## Cost savings

Working together in a supply chain partnership as part of the Envirowise Forum has led to encouraging results for the host companies and their suppliers. Total savings of £304 500/year have been identified since the project began in December 2002 (see Fig 1). All of the cost-saving initiatives required zero or minimal investment (ie less than £1 000), and the average payback period was less than one month. Even greater savings are anticipated from on-going and planned projects.

Fig 1 highlights the merits of giving priority to:

- taking action to prevent waste and reduce raw material and utility use (over 50% of the savings are attributed to more efficient raw material use);
- re-using and recycling raw materials, water and waste.

Examples of waste minimisation initiatives include:

- recovering raw material for re-use;
- solvent recovery and good housekeeping;
- eliminating unnecessary packaging and re-using incoming packaging;
- segregating metal, cardboard and plastic waste;
- buying chemicals in bulk;
- recycling water from wash tanks;
- installing water-saving devices.

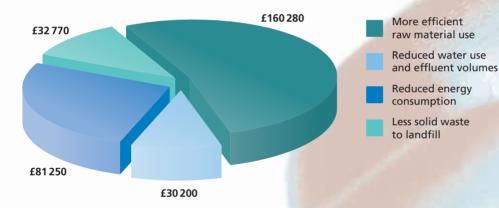


Fig 1 Distribution of cost savings by type

## Environmental benefits

Although cost savings are an important measure of the success of the partnership approach, participants have improved their environmental and business performance through:

- reduced raw material use;
- reduced packaging and solid waste:
- improved process control;
- reduced water use and effluent volumes;

- reduced energy consumption;
- improved waste segregation and recycling;
- improved health and safety in the workplace;
- increased environmental awareness.

Your company could achieve similar benefits from working in a partnership with its supply chain - and thus boost its bottom line through improving its social, economic and environmental performance.

## Continuing the success

The pilot project has demonstrated that engineering companies and their suppliers can make major cost savings and environmental improvements by working together in a partnership approach.

Envirowise offers free services to help others achieve the same success, including:

- Advice from Envirowise experts through the Environment and Energy Helpline.
- A variety of publications that provide up-to-date information on waste minimisation issues, methods and successes.
- On-site waste reviews from Envirowise advisors, called FastTrack visits, which help businesses identify waste and cost-saving opportunities.

All Envirowise's free information and advice can be accessed via its website (www.envirowise.gov.uk) or by contacting the Environment and Energy Helpline on freephone 0800 585794.

Action Energy (www.actionenergy.org.uk) offers free advice and publications on how to use energy more efficiently in all areas of your business. Action Energy services, which include a free on-site energy survey, can also be accessed by contacting the **Environment and Energy Helpline.** 

#### **Useful publications** from Envirowise

(EN335) Support for the engineering industry

(IT313) WasteWise: increased profits at your fingertips

(GG317) Cost and environmental benefits from supply chain partnerships: mentor guide

(GG318) Cost and environmental benefits from supply chain partnerships: supplier quide





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Environise - Practical Environmental Advice for Business - is a Government programme that offers free, independent and practical advice to UK businesses to reduce waste at source and increase profits. It is managed by Momenta, an operating division of AEA Technology plc, and Technology Transfer and Innovation Ltd. This publication was prepared with assistance from Environmentor Ltd.



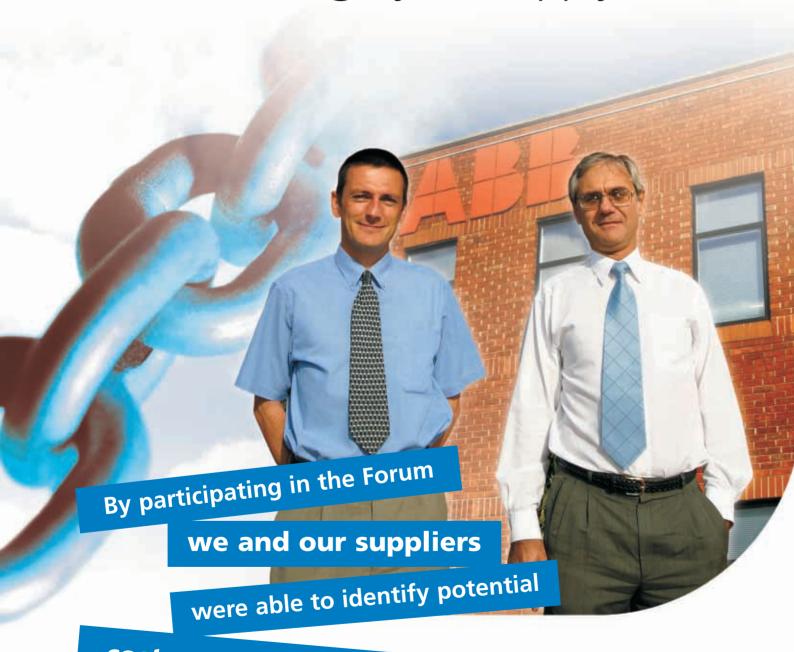
**Environment** 

For further information please contact the

and Energy **Helpline** 0800 585794



# Engineering profit through your supply chain



cost savings of £62 270/year

## Introduction

In December 2002, Envirowise launched a project that involved working with engineering manufacturers and their supply chains to identify areas where they could improve resource efficiency and maximise profit margins. To date, the project's three host companies and their suppliers have identified potential savings of approximately £304 500/year.

The supply chain partnership forum (the Forum) worked with 37 companies on an ambitious programme to give them the knowledge, practical tools and confidence to tackle waste minimisation. Many of the companies involved are successfully working towards integrating resource efficiency and waste minimisation into their environmental management systems and business strategy.

#### How does the Forum work?

The principles behind the Forum are simple. Envirowise works with host companies, which invite their key suppliers to join them in a partnership to improve business efficiency through minimising waste, implementing environmental management systems and maximising cost savings. In addition, Action Energy provides invaluable support and advice on energy-related issues.

All companies are invited to take up the offer of free FastTrack or Action Energy visits. These onsite reviews by expert advisors identify ways to increase performance, minimise resource use and waste, and save money. All companies are also invited to attend up to three workshops delivered by specialist trainers. The workshops cover the main environmental and cost issues facing engineering manufacturers - waste and water minimisation, packaging reduction, cleaner design, energy and environmental management systems.

The success of the Forum depends on three key factors:

- Envirowise provides an independent forum for companies to partner with their suppliers and gives them the tools and knowledge to take action.
- The Forum encourages and equips companies to work together and to find solutions to problems such as improved packaging design, re-use of packaging, recovery of raw materials for re-use and more efficient use of utilities.
- Envirowise involvement helps to keep the allimportant momentum going and stops progress slipping.

#### Benefits of the Forum approach

The benefits to the three engineering companies and their supply chain are based on sound business reasons. These fall into four categories:

- Security of supply good relationships minimise the risk of a break in the supply chain.
- Market opportunities suppliers responding to the approach gain competitive advantage.
- Compliance with legislation there is a risk of adverse publicity and fines from pollution incidents and poor practices.
- Improved environmental performance as demonstrated by certification to ISO 14001 continual improvement in environmental performance is rewarded by long-term gains in competitiveness and profitability.

Envirowise can help you set up your own supply chain partnership forum. Please contact the Environment and Energy Helpline on 0800 585794 or visit www.envirowise.gov.uk for details of the free advice and publications available.

## Benefits to host companies

The Forum was based around three large engineering companies with extensive supply chains in the UK. All three companies gained significant cost and environmental benefits from the initiative and continue to seek further opportunities for improvement through partnership with their suppliers.

#### **ABB Limited - Instrumentation**

The ABB Group of companies operates in around 100 countries and employs about 115 000 people. In the UK, utility and industry customers are served from 20 locations nationwide with power and automation products and systems. Three instrumentation manufacturing units provide a global resource for products and systems for flow monitoring, water analysis and industrial process control. As one of the first engineering manufacturers to sign up to the Forum, ABB has seen long-term and cost benefits to both itself and the 12 suppliers that took part. The company estimates that, through participation in the Forum, ABB and its suppliers have identified potential cost savings of £62 270/year.

As a result of the Forum,
we have better relationships
with our suppliers and
benefit from reducing our
joint business costs.

Doug Lincoln, Quality Manager, ABB Limited - Instrumentation

Being involved in the Forum helped to raise awareness about the environment throughout our company in areas such as finance, purchasing and business support units. We are currently investigating where we can streamline our waste and reduce scrap. Initial results show that savings in the order of £40 000/year could be achieved.

Frank Barton, Environmental Manager, Mayflower Vehicle Systems plc

#### **Mayflower Vehicle Systems plc**

Mayflower Vehicle Systems designs, engineers and manufactures large-scale assemblies for the automotive industry at its site in Coventry, where some 770 people are employed. Customers include Land Rover, Jaguar and Aston Martin. As a world-class Tier 1 supplier, Mayflower believes that partnering with key Tier 2 and Tier 3 suppliers is crucial to its continued status in the automotive industry. As a result of Forum participation, eight suppliers have investigated the potential for energy and waste savings within their own operations.

#### **CP Desoutter Ltd**

Desoutter, based in Hemel Hempstead, manufactures and sells power tools for the industrial and automotive sectors. As part of the company's commitment to continual environmental improvement, 14 of its key suppliers were invited to take part in the Forum.

Although the focus of the Forum was to identify environmental improvements in the manufacturing process, it quickly became apparent that office-based activities could also offer opportunities for cost savings and improved practices. For example, savings in the order of £4 440/year were identified by:

- switching off computer monitors when not in use;
- reducing the amount of office paper used;
- installing urinal flush controls and energy efficient lighting and controls.

Desoutter is confident of the long-term benefits of the Forum and we are actively participating with our suppliers on environmental aspects of our joint business activities.

# ABB forges links with its suppliers

All 12 of the ABB suppliers that participated in the Forum benefited from the experience. Examples of these benefits are given here.

**Robnor Resins Ltd**, based in Swindon, specialises in the manufacture of adhesives for ABB and employs 40 people. To help it get started with specific waste minimisation measures, the company requested a *Fast*Track visit. The specialist advisor identified a number of no-cost and low-cost improvements in several areas including:

- more accurate product measurement;
- reduced solvent use;
- eliminating compressed air leaks.

The cost savings identified by the Envirowise advisor totalled £21 000/year.

The FastTrack visit
we received from an
Envirowise advisor as
part of our participation
in the supply chain
partnership with ABB
gave us a kick-start to
taking action. We were
surprised by how easy
it was to save money
by reducing waste.

Drew Warren, General Manager, Robnor Resins Ltd

TW Metals UK Ltd, based in Southampton, is a distributor and processor of stainless steel and special alloy products, and has been supplying materials to ABB for over 15 years. Company employees attended the training workshops and requested a FastTrack visit to get new ideas through a common sense and practical approach to reducing waste.

Immediate cost reductions have been achieved by collecting and re-using packaging materials, and by installing water and electricity control systems in washrooms. Future possibilities include increasing the energy efficiency

of warehouse lighting and saving heat by installing fast-acting roller doors on the warehouse.

Most cost-saving ideas were common sense, but being involved in the Forum made sure we took time to look at the opportunities within our business.

Martin Reaney, Warehouse Manager, TW Metals UK Ltd Quadrant Connections Limited provides high quality connector, speech communication and custom-made cable assemblies to the professional electronics industry. Having adopted the systematic approach to reducing waste endorsed by the Forum's workshops, the company estimates that cost savings of £10 400/year could be achieved by simple and effective changes to its operations. For example, returning connector parts to suppliers has already realised savings of around £8 000/year, while rationalising electricity billing could save £1 700/year and using timers to switch off vending machines at night could save about £700/year. Eliminating cable off-cuts and wastage could save a further

Taking part in the supply chain partnership approach has enabled Quadrant to examine critically the way we operate and to identify further waste reduction opportunities.

John Hatchett, Health, Safety and Environmental Manager, Quadrant Connections Limited

