



ResourceWise

Sustainable Business Program

Engineering a sustainable future...

ResourceWise Team

Colin Barker

Manager - Process & Sustainability



Colin is an experienced chemical engineer, specialising in process design, resource efficiency and sustainability. He has worked with the NSW Office of Environment and Heritage's sustainability programs for over 10 years, where he has helped a large number of companies to reduce resource use and 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

Senior 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.

Tooraj Arvajah

Senior Sustainability Engineer



Tooraj is a sustainability/mechanical engineer with over 7 years experience in resource efficiency in industrial, manufacturing and built environment design and operation. He is experienced in compliant energy, sustainability, carbon audits, life cycle studies, GHG measurement and is a Green Building Accredited Professional.

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 OEH *Sustainability Advantage* program - resource efficiency module
- ⇒ Energy procurement

Management Advice

- ⇒ Carbon emissions management
- ⇒ 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

Life Cycle Assessment

- ⇒ Economic Input / Output Modelling
- ⇒ Marginal Abatement Analysis





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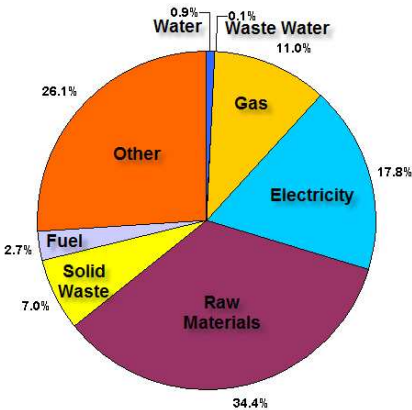
Engineering a sustainable future...

Aggregate Resource Efficiency Results (2006-2010)

Results for companies Advitech has worked with

No. companies Advitech has worked with	199
Aggregate annual savings	\$33.01 m
Average return on capital for project initiatives	<18 mths

Total Annual Savings by Resource Sector



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Experience

Advitech has delivered the resource efficiency module to many organisations within the NSW Office of Environment and Heritage (OEH) *Sustainability Advantage* and *Cleaner Production* programs and achieved substantial savings for those organisations. 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 OEH program module delivery, the **ResourceWise** team offers experience in energy management, process and materials engineering, across many industry sectors.

Example Projects

- ⇒ Level 2 energy audit for Tamburlaine Organic Wines at Pokolbin, achieved potential energy savings of \$110,000 p.a. which was equivalent to a 75% energy usage reduction
- ⇒ 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 2 energy audits for Contract Beverage Packers (makers of packaged milk products) at Taren Point, achieving a total saving of \$450,000 p.a. which was equivalent to a 61% energy reduction of gas and electricity consumption
- ⇒ Development of the resource efficiency module for OEH's *Sustainability Advantage* program, then delivery of the module for a large number of companies within the following clusters (currently in progress):

- Central West Cluster (e.g. Fletcher International, Western Plains Zoo, Dubbo RSL, Delta Electricity, Polystrom Plastics)
- NSW Building Products Cluster (e.g. Boral Bricks, Readymix, Vinidex)
- Riverina Cluster (e.g. Bartter, Rockdale Beef, De Bortoli 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

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