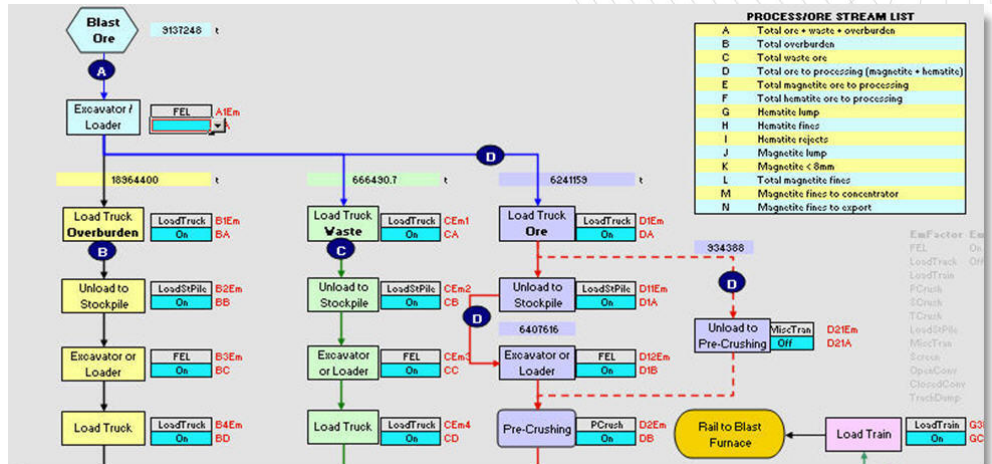


National Pollutant Inventory Reporting Advitech Reduces Reporting Time by 75%

National Pollutant Inventory (NPI) reporting can be a tedious and confusing process. Data consistency and transparency often suffer as a result of the complexities of the NPI process. Other difficulties include changes in calculation assumptions, changes in personnel from year to year, and the inevitable rush to meet the submission deadline.

Advitech has developed a clear, efficient and robust, spreadsheet-based system for producing National Pollutant Inventory returns, both for specific industries and unique processes.



Example of a visually documented process for emissions calculation using Advitech's NPI spreadsheet.

Visualising Processes

Each process is visually documented and allows for emission source points to be turned on or off depending on the requirements for that year.

For example, if a new cover has been installed on a conveyor since last year, emissions no longer need to be calculated for the conveyor, so can be simply 'switched off'.

Data Integrity

Data integrity is maintained by:

- ⇒ Protecting worksheets from unauthorised formula and data modification;
- ⇒ Cross checking data for omissions and errors prior to final NPI totals being calculated;
- ⇒ Logical naming of cells to enable raw data sources to be easily traced;
- ⇒ Compulsory review of NPI Emission Estimation Technique (EET) manuals for currency, so final NPI totals are visible.

Advitech develops NPI spreadsheets for companies that can be used again each year. This can reduce the NPI reporting time by up to 75%.

Alternatively, companies can purchase their own spreadsheets and undertake NPI reporting in-house. Data entry sheets are simple and self explanatory. Drop down boxes are provided wherever possible to ensure the consistency of contextual data.

Many companies have found that Advitech's NPI reporting system has uses beyond the NPI. The spreadsheet can be used as an analytical tool to develop an understanding of how changes in production processes can impact on emissions from a facility. The NPI reporting system can also be extended to other statutory and internal environmental reporting requirements such as Load Based Licensing (LBL), and sustainability reporting.

Advitech is experienced in NPI reporting for a variety of industries. Over the past five years we've completed NPI returns for numerous OneSteel sites, Hydromet

Corporation, Smorgon Steel and Port Waratah Coal Services.

Sample Spreadsheet Online

A sample spreadsheet is available on our website to demonstrate our NPI reporting system. If you wish to save time and resources on your NPI reporting, please contact:

Barry Jacobs, Environmental Engineer, 02 4961 6544

MD's Welcome

It's business as usual here at Advitech – we have lots of projects underway which are set to continue into next year. We're very pleased to report on our new Parramatta office, and our plans to expand into the Sydney market over the coming months and years. On behalf of Advitech, I extend our very best wishes for the festive season to all of our customers. We look forward to working with you throughout 2009!



Larry Platt

Riverina Industries Save \$3.5 m

Resource Efficiency Savings

Advitech has helped companies within the Riverina region of New South Wales to achieve combined cost savings of \$3.5 million through resource efficiency.

Advitech was engaged by the NSW Department of Environment and Climate Change (DECC) to deliver resource efficiency modules to a number of companies within the Riverina region, as part of its **Sustainability Advantage** program.

There were 13 participating companies within the Riverina cluster, including wineries, food processing plants and other industries.

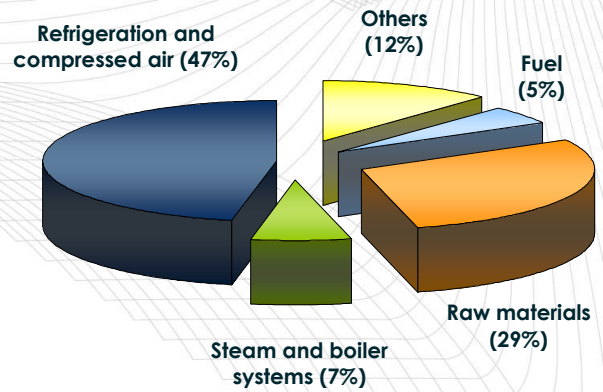
Based on the resource efficiency report published by DECC in June 2008, the 13 companies achieved an estimated

total saving of \$3.5 m, with an expected payback period of only four months. The majority of these savings (47%) were achieved through improvements to refrigeration and compressed air systems.

Reduction in the use of raw materials also contributed significantly to resource efficiency (29% of total savings).

Other savings involved improvements to steam and boiler systems (7%) and reductions in fuel consumption (5%).

For more info, contact **Colin Barker** (Newcastle) on 4961 6544 or **Norman Rickard** (Parramatta) on 0438 832 403.



Contribution of various systems to the total resource efficiency savings achieved

Join the Hunter Sustainability Advantage Cluster!

We're currently helping DECC to recruit Hunter companies to participate in Sustainability Advantage. Call us for more info on **4961 6544**.

Environmental News

Carbon Calculator

Advitech now has a free, online carbon calculator for businesses on our website, as part of our **ResourceWise™ Sustainable Development Program**. The carbon calculator is designed to assist you to determine your

organisation's carbon emissions, and estimate the likely cost of the Australian Government's proposed carbon trading scheme to your business. Results depend on the final agreed carbon price, which is expected to be between \$20 and \$60 per tonne. The carbon calculator has been designed to assist

customers to assess direct emissions (Scope 1) and electricity consumption related emissions (Scope 2).

For more detailed investigations, Advitech can assist with assessments, and develop carbon reduction strategies for your organisation. Please contact **Colin Barker** or **Jim Kelty** on 4961 6544 or mail@advitech.com.au.

Fuel/Process	Consumption Units	Units	Basic Units	Factors	kg CO ₂ -e	Tonnes CO ₂ -e
Electricity		GJ	0.00 kWh	1.06 kg CO ₂ -e/kWh	0	0.0
Natural Gas (non-transport)		GJ	0.00 GJ	66.1 kg CO ₂ -e/GJ	0	0.0
LPG (non-transport)		kt	0.00 t	3.3 t CO ₂ /t	0	0.0
Industrial Diesel Oil		kL	0.00 kL	3.1 t CO ₂ /kL	0	0.0
Petroleum Products Transport						
Petrol/Gasoline		kL	0.00 kL	2.5 t CO ₂ /kL	0	0.0
Automotive Diesel Oil		kL	0.00 kL	2.9 t CO ₂ /kL	0	0.0
LPG - Transport		kL	0.00 kL	1.7 t CO ₂ /kL	0	0.0
Natural Gas/CNG LDV		M3	0.00 m ³	0.0027 kg CO ₂ /m ³	0	0.0
Natural Gas/CNG HDV		M3	0.00 m ³	0.0026 kg CO ₂ /m ³	0	0.0
Marine/Industrial Diesel		kL	0.00 kL	2.9 t CO ₂ /kL	0	0.0
Aviation Gasoline		kL	0.00 kL	2.4 t CO ₂ /kL	0	0.0
Aviation Turbine		kL	0.00 kL	2.8 t CO ₂ /kL	0	0.0
Waste						
Co-mingled		t	0.00 t	0.9 CO ₂ -e/t	0	0.0

The Carbon Calculator is now available on Advitech's website at: www.advitech.com.au/ourservices/resourcewiseprogram/carboncalculator

Govt Funding

Federal government funding of \$240m has been allocated to the *Clean Business Australia* initiative, including:

⇒ \$75m 'Climate Ready' funding for R&D into solutions to climate change.

⇒ \$75m for 'Re-tooling for Climate Change' to help Australian manufacturers implement energy and water efficiency projects.

⇒ \$90m 'Green Building Fund' for projects that save energy in commercial office buildings throughout Australia.

NSW funding of \$150m will go to the DECC Energy Efficiency Strategy.

Completion of Koombahla Aged Care Facility

Advitech recently wrapped up project management of the design and construction of UnitingCare Ageing's **Koombahla Aged Care Facility** in Lake Macquarie, after completion of the 12-month defect liability period.

Advitech provided all project management services for the building of the Koombahla retirement facility, including interface management and coordination with and between nominated local and state government authorities, the architect, various supporting professional service providers and the building contractor.

The project was completed to schedule and within budget.

The Koombahla facility was recently recognised when the Newcastle Master Builders' Association (MBA) awarded

Belkin Constructions the Commercial Excellence Award for Aged Care/Medium Density Development Over \$5m.

EJE Architects also received an industry architectural award for the design of the facility.

"For the provision of project management services, Uniting Care has no hesitation in recommending Advitech to any prospective client."

Peter Matheson, UnitingCare Ageing



Advitech Expands into Sydney Market

Advitech is very pleased to announce its expansion into the Sydney market, with a new office in Parramatta. The new office in Phillip Street is only small - just to get us started - but is intended to expand as we grow the business in the region.

The office is currently staffed by our two newest employees – **Norman Rickard** (Sydney Manager) and **Steven Mills** (Senior Engineer – Sustainability).

Steven Mills is a chemical engineer with significant experience in process engineering, process improvement and environmental auditing.

Prior to joining Advitech, Steven spent six years working in chemical production for ICI, and ten years in manufacturing for companies such as Amcor, Uncle Ben's and VIP Packaging.

Norman Rickard joined Advitech in August as Sydney Manager. His early career was involved in the mining industry as Primary Metallurgist and Geologist. Norman then moved into market development, technical marketing, sales and general management roles, mostly within the CRA group (now Rio Tinto).



As Sydney Manager, Norman has taken on the role of establishing Advitech's new office in Parramatta, including recruitment and management of staff, and business development activities.

Norman and Steven's initial focus will be providing support to the NSW Department of Environment and Climate Change (DECC) for their Sustainability Advantage programs, and providing a range of other services such as energy auditing, and environmental and process engineering.

Advitech's Colin Barker has been working with DECC for many years, delivering resource efficiency programs to businesses throughout Sydney and south-western NSW. Norman and Steven will assist Colin and build upon this work.

In addition to DECC-related projects, we plan to provide general engineering consulting services to manufacturing and other operations in the Sydney region.

Advitech Aware

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