

CIWEM EMS

Review of CIWEM's Environmental Performance 2007

Overview

For a number of years CIWEM has been taking steps to improve its environmental performance. This was placed on a more structured footing in 2007 with the production, approval (by CIWEM's Cabinet and Council) and circulation of material establishing a more formal Environmental Management System (EMS).

Various aspects of CIWEM's environmental performance, such as usage of paper, gas, water and electricity have been monitored since 2005. These have been expanded in 2007 to include staff travel, and staff cooperation in terms of logging their work-related travel appears to be good. The consistency of monitoring of deliveries of stationary and catering supplies has been low and steps will be taken to improve this in 2008.

An Environmental Manual, Procedures, Guidance and Management Programme were circulated to staff and contractors as appropriate and made available on CIWEM's intranet. Compliance with the procedures has been tested with internal audits of the EMS in April and July 2008, indicating broad compliance, albeit with a small number of failures which are being addressed. Performance against the Environmental Management Programme has been largely positive but again with some incidence of failure to meet the targets set. This largely related to the need to require suppliers of goods and services to CIWEM to provide information on their environmental performance so this could be taken into account as part of a decision-making process on their appropriateness to supply CIWEM. The EMS Coordinator may need to take a more active role in encouraging staff to deliver against actions set out in the Environmental Management Programme.

For the time being the focus of the system is in improving the environmental performance of CIWEM's office in London, as well as encouraging CIWEM's contractors to improve the environmental impacts of the services they deliver for CIWEM (e.g. national-scale conferences and CIWEM's Magazine and Journals). The activities of the branches and groups are being worked into the scope of the EMS, however it is a long-term target to increasingly incorporate their activities into the system. Some initiatives are being piloted with the Metropolitan Branch in order to gauge their likely effectiveness.

Environmental performance will be assessed against the Key Performance Indicators (KPI) (Table 1) and targets set in the Environmental Management Programme.

Table 1: CIWEM EMS Key Performance Indicators

Issue	Indicator
Transport	Number. of deliveries per year
	Number of staff journeys taken not on public transport per year
Environmental Stewardship	Number of web pages of interpretive material
	Number of PPSs produced per year / total
	Number of consultation responses produced per year
	Number of different themes covered in programme of national conferences
Professional Development	Number of accredited training courses offered
Publications	Recycled paper content / printing quality for:
	- WEM
	- Water & Environment Journal - Envelopes / carrier
Energy Use	Gas consumption per year
	Electricity consumption per year
Conferences	Recycled paper content of conference brochures
	Percentage of conference / meeting venues within 1 mile of public transport
Office Waste Minimisation	Consumption of A4 printer paper
Water Use	Water consumption per year

Transport

KPI Transport: Number of deliveries per year

The number of deliveries made to CIWEM per year was a Key Performance Indicator but records of deliveries were not adequately maintained throughout the year. Steps have been taken to ensure that this will be undertaken properly during 2008.

The frequency, mode and distance travelled by CIWEM staff members were logged. Typical modes of transport utilised were train, aeroplane, taxi and private car.

Approximately 23,300 miles were travelled by plane in 2007, with much of this made up by the trip by the Director of International Development to China and Hong Kong. Approximately 15,330 miles were travelled by train by staff, including a number of trips to Europe. For more local journeys, approximately 50 miles were covered using buses (16 journeys), 365 miles on the tube and 470 miles in taxis (132 journeys).

KPI Transport: Number of staff journeys taken not on public transport per year

Such journeys are taken to include those via taxi or private vehicle. According to records, 1,910 miles were covered in this manner.

It should be noted that whilst air travel is not private transport, because of its particularly damaging environmental impacts it is not considered to be public (mass) transport. Thus, mileage / trip numbers for air travel should always be considered separately.

2007 was the first year of monitoring staff travel so there are no trends to report.

In response to targets in the Environmental Management Programme, the following actions are being taken to reduce transport impacts:

- CIWEM's national conferences are located at venues with good access to public transport (this is a material consideration in choice of venue).
- International members are being encouraged to attend overseas meetings in place of CIWEM staff
- Teleconferencing facilities are available for those who would otherwise travel long distances to attend meetings

The feasibility of wider use of video conferencing to take the place of some meetings has been discussed by the EMS Coordinator, IT Support & Development Manager and others, with the conclusion that it was unsuitable to replace panel and board meetings at this stage, although

the option will be re-examined on a regular basis. There is particular potential benefit in its use for interviewing candidates for membership who are based overseas.

Environmental Stewardship

At a recent internal audit it was found that all points of procedure relating to CIWEM's Environmental Stewardship were being followed.

KPI Environmental Stewardship: Number of web pages of interpretative material

Interpretive material is taken to include the Information Resources section of the website (52 pages) along with information on Arts and the Environment (1 page), conference outputs (92 pages), Policy Position Statements (41) and consultation responses (64). The total number of pages of such material at the end of 2007 was therefore 253.

2007 was the first year this information was monitored.

KPI Environmental Stewardship: Number of Policy Position Statements produced each year / total

As of the end of 2007 there were a total of 40 Policy Position Statements (PPSs) published on the CIWEM website. In 2007 there were six new or updated PPSs published. This is the same as in 2006.

KPI Environmental Stewardship: Number of consultation responses produced each year

In 2007 CIWEM submitted 26 responses to consultations or inquiries. This compares to 21 in 2006 and 17 in 2005. This increase reflects the growing diversity of CIWEM's technical panels and the range of expertise within the membership being harnessed to contribute to such outputs.

KPI Environmental Stewardship: Number of different themes covered in programme of national conferences

There were eleven different themes covered by CIWEM's annual conferences in 2007, with only wastewater management and waste management not being covered.

2007 was the first year this information was monitored.

The KPIs relating to the Environmental Stewardship component of the EMS will be kept under review to ensure they continue to reflect the areas of CIWEM's stewardship activities deemed the most appropriate.

Professional Development

KPI Professional Development: Number of accredited training courses offered

The Accredited Academic courses totals 20 (17 Postgraduate and 3 Undergraduate)

CIWEM has approximately 80 courses Accredited as contributing to CPD.

Publications

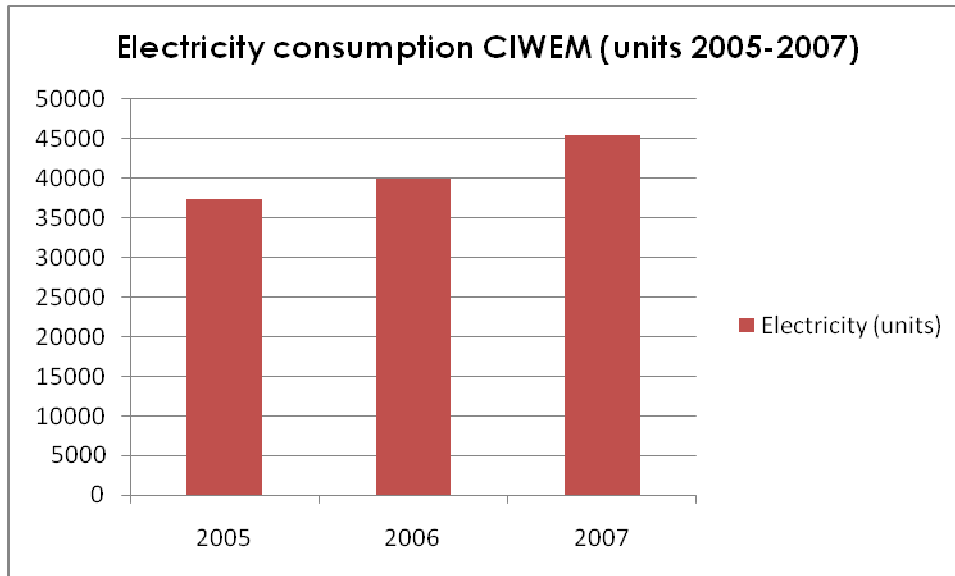
KPI Publications: Recycled paper content / printing quality for:

- **WEM**
- **Water & Environment Journal (WEJ)**
- **Envelopes / carrier**

All CIWEM publications use paper which comprises 100% post consumer waste recycled paper. In 2007 approval was given for the carrier for Water & Environment Journal to be biodegradable plastic (as such carriers are commonly not recyclable). Dialogue is continuing with Lead Media regarding similar arrangements for WEM, but this involves significant additional cost and the carrier is currently recyclable. The printing processes for both WEM and WEJ both make use of vegetable/soya-based inks.

Energy Use

Electricity and gas consumption are monitored via monthly meter readings. Records have been maintained for 3 years and consumption trends are shown below. There is an increase in electricity consumption of 21% over these three years.



KPI Energy Use: Electricity consumption per year

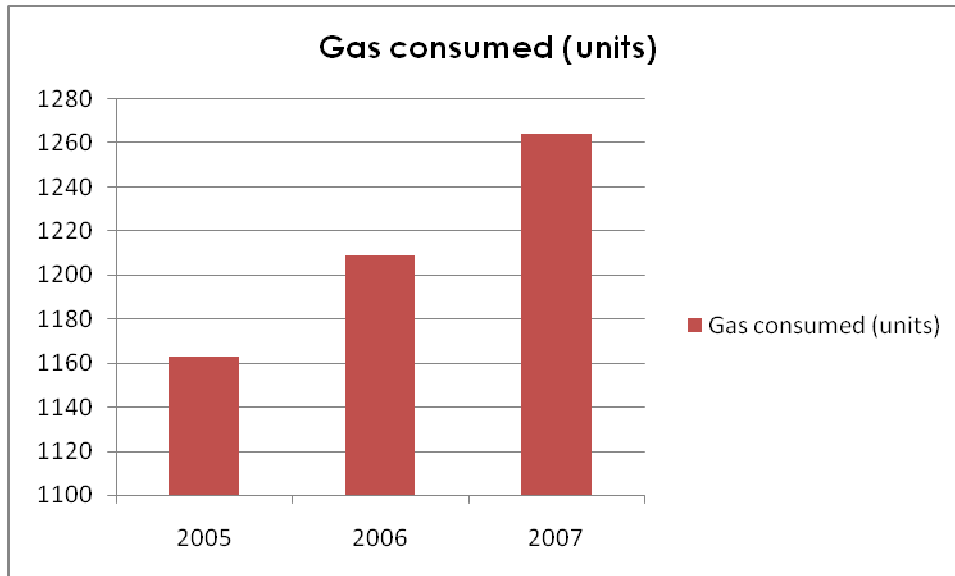
In 2007 electricity consumption increased from that in 2006 by more than 13%. This may be largely explained by the upgrading of CIWEM's IT equipment: In December 2006/January 2007 the number of servers was expanded from 3 to 7, together with some additional other equipment. There have also been three additional staff since 2005/06, as well as interns for extended periods, with associated IT use. A number of offices also have additional electric radiators for use during cold weather, the use of which should be minimised as far as possible.

It should be a target for 2008 to stabilise electricity consumption at a minimum, with an aspiration to reduce consumption by 1%

Expert advice will be sought on how CIWEM can reduce its electricity consumption within its offices. A recommendation from the recent audit was that sub-metering could be employed to identify particular areas of high use. Investigations are also being made into the potential for improving the energy efficiency of office lighting further.

KPI Energy Use: Gas consumption per year

In 2007 gas consumption increased from that in 2006 by 4.5% and 8.7% over the period 2005-2007 inclusive. Over this period there has been an increase in the number of staff in the office, with increased use of certain rooms. Greater use of central heating is likely to have resulted in this increase. There should be a target of 1% decrease in gas consumption for 2008. Increased vigilance in use of thermostatic valves on radiators when rooms are unoccupied (especially over weekends) will be encouraged.



Actions in the Management Programme concerning maintenance and flushing of the central heating system were not fully carried out, neither were those relating to potential for improvements to insulation. These will be undertaken over summer 2008. Again, expert advice will be sought on how heating efficiency within the building may be improved. A recommendation from the recent audit concerned investigation into upgrading the boiler timer to allow for greater flexibility across weekends.

Conferences

KPI Conferences: Recycled paper content of conference brochures

In 2007 CIWEM's national conference brochures were printed on 100% recycled post consumer waste paper when produced by CMS and 25% post-consumer, 30% pre-consumer waste and 45% virgin fibre when produced by Aqua Enviro. The EMS requires that CIWEM publications should comprise recycled paper of at least 75% post consumer waste with the remainder from sustainable forests.

Steps should be taken to ensure that all brochures in 2008 meet the required level.

KPI Conferences: Percentage of conference / meeting venues within one mile of public transport

For national conferences:

- SOAS, London: Within 200m of London Underground (Russell Square station) and local buses
- Teacher Building, Glasgow: Within 100m of Glasgow Subway (St Enoch station) and local buses

- The Lakeside Centre, Birmingham: Within 1km of Birmingham New St, Moor St, Snow Hill mainline stations and local buses.
- The Brit Oval, London: Within 200m of London Underground (Oval station) and local buses

Compliance with this KPI was 100% and should be maintained.

Discussions took place with CMS regarding greening conferences and options regarding only marketing conferences electronically, reducing the amount of sponsor material included in delegate packs etc. Further discussions and a trial of e-marketing will take place in 2008. Options for web-streaming presentations at conferences are being discussed and will be trialled at an appropriate event. Guidance to sponsors of CIWEM conferences now emphasises CIWEM's wish that they should minimise the amount of printed promotional material placed in delegate packs and alternatives, such as web-based advertising on dedicated pages of the CIWEM site for a given event is considered to be a likely option to offset any associated loss in sponsor exposure.

Office Waste Minimisation

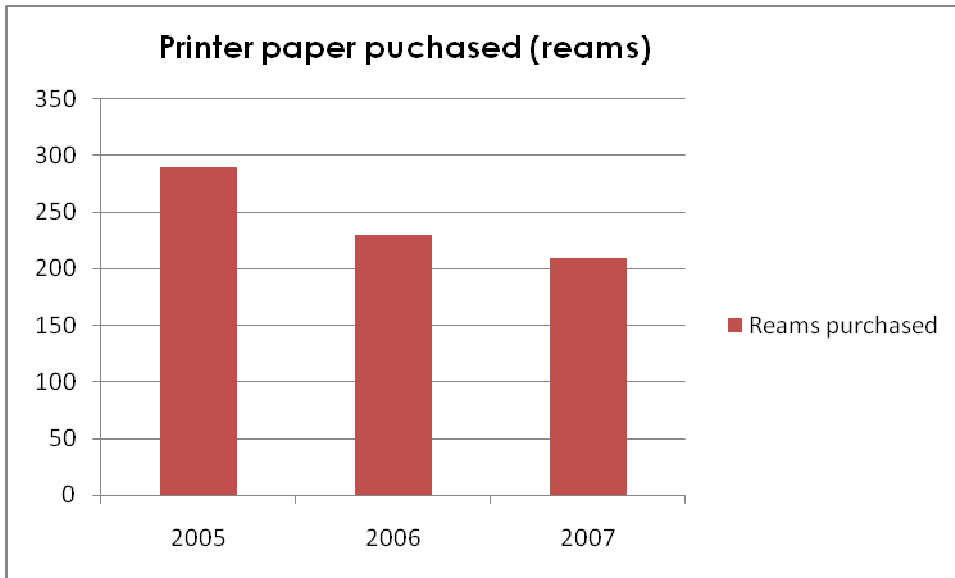
The recent internal audit found that CIWEM staff were broadly aware of their personal responsibility to minimise the amount of materials they use, waste they produce and to manage their waste according to the guidance provided to them. Procedures in this context were being followed.

KPI Office Waste Minimisation: Consumption of A4 printer paper

Consumption of A4 printer paper has been monitored annually for the last 3 years in terms of the number of reams purchased and the numbers of reams used by department.

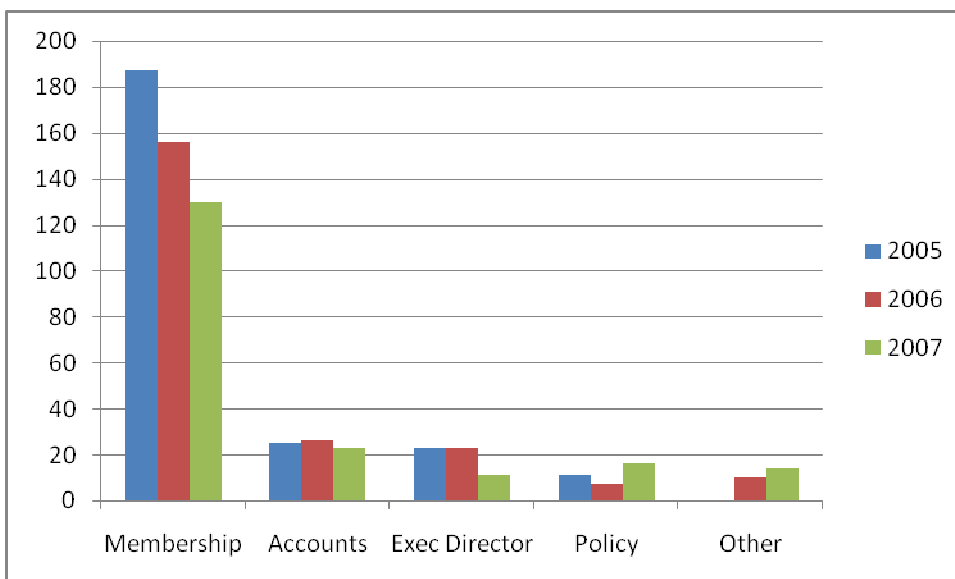
The number of reams of paper purchased in 2007 was 210, down from 230 in 2006. This represents an 8.7% reduction on 2006 and there has been a 27.5% reduction over the three-year period (see table below).

This demonstrates the effectiveness of monitoring and recording usage and purchasing through the use of a record book all staff must complete upon taking paper from the store. Since mid-2007 printer paper is stored in a locked cupboard in the Finance & Admin office.



Paper use by department

Printer paper consumption overall has fallen. This is in the main due to the efforts of Membership Department whose use of paper has reduced by 30% since the start of 2005, as a result of encouraging reviewers and accreditation board members to receive information electronically, as well as increased electronic communication in other areas. Other departments have broadly similar consumption except for Policy department which has seen an overall increase in consumption (see table below), but in this time there have been two new full time members of staff using its printer.

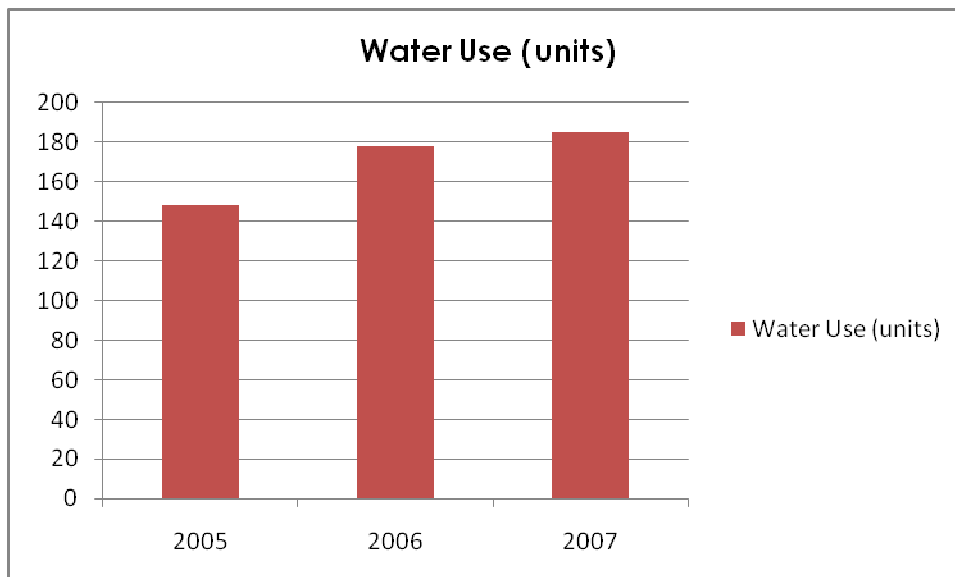


Water Use

KPI Water Use

Water consumption in 2007 increased on 2006 levels by 3.9%, and have increased by 25% since the start of 2005. There has been an increase in staff numbers in this period (3 staff) but this is insufficient to explain the additional usage. Further, 'hippos' have been installed in toilet cisterns and one toilet (mens, first floor landing) has been converted to a low flush cistern. It is difficult to monitor the behaviour of outside parties such as cleaners in terms of water use but they will be encouraged to maximise their water efficiency.

A target for 2008 should be to halt any further increases in water consumption and examine any further ways of reducing water use.



Compliance with Environmental Regulations

The environmental legislation and regulations with which CIWEM must comply is listed in the Register of Environmental Regulations, which is stored on 'Dolphin'. CIWEM is in compliance with these regulations and in 2007 there were no failures to comply with the requirements. The register was revised and updated in April 2008.

August 2008