



# ResourceWise™

## Sustainable Business Program

*Engineering a sustainable future...*

### ResourceWise Team

**Colin Barker**, Lead Engineer - Sustainable Development



Colin is a process engineer with an industrial background. He has worked with the NSW Department of Environment and Climate Change since

2000 on its sustainability programs, helping many companies reduce resource use and save thousands of dollars in operating costs.

**Jim Kelty**, Senior Consultant



Jim has over thirty years experience in energy procurement and management. He assists clients with energy auditing, energy cost reduction

strategies, sustainable development, risk management, and environmental auditing.

**Dr Carl Fung**, Snr Process Engineer



Carl is a chemical engineer experienced in ventilation modelling, process optimisation, heat transfer analysis, wastewater treatment and environmental

assessment. He has facilitated many resource efficiency programs for industrial and commercial clients.

**Lindy Woodburn**, Snr Consultant



Lindy is a materials engineer with ten years experience in manufacturing. Her process improvement experience includes resource efficiency,

waste reduction, and product quality improvement.

Advitech's **ResourceWise™ Sustainable Business Program** assists organisations to achieve environmental and financial sustainability in a socially responsible manner. The **ResourceWise** program draws on Advitech's experience in sustainability, resource efficiency, energy management, environmental management and process engineering.

The program is tailored to suit each client's individual needs. **ResourceWise** personnel lead participants through a range of activities to identify potential areas for improvement - focussing on energy, raw materials and water use, and waste minimisation strategies. We assist with the development of action plans to address identified areas of need, then help implement the action plan.

The **ResourceWise** team is supported by Advitech's team of experienced engineers and scientists, who are available to provide technical assistance as required. This provides a **unique advantage** to our clients. We help businesses implement real solutions, through our engineering abilities and understanding of resource use. We are not just auditors, we work with you to improve your organisation's performance!

Advitech offers a range of services within the **ResourceWise** program:

#### **Resource Efficiency Solutions**

- ⇒ Process efficiency and optimisation
- ⇒ Engineering solutions
- ⇒ Project management of equipment upgrades
- ⇒ NSW DECC Sustainability Advantage program - resource efficiency module
- ⇒ Energy procurement

#### **Management Advice**

- ⇒ Australian Emissions Trading Scheme assistance
- ⇒ Corporate policy development
- ⇒ Resource action plans and improvement programs
- ⇒ Advice on legislative changes

#### **Environmental Awareness and Training**

- ⇒ Regulatory and market advice
- ⇒ Cultural change facilitation
- ⇒ Staff sustainability training

#### **Monitoring**

- ⇒ Selection of appropriate energy, water and waste monitoring equipment

#### **Auditing and Assessment**

- ⇒ Resource assessments (energy, water, waste)
- ⇒ Resource audits to AS 3598 *Energy Audits* (Level 1, 2 or 3) and AS 14001 *Environmental Management Systems*
- ⇒ NSW Energy Saving Action Plans and Federal Energy Efficiency Opportunity (EEO) Assessments

#### **Environmental Reporting**

- ⇒ Carbon footprint estimation
- ⇒ NPI calculation and reporting, load-based licensing
- ⇒ National Greenhouse and Energy Reporting System
- ⇒ Environmental licensing and compliance



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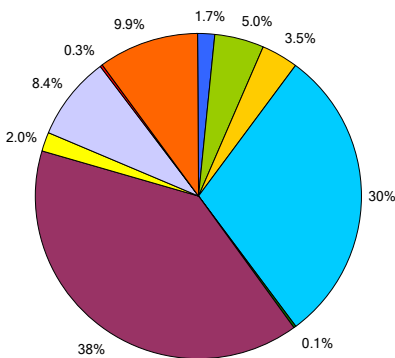
*Engineering a sustainable future...*

### Aggregate Resource Efficiency Results (2000-2008)

#### Results for companies Advitech has worked with

No. companies Advitech has worked with	103
Aggregate annual savings	\$8.355 m
Average return on capital for project initiatives	~ 5 mths

#### Total Annual Savings by Industry Sector



Water	1.7%
Waste Water	5.0%
Gas	3.5%
Power	30%
Power Tariff	0.1%
Raw Materials	38%
Solid Waste	2.0%
Fuel	8.4%
Risk Reduction	0.3%
Other	9.9%

### Experience

Advitech has delivered the resource efficiency module to many organisations within the NSW Department of Environment and Climate Change (DECC) Sustainability Advantage and Cleaner Production programs. Working with each participant company's Resource Efficiency Team, substantial savings have been achieved. In addition to business cost savings, participant companies emerge from the program with increased capacity to measure, analyse and respond to combined environmental and business cost pressures. In addition to our experience in DECC program module delivery, the **ResourceWise** team offers experience in energy management, process and materials engineering, across many industry sectors.

### Example Projects

- ⇒ Level 3 energy audits for the large Manildra Group starch and ethanol plant at Bomaderry, achieving savings of \$240,000 p.a. (payback <2yrs)
- ⇒ Level 3 energy audits for Casella Winery (makers of the Yellowtail wines) at Griffith, achieving a total savings of \$1.9 million (payback <2 years)
- ⇒ Development of the resource efficiency module for DECC's Sustainability Advantage program, then delivery of the module for a large number of companies within the following clusters (currently in progress):
  - NSW Building Products Cluster (e.g. Boral Bricks, Readymix, Vinidex)
  - Riverina Cluster (e.g. Barter, Rockdale Beef, Debortoli Wines)
  - Marrickville Council Cluster (e.g. Choice Magazine, Shaw Australia)
  - Newcastle/Lower Hunter Cluster (e.g. Fairfax, Ultrafloor)
  - Sydney Food Cluster (e.g. Goodman Fielder, Fosters)

Projected savings for all 45 participating companies totals \$3.4 m, with an average payback period of only 1.5 years.

- ⇒ In previous years, Advitech delivered 'Cleaner Production' programs for the Hunter Region Pilot Program (6 companies, \$1 m savings), Fairfield City Council (8 companies, \$340k savings, 9 month payback), numerous councils (e.g. Newcastle, Blacktown, Warringah) and the Australian Industry Group
- ⇒ Preparation of training modules on environmental auditing and cleaner production for Local Government Environment Officers

More detailed information on these and many other projects completed by Advitech, including case studies, can be provided on request.

### Why Choose ResourceWise?

- ⇒ The effectiveness of our tools and methodologies has been proven
- ⇒ We've achieved demonstrable results in resource efficiency
- ⇒ We are recognised by reputable government bodies
- ⇒ We are experienced in water and waste management, not just energy
- ⇒ We offer a total solution package – auditing, advice, engineering, procurement and project management