



10+ ways to reduce your environmental footprint seminar

23 September 2010

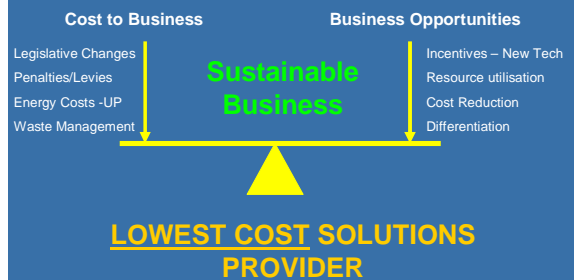
Vital statistics

- Established in 1930
- Employees ~60 permanent + 20 casuals through vintage
- 4 strategically positioned production facilities in Australia
 - Nuriootpa, SA – Distillery & Head Office/Production Facility
 - Berri, Riverland SA
 - Griffith, NSW

Services

- **Winery waste processing:**
(grape marc, filter cake, wine, waste water, tank washings, etc)
 - Approx 130,000 T of grape marc
 - > 55 million litres of liquid waste
 - 7,000 T of solid waste
(figures from 2009 calendar year)
- **Distillation services:**
(alcohol reduction, wine concentration, etc)
- **Waste water treatment**

Sustainability



Environment & Sustainability

What is Tarac doing?

- Balance between business/economic and environmental sustainability.
- Investigating options to reduce carbon footprint & taking positive steps internally to make Tarac more sustainable as well as providing solutions for the wine industry.

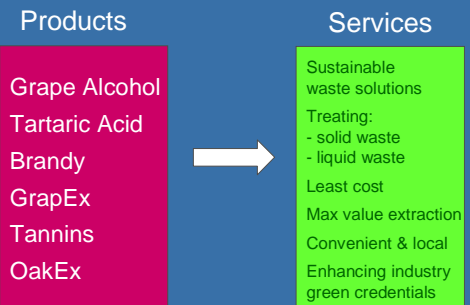
What are we doing?

- BioGas Re-use
 - ✓ anticipate savings of 18% of natural gas use
 - ✓ envisage reduction of over 4,000T CO2 p.a.
 - ✓ Commonwealth funding obtained under Re-tooling for Climate Change grant

What are we doing?

- Nuriootpa Distillery upgrade
- ✓ streamlining of distillation process to reduce energy & water consumption & improve product quality
- ✓ projected savings of 79.93 TJ of energy with reduction of 4,690T CO2 equivalent p.a.
- ✓ Commonwealth funding obtained under Re-tooling for Climate Change grant

Our Value Shift



Industry benefits

The service of taking winery waste for processing at Tarac's four strategically positioned sites, in an environmentally sustainable way, assists the industry in many ways:

- reduction of ethanol emissions
- reducing landfill
- significant infrastructure investment
- convenience to wineries

Industry benefits

- Reduction of VOC emissions
- Marc processed = 130,000 Tonnes per year
- ↓
- Ethanol yield = 50 litres per Tonne
- ↓
- Emissions to atmosphere = 6,500,000 litres
- ↓
- Greater than 5,000 Tonnes of VOC emissions (of which Tarac recovers more than 90%)

Industry benefits


- Landfill
- ✓ significant annual savings for wineries sending waste to Tarac
- ✓ alternatives costly – multi-million \$ p.a. (130kT marc x \$35/T = \$4.6m)
- ✓ many implications associated if not disposed of correctly
- ✓ can result in high CO2 emissions and/or methane gas if not treated correctly.

Industry benefits

- Significant infrastructure investment
- ✓ winery waste disposed of / re-used in an environmentally sustainable manner, reducing impact on wineries
- Convenience to wineries
- ✓ proven track record
- ✓ close proximity to majority of wineries
- ✓ looking after the environment long term
- ✓ cost effective solutions

The future!

- BioMass
- Conducting feasibility study with the aim to recover energy from BioMass to:
 - ✓ offset natural gas and electricity consumption
 - ✓ return energy to the grid which becomes a potential green energy, available to the wine industry

 tarac technologies

The future!

- Beckwith Park
 - Innovative new industrial and business park in Nuriootpa, (formerly historic Penfold's winery site).*
 - Currently in the process of aiming for green certification as the Master Plan is executed & new tenants take up residency

 BECKWITH PARK

Summary

- Providing environmentally sustainable solutions for the Wine Industry
- Providing the most cost effective solutions
- Internal focus on reducing our Carbon emissions and costs
- Developing technology to add further value
- Already reducing, with the aim to increase reduction in Carbon footprint of our customers / suppliers