

O-I CUTS COMPRESSED AIR USAGE AND ACHIEVES BIG ENERGY SAVINGS



O-I (formerly known as ACI in Australia) is the world's leading supplier of glass containers. The company's Melbourne plant has operated in Spotswood since 1890 and, in the last 10 years, a strong focus on energy and water efficiencies has produced significant reductions in resource use.

Greg Savage, O-I's Melbourne Plant Manager, says the company realised that businesses could not simply continue to operate in the way they traditionally had with resources.

'We need to integrate sustainable practices in our everyday business decisions, continually improve our processes to reduce energy, waste and water, and cope with the demands of increased production,' he explains.

Since the initial development of the O-I EREP, the site has already begun to see financial and resource savings. Key achievements include the optimisation of high and low-pressure compressed air systems, saving 6.7 TJ of energy and 2375 t CO₂-e in greenhouse gas emissions in the past 12 months.

Low-pressure air leaks were reduced through a leak detection and repair program, and by shutting off equipment not in use. Where possible, the company replaced high-pressure air systems with air conditioning or fans to cool electrical equipment. Checks were also run to ensure equipment was not being supplied with greater air pressure than required.

Two more projects, optimising operations of electric lehrs (ovens used for annealing, or slowly cooling, glass) and furnaces, and replacing compressor cooling towers with low water consumption units are expected to have payback periods of 1.4 years.



O-I's Melbourne Plant Manager, Greg Savage



Investment and savings (from actions with a payback period of three years or less)	
Estimated annual savings	
Energy:	35 TJ
Greenhouse gases (CO ₂ -e):	10,926 t
Water:	21 ML
Solid waste:	760 t
Liquid waste:	3555 kL
Financial payback	
Average payback:	0.7 years



O-I cuts compressed air usage and achieves big energy savings

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.

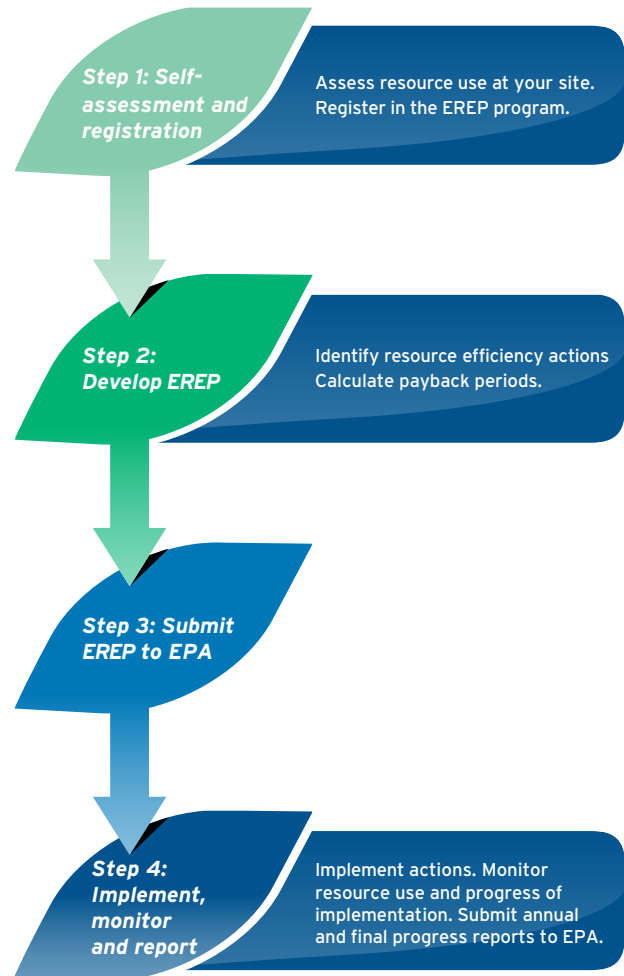
Large energy and water users are required to show they have assessed their operations, identified opportunities to improve resource efficiency and prioritised these actions. Importantly, actions that pay for themselves within three years must be implemented. To date, EPA has found that the average payback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

