

DEMONSTRATING A DECADE OF WATER SAVINGS AT SCA HYGIENE



SCA Hygiene has a proven track record in implementing water efficiency process improvements. EPA Victoria has recognised this achievement through granting the site a partial exemption from the EREP program.

The company manufactures toilet tissue, paper towel and facial tissues – using large volumes of water in the production process. However, since introducing resource efficiency actions at its Box Hill site, the business has reduced water consumption per tonne of paper produced on the paper machines by 68 per cent in the last decade.

At the time of entering into a voluntary water management plan with Yarra Valley Water in 2005, the company had already cut consumption per tonne of paper by 26 per cent. At the end of 2007 the company had achieved a further 36 per cent reduction, dropping daily water usage per tonne of paper from 28 kL to 18 kL.

The majority of the water used on site is recycled, with large quantities filtered for use in cleaning showers, preparing pulp, wash-up water and other processes. Fresh water is needed for critical washing and cleaning applications.

SCA Hygiene's plans to further improve its efficiency were critical to its success in achieving an exemption from the water component of its EREP. The company's goal is to reduce water use from its present 12 kL per tonne of paper produced to less than 10 kL per tonne, which is comparable to best practice at SCA's sites around the world.

The business has put a strong focus on water recycling and reuse, including substituting fresh water with process water, installing more efficient filters to enable greater water reuse, reducing water pressure and nozzle sizes, as well as installing automatic valves on vacuum pumps and splashguards. The site is also investigating harvesting rainwater and reusing trade waste via a water treatment plant.

Energy

Efforts have also been made to address energy efficiency at the Box Hill site, with opportunities investigated during a 2007 audit forming the backbone of the EREP.

Forty-three opportunities were identified as a result of the audit, which was undertaken by an expert from SCA's European operations. The projects represent potential savings of nearly eight per cent of electricity consumption and nearly 18 per cent of gas consumption.

Some projects have already been implemented, and the rest are being prioritised for more detailed investigations.



Toilet tissue manufacturing at SCA Hygiene's Box Hill site

SCA Hygiene – savings at a glance

Energy reduction: 16 per cent per tonne of paper produced since 2005.

Water reduction: 68 per cent per tonne of paper produced over the last 10 years.

- Water use at start of 2005: 28 kL per tonne
- Water use at end of 2007: 18 kL per tonne
- Current YTD (Oct) 2009: 12 kL per tonne

Investment: Some projects with specific investment; however, a large proportion of our reductions have been achieved through process optimisation and behavioural change.



The EREP program – designed for flexibility

EPA Victoria's Environment Resource and Efficiency Plans (EREP) program is helping businesses achieve large resource savings and improve their bottom line through reduced energy, water and waste costs. EREP participants often find improvements can be made without major capital expenditure, so financial returns are fast.

Introduced in 2008, the EREP program is already set to achieve annual savings of around \$70 million each year for the 250 Victorian sites participating in the program.

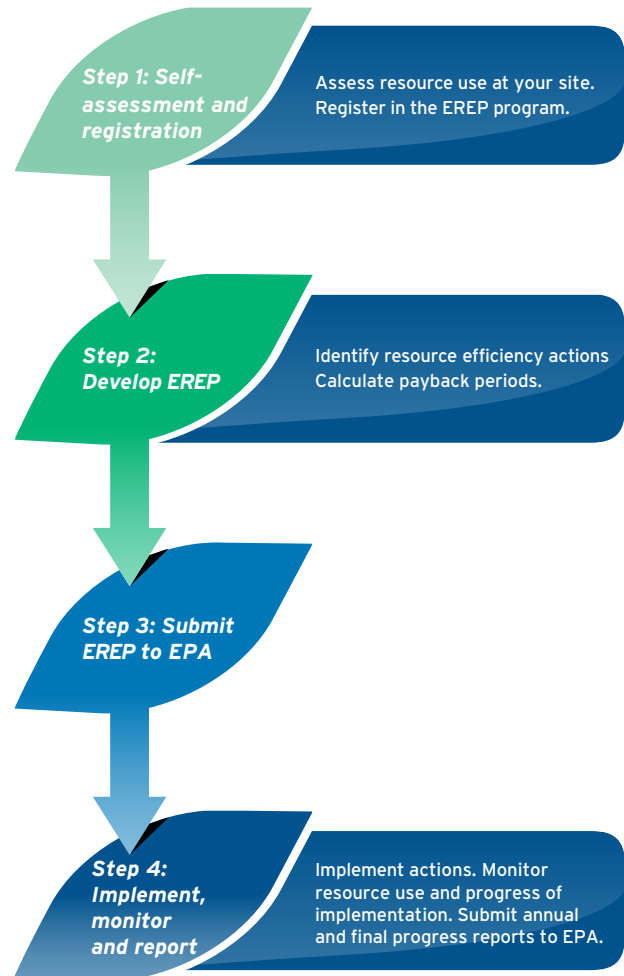
Large energy and water users are required to show they have assessed their operations, identified opportunities to improve resource efficiency and prioritised these actions. Importantly, actions that pay for themselves within three years must be implemented. To date, EPA has found that the average payback period of mandatory actions is about 10 months.

EREP participants come from a range of sectors including metals and chemicals manufacturing, food and beverage manufacturing, shopping centres, metropolitan hospitals, universities and sporting facilities.

What's in an EREP?

- Resource profile (baseline): site level energy, water and waste.
- Major energy-using, water-using and waste-generating activities.
- Actions to reduce energy and water usage and reduce waste.
- Costs, savings and efficiency gains expected from each action.
- Payback periods for each action.
- Time frames and responsibilities for implementing actions.
- Monitoring, reporting and review process.

EREP program steps



Annual EREP program savings (from actions with a payback period of three years or less)

Energy:	more than 4500 TJ (enough to power around 90,000 households*)
Greenhouse gases (CO ₂ -e):	at least 900,000 t
Water:	more than 5000 ML (around 90,000 Melburnians' annual water usage**)
Solid waste:	more than 100,000 t
Liquid waste:	more than 900 ML
Financial savings	more than \$70 million
Average payback period of actions:	around 10 months

* Based on 2005 average usage (source: www.environment.gov.au) ** Based on Target 155 (source: www.ourwater.vic.gov.au)

To find out more about the EREP program visit www.epa.vic.gov.au/erep, email erep@epa.vic.gov.au or call EPA on 03 9695 2722.