AUSTRALIAN INDUSTRY GROUP

# $7.5 million renewable energy plant to be powered by wine industry grape waste

## Annual energy costs will drop by $1.52 million

SUSTAINABILITY COVENANT CASE STUDY

Since 2006, Ai Group has granted funding assistance for 58 sustainability and environmental projects involving 84 participating organisations. More than $2 million has been invested in grants in the past four years.

A new sustainability covenant was launched in March 2009, with funding from EPA Victoria of $3 million over three years.

## Key outcomes

| | |
|---|---|
| **FUNDING** | |
| **Ai GROUP** | **$ 40,000** |
| **VICTORIAN GOVERNMENT RIDF** | **$ 1,800,000** |
| **CURRENT WATER, WASTE AND ENERGY COSTS** | |
| **WATER CONSUMPTION** | **$ 85,000** |
| **ENERGY** | **$ 2,750,000** |
| **SOLID WASTE** | **$ 3,500** |
| **TOTAL** | **$ 2,838,500** |
| **BIOMASS BOILER INVESTMENT** | |
| **COST** | **$ 7,500,000** |
| **PAYBACK PERIOD** | **4.8 YEARS** |

**PROJECTED SAVINGS**

- **Annual energy costs cut by $1.52 million**
- **Greenhouse gas emissions reduced by 72% (9,813 tonnes CO2e)**
- **Use of fuel oils to cease completely (1.85 million litres or 73,445 GJ)**
- **LPG use cut by 69% (830 tonnes or 40,759 GJ)**
- **Electricity from the grid reduced by 43% (1,656 MWh)**
- **Closing the loop on 90,000 tonnes of waste from wineries**

An innovative $7.5 million renewable energy plant at Australian Tartaric Products' (ATP) Victorian plant at Colignan 50km's south of Mildura will slash energy costs, improve international competitiveness, significantly reduce the company's carbon footprint and close the loop on the annual disposal of 90,000 tonnes of grape waste from the wine industry.

ATP is Australia's largest manufacturer of natural tartaric acid. They collect waste grape marc, sludge and lees from the Murray Darling, Riverina and Swan Hill wine regions, then supply the tartaric acid back to the industry for use in the wine making process.

General Manager, Sam Testa, said "ATP began looking at alternative energy sources in 2006, as electricity prices jumped by more than 50 per cent and LPG prices by 70 per cent. Increased competition from cheaper synthetic tartaric acid imports from China was adding to the pressure to act".

"One of our main objectives was to improve our competitiveness by reducing our energy costs". Mr Testa said "We also wanted to make a major impact in reducing our carbon emissions".

Awarded a $40,000 grant under the Australian Industry Group/EPA Victoria Sustainability Covenant, ATP identified


EPA VICTORIA

Victoria The Place To Be

ATP Australian Tartaric Products PTY. LTD.

AUSTRALIAN INDUSTRY GROUP

# $7.5 million renewable energy plant to be powered by wine industry grape waste

## Annual energy costs will drop by $1.52 million

SUSTAINABILITY COVENANT CASE STUDY

## Further information


**Australian Industry Group**
**Tel: 1300 733 752**
**Email: sustainablebusiness@aigroup.asn.au**
**www.aigroup.com.au**

**Sam Testa**
General Manager
Tel: 03 50291450
Email: sam.testa@australiantartaric.com.au

**or contact EPA Victoria**
Tel: 03 9695 2722
Email: business.programs@epa.vic.gov.au


the opportunity to generate energy using spent grape marc and then with assistance from the Ai Group successfully secured a $1.8 million grant from the Victorian Government's Regional Infrastructure Development Fund (RIDF) for its $7.5 million biomass boiler.

To be operational by 2012-2013, the 8MW grate-fed biomass boiler will use spent grape marc to produce steam required for the production of tartaric acid and substantially reduce the company's reliance on fossil fuels. (Spent grape marc remains after the waste marc is processed and is currently stockpiled and then sold sporadically for stock feed.)

Various options are being examined for electricity production, including steam engines and steam turbines; however the latter would require ATP to install costly water treatment facilities.

Mr Testa says energy costs will be cut by $1.52 million a year.

"Energy drawn from the grid will drop by 43 per cent, our use of LPG will fall by 69 per cent, and we will cease using fuel oils. We believe we have a social and moral obligation to cut our carbon emissions, and will reduce these by 72 per cent."

The renewable energy plant will boost confidence in ongoing investment in the region's wine industry by ensuring a sustainable, reliable and commercial option for the disposal of waste grape marc.

The value of spent grape marc as a biofuel to the company is 10 times greater than the value they receive for selling it for stockfeed.

AUSTRALIAN INDUSTRY GROUP

EPA VICTORIA

Victoria The Place To Be

ATP Australian Tartaric Products PTY. LTD.