

# EREP DELIVERS EFFICIENCY FOR SUGAR AUSTRALIA'S YARRAVILLE OPERATIONS



*Sugar Australia refines more than 60 per cent of Australia's refined sugar, with half of the company's output coming from its Victorian Yarraville refinery. Sugar Australia will in total be investing about \$1.3 million as part of the EREP program. This is in addition to \$56 million already invested in a new drier and grading plant to run on a continuous basis, improving efficiency and safety.*

By considering resource efficiency up front in the design and construction of its new facility, Sugar Australia will save around \$125,000 in annual energy costs when the facility is completed in late 2009.

The new facility has additional processes that will require more energy, but the increased storage capacity will result in fewer process start-ups and shut-downs that generate high energy loads.

In the existing refinery, annual energy savings of around \$271,000 will come from 29 initiatives including:

- optimising operation of sugar boiling pans
- running boilers at a steady rate to reduce energy spikes
- installing economisers for boilers
- using variable-speed drives on injection water pumps and induced-draft fans
- installing energy-efficient lighting.

Thirteen projects focusing on optimising wash cycles, in combination with increasing reuse and recycling of water, will save around 45 million litres of water and \$50,000 in annual potable water costs.

The EREP has helped Sugar Australia to identify projects that will create 'win-win' situations where the business will get cost savings from projects that are also beneficial to the environment. The structure of the program also allows the company to easily track the progress of actions through implementation to completion.



Sugar Australia's Yarraville refinery

## Investment and savings (from actions with a payback period of three years or less)

### Estimated annual savings

<b>Financial:</b>	<b>\$271,304</b>
<b>Energy:</b>	<b>27.5 TJ</b>
<b>Greenhouse gases (CO<sub>2</sub>-e):</b>	<b>2579 t</b>
<b>Water:</b>	<b>0.5 ML</b>

### Financial outlay and payback

<b>Total investment:</b>	<b>\$117,700</b>
<b>Other costs:</b>	<b>\$7900</b>
<b>Average payback:</b>	<b>0.5 years</b>



## EREP delivers efficiency for Sugar Australia's Yarraville operations

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.

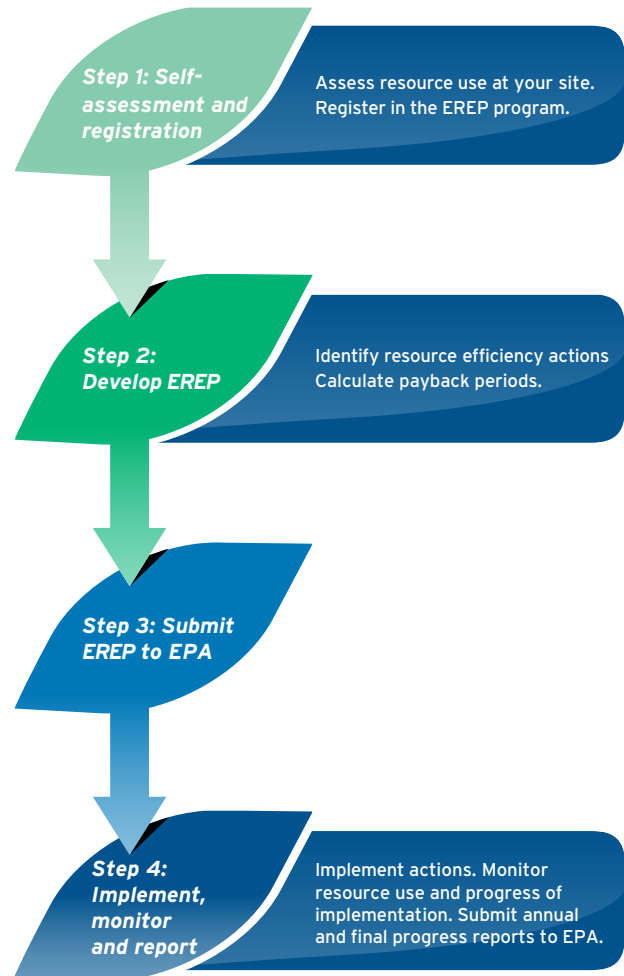
Large energy and water users are required to show they have assessed their operations, identified opportunities to improve resource efficiency and prioritised these actions. Importantly, actions that pay for themselves within three years must be implemented. To date, EPA has found that the average payback 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 <sub>2</sub> -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](http://www.environment.gov.au)) \*\* Based on Target 155 (source: [www.ourwater.vic.gov.au](http://www.ourwater.vic.gov.au))

To find out more about the EREP program visit [www.epa.vic.gov.au/erep](http://www.epa.vic.gov.au/erep), email [erep@epa.vic.gov.au](mailto:erep@epa.vic.gov.au) or call EPA on 03 9695 2722.