

*Retail therapy:
supply chains benefit from
partnership approach*

The envirowise supply chain partnership

helped us

make more resource efficient links

with our supply base

and within weeks we

identified savings of almost £250 000.

Robert Brown,
Technical Consultant, Product Quality and Development Centre,
Boots Group PLC

Introduction

In January 2002, Envirowise launched a pilot project that worked with retailers and their supply chains to identify areas where they can improve resource efficiency and maximise profit margins. To date, the project's 'host' companies and their suppliers have identified potential savings exceeding £1.9 million. The supply chain partnership forum (the Forum) worked with 120 companies on an ambitious programme to give the companies knowledge, tools and confidence to tackle waste minimisation. Many of the companies involved are successfully working towards integrating resource efficiency and waste minimisation into their business strategy.

Host organisations

Allen Construction Management Ltd
Boots Group PLC
Center Parcs Ltd
Essex County Council
Furniture Resource Centre
High Peak Borough Council
Strathaird Salmon Ltd

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 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 on-site reviews by expert advisors identify ways to increase performance, minimise waste and save money. All companies are also invited to attend up to three workshops delivered by specialist trainers. The workshops cover the 'big' environmental and cost issues facing industry - waste and water minimisation, packaging, cleaner design, energy and transport.

The success of the scheme lies in three key factors:

- Envirowise provides an independent forum for companies to partner with their suppliers and gives them the tools and the knowledge to take action.
- The Forum encourages and equips companies to work together and inventively to find solutions to problems, such as re-usable transit packaging, better delivery logistics, and smarter product packaging design.
- Envirowise involvement helps keep the all-important momentum going and stops progress slipping by the wayside.

Why you should read this Guide...

The companies that took part in the Forum are certainly reaping the rewards! The potential savings of over £1.9 million are valuable for the entire supply chain. The partnership approach has also helped participants to:

- reduce waste;
- minimise supply chain costs;
- minimise damaged goods;
- improve the local environment.

This Guide will give you practical tips and examples on how a supply chain partnership can increase profit margins and reduce environmental impact. Not only that, but by working in partnership with a supply chain, you can increase efficiency and improve customer service through better communications and more innovative working practices.

Envirowise can help you to set up your own supply chain partnership forum. Simply order *Good Practice Guide Practical tools to help retailers manage a supply chain partnership (GG362)*. It contains all the practical advice and information you'll need to set up and manage a supply chain partnership, including a toolkit on a CD-ROM. **To order your FREE copy visit www.envirowise.gov.uk or call the Environment and Energy Helpline on freephone 0800 585794.**

Boots strengthens links with its suppliers

Boots The Chemists is a major retailer of health and beauty products with around 1 400 stores, ranging from small community pharmacies to city centre department stores. With over 3 000 product lines and 5 000 suppliers, managing the supply chain is an important function of the company's business. As one of the first hosts to sign up to the Forum, Boots has seen clear benefits to both itself and the 11 suppliers that took part.



Culture change drives waste reduction at Peri-dent

Peri-dent manufactures interdental products such as dental floss and toothpicks for Boots at its site in Galashiels. Following the first Forum meeting, Peri-dent began using posters and staff briefings to raise awareness and to educate staff about the benefits of changing practices to reduce waste. An internal working group with representatives from all departments was set up to investigate where waste was occurring and to identify possible improvements.

From small beginnings, Peri-dent has already made savings of some £11 700/year, with many of the ideas coming directly from staff. One key example is the replacement of disposable packaging and storage systems in the manufacturing and warehouse areas by dedicated re-usable systems. This initiative, among others such as the reduction of waste going to landfill by compacting and segregation, with over 50% of waste now being sent to a recycler instead of directly to landfill, has helped Peri-dent identify not only large potential cost savings

but savings in efficiency and space utilisation throughout the company.

“Being involved in the Forum has made our staff more aware of the impact our company is having on the environment. We are now able to identify where efficiencies can be made and potential cost savings.”

**Stuart Scott,
IT & Logistics Manager, Peri-dent**

Denman brushes aside wasted resources

Denman International, based at Bangor in County Down, manufactures branded and own-brand hair care products for Boots. Initial achievements have included saving £5 500/year by baling and recycling cardboard rather than sending it to landfill, and saving about £8 000/year by investing in energy-efficient lighting. Recommendations from an energy survey are part of an on-going campaign to reduce energy use. Measures include replacing old fittings with energy-efficient lighting and installing zone controls in the factory and motion detectors in storerooms.

“Our senior managers believe that good environmental practice is also good business practice. We are looking at changing our processes and product design to save raw materials and waste at the same time.”

**David Cree,
Assistant Manager, Engineering,
Denman International**

“Landfill was just a huge expense to our company, but we now know there are alternatives. The Forum has been a prime mover to prompt us into action and investigate where to begin managing our waste better.”

**Roger Blisset,
QA Manager, Labelsco Ltd**

Labelsco reduces solid waste to landfill

Labelsco Ltd prints self-adhesive labels and sachets for Boots at its site in Leicestershire. Reducing solid waste to landfill was an obvious area to focus on, as two employees spent 80% of their time sorting and handling waste, and waste disposal costs the company about £40 000/year. Labelsco's first step was to buy a compactor, which immediately saved £20 925/year by reducing staff handling costs and the number of skip uplifts. In a further initiative, paper and film waste is now sent under contract to a waste-to-energy plant. This has reduced landfill waste by 28% and saved a further £8 725/year.

Center Parcs uses forum to forge partnerships

Founded in 1968, Center Parcs provides short-break, relaxing holidays in a forest environment. Because the environment is central to the company's ethos, Center Parcs scrutinises the impact on the environment of its business activities and those of its suppliers.

Center Parcs was keen to join the Forum and saw the initiative as a mechanism to support and mentor 19 of its key suppliers; in particular, to help them develop joint initiatives and improve their environmental performance. The benefits of becoming a host are clear - company benefits, supply chain benefits and environmental benefits.

Center Parcs believes

we should have a sustainable business

within a sustainable environment.

We want to work in partnership with our suppliers

to do this - and we are looking at them

to make a difference.

Simon Drury,
UK Environment Manager,
Center Parcs Ltd

“The Forum has increased environmental awareness throughout the company.”

Keith Field,
Production Director,
Paragon

Workshops help Paragon reduce waste and costs

The laundry group Paragon operates from six sites in the UK and is responsible for laundering sheets, towels and other soft furnishings for Center Parcs. As a key supplier, the company was invited by Center Parcs to participate in the supply chain partnership forum.

Although Paragon already had a waste minimisation programme, involvement in the Forum has helped the company to identify new initiatives and savings. The skills needed to identify where savings can be made were developed at its Cheltenham site and are now being passed on to the other sites.

Water, energy and packaging are key resources that Paragon uses in its daily operations. For example, the installation of water recovery systems in its washing departments has saved almost 12% of the water costs across the company, a saving of approximately £36 000/year.

Significant savings will also be achieved from simple ideas. Following a packaging workshop run by the Forum, Paragon is investigating the potential to replace laundry plastic packaging with re-usable cage liners. The outcome could be impressive as the company could reduce landfill waste dramatically and packaging costs by approximately £17 000/year.

Local authority hosts supply chain

Although the supply chain partnership forum was launched primarily to support the retail sector and its suppliers, it was inundated by requests to sign up from many different kinds of organisation (including service sector and manufacturing businesses). One such organisation was High Peak Borough Council, which covers north-west Derbyshire and operates within the Peak District National Park. The Council asked to join the initiative as a host for 12 of its 150 suppliers and contractors in support of its work as an EMAS-accredited organisation.

As a local authority, we have a duty to protect and enhance the local environment.

We would like our suppliers and contractors to

gain financially by adopting good environmental practices

and this in turn will

reduce environmental liability.

Bill Purvis,
Environmental Policy Officer,
High Peak Borough Council

Natural Stone Sales makes the most of raw materials

Natural Stone Sales Ltd supplies masonry material to High Peak Borough Council. The company was set up originally to sell grit stone material, but has expanded to process granite, marbles and limestone as well as grit stone. The company operates at three different sites - a limestone quarry at Sheldon in the Peak District, a block handling facility at Longrake and a finishing plant in Rowsley.

At the Sheldon quarry, blocks were traditionally selected for different products on a nominally random basis and were not necessarily used to their full potential. Architectural blocks are the largest and provide a premium income. Smaller blocks can be used for building stone, random walling stone, dry-stone walling and rockery stone material.

Joining the Forum spurred the company directors to look at the business in a completely different way. This has led to a significant change in quarry operations. Block extraction at the quarry is now primarily for architectural use, and smaller blocks are selected from the waste blocks to make other products. The change in the quarrying method has also improved the overall process efficiency of cutting and finishing at the Longrake and Rowsley sites, saving about £100 000/year through reduced haulage, rework, rejects and labour costs.

“The Forum gave us a kick-start into taking action. It has made us more conscious and aware of how to maximise our use of resources. We hope to build on our achievements over the next year - it’s now an education process with the rest of the people in our company.”

Chris Kelsey,
Director,
Natural Stone Sales Ltd

Glossop Leisure Centre stops throwing money down the drain

The Glossop Leisure Centre runs sports and leisure facilities on behalf of High Peak Borough Council. Staff began their efforts to reduce waste by focusing on water and energy savings. The first step was to install waterless urinals, saving £333/year, and to replace showerheads. This latter measure reduced water use by 70%, saving an additional £1 500/year.

Further cost savings are expected from energy-efficient measures that are already in place. For example, replacement of 80 watt fluorescent tubes by 70 watt natural daylight tubes has reduced energy use while actually increasing light levels.

“The Forum has helped to raise awareness within our organisation and we are confident we can now achieve realistic goals to reduce waste.”

Aidan Hall,
Centre Manager,
Glossop Leisure Centre

Cost savings

Results to date are impressive. Since the project began in January 2002, savings of over £1.9 million/year have been identified (see Table 1). Fig 1 highlights the merits of giving priority to prevention, reduction, re-use and recycling when taking action to reduce waste.

Over a third of the cost-saving initiatives required zero or minimal capital investment (ie less than £2 000) and over 80% of initiatives had a payback period of less than a year. The average payback period was just five months.

Fig 1 Distribution of cost savings by type

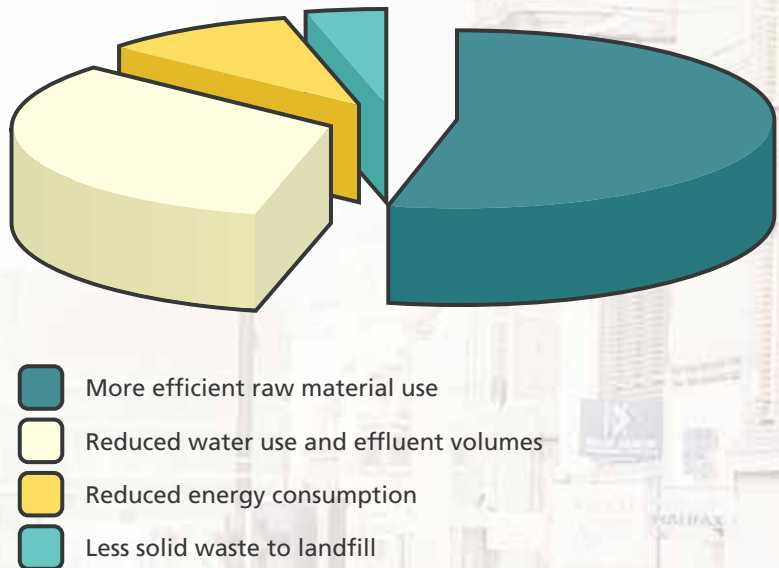


Table 1 Cost benefits*

Initiative	Savings (£/year)	Capital costs (£)	Payback period (months)
More efficient raw material use, eg	716 060	290 820	5
<ul style="list-style-type: none"> ■ Computer-aided design and manufacture ■ New equipment to optimise cutting ■ Process improvement to reduce scrap ■ Preventative cleaning procedure ■ Re-use of waste to reduce new materials ■ Change to re-usable packaging 			
Other identified savings	446 170		
Reduced water use and effluent volumes, eg	435 390	64 250	2
<ul style="list-style-type: none"> ■ Water saving devices ■ Better cleaning equipment ■ Water recovery systems 			
Reduced energy consumption, eg	132 480	22 500	2
<ul style="list-style-type: none"> ■ Compressor switched off when not in use ■ Energy-efficient lighting and controls installed ■ Transport routes optimised 			
Other identified savings in utility use	95 290		
Less solid waste to landfill, eg	52 850	22 870	5
<ul style="list-style-type: none"> ■ Sale of fabric waste as a raw material ■ Segregation and recycling ■ Incineration rather than landfilling of waste ■ Compactor for waste 			
Other identified savings	33 160		
Total	1 911 400	400 440	

* A full economic analysis is not available for all the cost-saving initiatives identified during the project.

Environmental benefits

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

- ✓ reduced raw material use;
- ✓ reduced packaging and other solid waste;
- ✓ reduced water use and effluent volumes;
- ✓ reduced energy consumption;
- ✓ improved process control;
- ✓ improved health and safety in the workplace;
- ✓ increased waste segregation and recycling;
- ✓ increased environmental awareness.

Continuing the success

The pilot project has demonstrated that retailers 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:



- ✓ **Good Practice Guide *Practical tools to help retailers manage a supply chain partnership (GG362)*** - a toolkit containing everything you need to set up and manage a supply chain partnership.
- ✓ **FastTrack** visits to help you identify waste and cost-saving opportunities.
- ✓ **designtrack** - a free, on site product design review conducted by an independent industrial design consultant. The review covers environmental and financial aspects of the product across the life cycle, including raw materials, manufacture, use and end-of-life disposal, and identifies cost and environmental savings.
- ✓ A website (www.envirowise.gov.uk) with details of all Envirowise publications, tools and events.

All of Envirowise's free information and advice can be accessed via the website or by contacting the Environment and Energy Helpline on freephone 0800 585794.

Envirowise - 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 AEA Technology Environment and NPL Management Limited.

Envirowise offers a range of free services including:

- ✔ Free 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.
- ✔ Free, on-site waste reviews from Envirowise consultants, called *FastTrack* visits, that help businesses identify and realise savings.
- ✔ Guidance on waste minimisation clubs across the UK that provide a chance for local companies to meet regularly and share best practices in waste minimisation.
- ✔ Best practice seminars and practical workshops that offer an ideal way to examine waste minimisation issues and discuss opportunities and methodologies.



Harwell International Business Centre | Didcot | Oxfordshire | OX11 0QJ
E-mail: helpline@envirowise.gov.uk Internet: www.envirowise.gov.uk

Envirowise - Practical Environmental Advice for Business - is a Government programme managed by AEA Technology Environment and NPL Management Limited. This publication was prepared with assistance from Enviromentor Ltd.



© Crown copyright. First printed February 2003. Printed on paper containing a minimum of 75% post-consumer waste. This material may be freely reproduced in its original form except for sale or advertising purposes.

*For further information
please contact the*

**Environment
and Energy
Helpline
0800 585794**