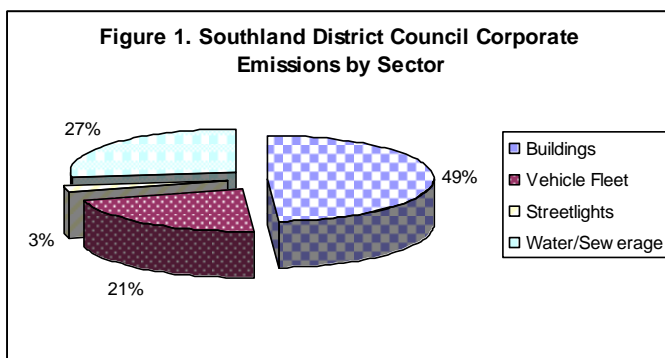
- Milestone 1 - Conduct an inventory and forecast for Corporate (council) and Community greenhouse gas emissions.
- Milestone 2 - Establish an emissions reduction goal.
- Milestone 3 - Develop and adopt a local action plan.
- Milestone 4 - Implement the local action plan.
- Milestone 5 - Monitor and report on achievements.

**Milestone 1**

Council completed Milestone 1 in February 2008 and the Deputy Mayor Jim Copland received the award for achieving this on behalf of Council at a ceremony in Rotorua on 29 July 2008.

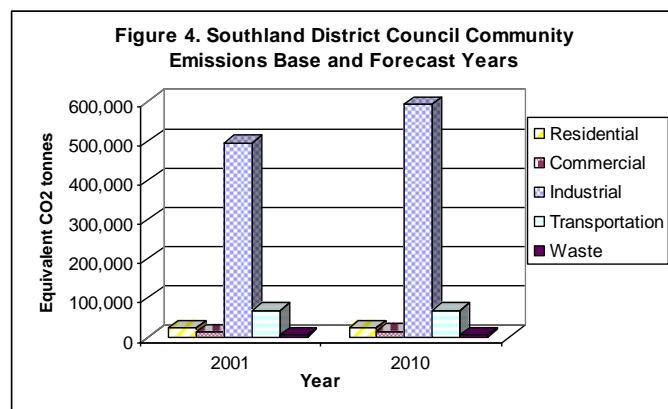
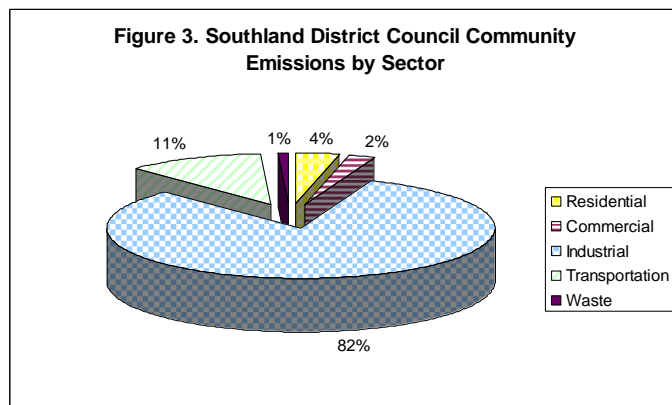
The results of Milestone 1 showed:

- Corporate emissions were 2,924 tonnes of Carbon Dioxide equivalents (CO<sub>2</sub>e) in 2005 and are predicted to increase in a business as usual scenario by 3% by 2010. The Building sector (49%) and Council’s water and sewerage systems (27%) were the main sources of greenhouse gas emissions.<sup>1</sup>



- Community emissions were 605,447 CO<sub>2</sub>e in 2001 and are predicted to rise by 17% by 2010 due to population and growth in the commercial, industrial and waste sectors. The Industrial (83%) and Transport (15%) sectors were the largest producers of greenhouse gas emissions in the Community (Industrial includes emissions from energy sources used in the agricultural sector, but not other emission sources, such as methane, as the data for this is not available). The graphs have been updated to reflect population projections in the Council’s Ten Year Plan (LTCCP) 2009-2019).

<sup>1</sup> Note that the diesel used to generate electricity for all Stewart Island residents is counted as corporate emissions because SIESA (Stewart Island Electricity Supply Authority) is owned by Council.



### **Milestone 2**

Council endorsed the goal to *Stabilise corporate emissions at 2005 levels by 2015 and then reduce by 20% by 2025* at its meeting on 28 January 2009. Council decided to only set a corporate goal at this stage with the intention that Council lead by example to begin with before working with the community on how they can reduce their emissions.

### **Milestone 3**

To achieve Milestone 3 of the CCP-NZ Programme, Council is required to adopt a local action plan outlining the strategy that will be undertaken to reduce greenhouse gas emissions. As such, the "Southland District Council Corporate Climate Change Action Plan" has been developed and forms part of this report.

#### **3.1.2 Development of the Corporate Climate Change Action Plan**

A workshop on Milestone 2 and 3 was conducted with various Council staff (including some from Invercargill City Council, Environment Southland and Venture Southland) and two Councillors on 27 November 2008. This workshop was facilitated by a CCP-NZ Programme Coordinator and covered possible emission reduction goals Council could adopt and actions different departments could take to reduce greenhouse gas emissions.

A question was included in the 2008 Residents' Satisfaction and Opinion Survey asking respondents to comment on what you think needs to be done to reduce greenhouse gas emissions.

A number of staff were met with individually to discuss possible actions that could be implemented in their department. Staff from Venture Southland also assisted in providing ideas which they had come across in their work and Council staff researched what other Council's in the CCP programme had included in their action plans.

The actions were discussed and revised with the help of the Council's Resource Efficiency Team (RET) and with the Management Team.

### 3.1.3 **Benefits of the Climate Change Action Plan**

It is envisaged that the Climate Change Action Plan will have a range of multiple benefits, including:

#### Economic Benefits

- Many of the initiatives are energy efficiency initiatives that will reduce Council's energy costs.

#### Social

- Council will be seen as a leader on the issue by the District.

#### Environmental

- Many of the initiatives will reduce waste going to landfill.
- Actions to encourage alternative transport for employees will reduce greenhouse gas emissions from vehicles.
- Wind turbines and solar panels on Stewart Island will decrease the use of diesel powered generators for electricity generation.

### 3.1.4 **Implementation of Actions**

Following adoption by Council, the actions in the plan will be reported on in the Council's Quarterly Report to ensure they are implemented. It should be noted that the plan is seen as a 'living document' and will be reviewed on a yearly basis to incorporate other actions that arise.

The implementation of actions outlined in this plan will take Council to Milestone 4 in the CCP-NZ Programme. For Milestone 4, ICLEI will assist Council to quantify the greenhouse gas emissions reductions achieved from projects implemented.

### 3.2 **Options Considered**

Not applicable.

### 3.3 **Policy and Plan Considerations**

Information about the Communities for Climate Protection Programme has been included in the Draft Ten Year Plan (LTCCP) 2009 - 2019. It also fits within Council's framework approach to sustainable development as outlined in the LTCCP.

### 3.4 **Consideration of Community Views**

As mentioned above, questions were added into the 2008 Residents' Satisfaction and Opinion Survey asking respondents to comment on what you think needs to be done to reduce greenhouse gas emissions. A large number of staff also provided input into the Action Plan.

### 3.5 **Financial Considerations**

In the past, the CCP™NZ programme was funded from the Ministry for the Environment. From 1 July 2009 funding from the Ministry will no longer be provided and it will cost \$2,000 a year for Council to continue participating as a CCP-NZ Partner.

Many of the actions in this Corporate Milestone 3 Action Plan will result in reduced energy consumption which will make savings for Council and ratepayers. At this stage all of the actions can begin within existing budgets and any new funding for specific projects or proposals will be brought to Council for funding approval and, if possible, be co-funded from sources such as EECA and the Crown Loan Scheme.

### 3.6 **Legal Considerations**

There are no significant legal implications associated with developing an action plan to reduce greenhouse gas emissions from Council's operations.

## 4. **CONCLUSION/SUMMARY**

It is recommended that Council adopt this Corporate Action Plan to reduce greenhouse gas emissions to achieve Milestone 3 (corporate) of the Communities for Climate Protection Programme. Once this plan is approved work will begin on implementing the actions

Yvette Paterson  
**ASSISTANT CORPORATE PLANNER**

## Southland District Council Corporate Climate Change Action Plan

### Initiatives already in place to reduce greenhouse gas emissions.

#### Resource Efficiency Team (RET)

A group of staff called the Resources Efficiency Team (RET) was established in 2003 to consider matters relating to resource efficiency in Council. This is a voluntary group and is made up of staff from various departments within Council. RET has introduced a number of initiatives. These include:

- Recycling services within Council. Each staff member has a “green bin” to put their waste paper in and the number of rubbish bins within each area has been reduced. This has resulted in the skip only being emptied once a month rather than once a week.
- Developing a Sustainable Procurement Guide.
- Food scrap bins in the Invercargill Office kitchens. These scraps are collected by a local worm farmer.
- Setting the majority of printers to double sided as the default.
- Creating recycled writing pads to replace paper cubes previously bought from a stationary supplier.
- Sending out an e-mail with a switch off your computer reminder on a Friday afternoon along with a trivia question and tips on how to minimise waste, reduce energy use.

#### Buildings

Heat pumps started to be installed in the Invercargill main office in March 2007. There has been a notable decrease in electricity since then - In 2007/2008 electricity consumption decreased 20% from 2006/2007. All heat pumps / air conditioners are on timers eg come on at 7.30 am and go off at 5.30 pm (but can also be manually turned on and off). In addition, six of the eight boilers were turned off in May 2008 and the remaining two were turned off in December 2008.

Solar guard was installed on some windows in the Invercargill office to prevent overheating in the summer to reduce the need to use air conditioners/fans.

#### Water and Sewerage

Variable speed drives have been installed on new water and sewerage schemes pumps to improve pumping efficiency. Infiltration investigations have also begun to find where there are lost fluid inefficiencies.

#### Streetlights

All streetlights in the Southland District were changed to more efficient ones five years ago.

### SIESA Renewable Energy Project

A renewable energy trial on Stewart Island began on 17 October 2008 with one wind turbine and two solar panels producing some electricity on the Island. As at 20 November around 900 kWh has been produced from the turbine and solar panels ie had produced just under 1% of the Island's electricity. The trial will run for six months. If the money is obtained to install further turbines and solar panels 33% of the Island's power will be produced from renewable sources. This will reduce the amount of greenhouse gas emissions significantly. Currently each kWh of diesel fired electricity on the Island produces about 1 kg of CO<sub>2</sub>, where-as NZ grid electricity is responsible for an average of around 0.2 kg of CO<sub>2</sub>.

### Vehicle Fleet

Council has a large vehicle fleet because of the size of the District. Staff such as Area Engineers and Building Inspectors need their cars to do their jobs which limits opportunities for creating one pool fleet with a booking system. Council is in the process of reviewing its vehicle policy which will encourage the purchase of smallest appropriate fit-for-purpose vehicles and looking at more efficient and less emission options.

### General

#### *Energy*

In 2006 a level one energy audit was undertaken on Council's buildings and water and sewerage pumps. Council has been monitoring its energy use since then. Council switched from Contact Energy to Meridian for its energy supply in April 2009. Meridian has not only offered better prices but they also produce electricity from renewable sources.

#### *Secretarial Services*

A large amount of paper is used in this area due to the significant number of Council committees and Boards which require agendas (12 Community Boards, 16 Community Development Area Subcommittees, 9 Water Supply Committees, Council, APAC, Policy, Resource Management and various other committees).

The option of sending agendas electronically has been looked at however is not always possible because of the speed of internet connections out in community and the size of the agenda. However, agendas for all Southland District Council meetings are double sided. Order papers (instead of the full agendas) are sent out to some members of the public electronically where appropriate. An e-mail is also sent out to Council staff asking if they no longer need a hard copy of the Council directory which is distributed twice yearly (around 200 copies each time).

#### *Knowledge Management*

The Knowledge Management Department is responsible for managing all the information within Council including sorting the mail sent to Council and the upkeep of Trim (Council's electronic document filing system). In recent years the department has reduced waste by no longer photocopying inwards mail and filing it. All mail received is scanned and filed into Trim.

*Information Technology*

A number of initiatives in this department are already in place to reduce energy/waste. These include:

- Video conferencing has been installed for use between all the Council offices.
- All Council computers are set so they go on to compulsory standby at 10.00 pm if they are (accidentally) left on.
- All computer equipment is leased and when the Council is finished with a product such as a computer it goes back to the lease company and they recycle it.
- All servers have gone virtual so only one server is needed instead of six. This reduces power not only because there is just one server but also because only a smaller server room is needed and less power is used for air conditioning.

**Action Plan**

<b>Action</b>	<b>Owner</b>	<b>Due Date</b>
<b>General</b>		
Investigate more energy efficient ways of providing heating in Archives.	G Cavanagh	June 2010
Educate all staff on the need to turn computers off at night (not just to reduce energy but so that 'updates' and virus scans can work).	RET/IT	July 2009
Review the location of Community Board/CDA meetings to have them at Area Offices where possible so that video conferencing can be used (especially when a staff member may be required to attend part of the meeting).	Committee Secretaries/Area Officers	December 2009
Educate all staff, Councillors and Community Board/CDA members on how to use video conferencing (for Community Board/CDA meetings or meetings between the offices around the District).	D Campbell	December 2009
Investigate installing external video conferencing (to reduce the need for air travel).	D Campbell	December 2009
Undertake audit of all printers in the Invercargill and Area Offices and remove those surplus to requirements.	D Campbell	December 2009
Investigate changing all printers so that you can't print unless a pin number is put in (just as we do for photocopying).	D Campbell	December 2009
Educate staff on IT policies.	D Campbell	July 2009
Look at incorporating e-bench alerts (showing when electricity consumption is above normal) into Management practises.	C McIntosh	December 2010
Quarterly updates on energy use at each of the Council offices or put the energy info on the intranet every month for each office.	RET	August 2009
Develop Sustainable Procurement Policy.	RET/R Hawkes	December 2009

<b>Action</b>	<b>Owner</b>	<b>Due Date</b>
<b>Buildings</b>		
Investigate installing solar panels and a wind turbine on the Invercargill Southland District Council office roof (dependent on outcome of trials on Stewart Island).	K McNaught, P Thompson	Following on from the renewable energy trial
Review the way the Area Offices are heated and replace with more efficient forms (to be done in conjunction with building reviews).	G Tong	June 2010
Investigate installing motion sensor lights in the Invercargill office and Area office toilets (to be done in conjunction with building review).	K McNaught	June 2010
Ensure energy efficiency is considered when any maintenance work is undertaken.	K McNaught	Ongoing
Make suggestions to appropriate hall committees to install coin operated electricity for lights/heaters (after hall reviews have been completed).	K McNaught	June 2010
Ban the use of all fan heaters in the Council offices.	D Adamson	May 2009
Review what toilet facilities in the District need electricity (as some are only open during the day when there is natural light).	K McNaught, Area Engineers	Ongoing
Remove all old night store heaters/boiler heaters and replace with more efficient options if needed.	K McNaught	Ongoing until all heaters are removed.
<b>SIESA</b>		
Investigate replacing two of the diesel generators with more efficient ones.	P Thompson	June 2010 and June 2011
Put in place a programme to insulate homes on Stewart Island.	P Thompson	June 2010
Continue to undertake renewable energy trial on Stewart Island with the instalment of a wind turbine and solar panels.	P Thompson	During 2009/2010
Look at funding options to put in a long term renewable energy system on Stewart Island.	P Thompson	June 2010
<b>Water and Wastewater</b>		
Install variable speed drives on new/replacement pumps as appropriate (so they are not pumping all the time).	S Dowling	Ongoing
Look into demand management and leak detection for all water schemes.	S Dowling	June 2011
Investigate water metering including undertaking a trial in one community.	S Dowling	June 2011
Promote rainwater collection in existing tanks for watering gardens/toilets.	S Dowling	June 2010
Infiltration investigations at Sewerage schemes and repair (if feasible) if water is found to be coming in.	S Dowling	June 2012
Investigate possible methane collection at Sewerage schemes and use for it.	S Dowling	June 2011

<b>Action</b>	<b>Owner</b>	<b>Due Date</b>
Investigate whether aeration blowers can be optimised so they are not running all the time and implement if feasible.	S Dowling	June 2011
Install a biofiltro (worm farm) system at the new Edendale/Wyndham sewerage scheme as opposed to an oxidation pond with aerators (results in less running costs and less man hours).	S Dowling	June 2009
Consider installing a biofiltro system for other sewerage scheme plants (perhaps starting with Ohai/Nightcaps).	S Dowling	June 2012
<b>Streetlights</b>		
Investigate the use of LED lights in new installations.	Area Engineers	Ongoing
Review subdivision standards to ensure more efficient lights are used.	R Hawkes	December 2009
Undertake audit of streetlights and give a recommendation of those that could be removed or replace with alternatives.	MWH	December 2010
<b>Waste</b>		
Reduce the amount of paper produced for Council agendas by sending order papers to staff rather than the full agenda. Staff can then print relevant sections themselves (Councillors, Area Offices, Management Team and some groups in the community will still receive the full agenda due to legislative requirements and the need to see the full agenda).	J O'Shannessy	July 2009
Implement the 'Meeting Manager' system. This system will allow agendas to be created from the Council's electronic document filing system TRIM rather than from paper hard copies.	G Cavanagh	December 2010
Educate staff on sending a link to a document in Trim instead of the full electronic document or paper version.	G Cavanagh	Ongoing
Look at how the intranet could be utilised to reduce the number of training manuals, staff directories etc printed.	L Pagan	June 2010
Educate staff how to use the printers to minimise the amount of paper used (often people print to the wrong printer and do not collect it, print one-sided on the large printers not set to double sided as a default and do not print more than one page per piece of paper).	D Campbell	July 2009
Educate staff (brown bag lunches) on not printing e-mails and documents that could be read easily on the computer screen.	IT / Knowledge Management	December 2009
<b>Vehicle Fleet</b>		
Adopt new vehicle policy which encourages more efficient options.	C McIntosh	August 2009
As vehicles come up for replacement replace them with smaller capacity vehicles.	C McIntosh	Ongoing
Investigate how Council could reduce its fleet size or cap the fleet size at current levels.	C McIntosh	June 2010
Look at the reporting of fleet energy costs.	C McIntosh	June 2010
Investigate providing driver education on fuel efficient driving techniques.	C McIntosh	June 2010

<b>Action</b>	<b>Owner</b>	<b>Due Date</b>
<b>Employee Commute</b>		
Undertake a survey on how people travel to and from work.	Y Paterson	August 2009
Organise a bike to work day (during bikewise week) with free breakfast/lunch for those that participate.	RET	February 2010
Set up a car pool programme.	RET	September 2009
Investigate installing bike rack/shed and lockers at Council.	K McNaught	June 2010