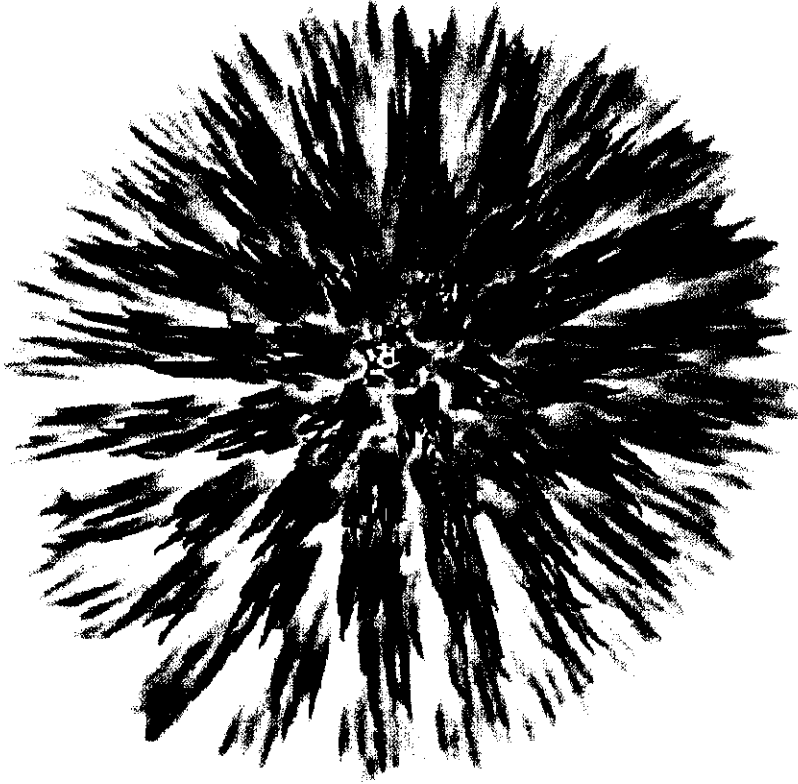


APPENDIX B



**The WRAP Business Plan**  
Creating markets for recycled resources



# Mission

- To promote sustainable waste management by:
- working to create stable and efficient markets for recycled materials and products

## Introducing the resource cycle

The idea of a cycle is at the heart of our lives. We talk about life cycles, the water cycle and the cycle of the seasons. As we launch our Business Plan, we'd like to introduce you to the resource cycle. It's how we use our limited resources in a way which balances social and commercial benefit – re-using what we have where we can. Resources may be finite. Their uses are infinite.

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## Chairman's statement

# Challenges

Every year Britain sends over 10 million tonnes of rubbish from industry, commerce and households to landfill. This means that every year we throw away enough rubbish to fill the Albert Hall.



happens to the rest, and how much recycled material they use. It is as much a part of good environmental stewardship as controlling energy and water use, limiting emissions and preventing pollution.

As a private sector company, we are in a good position to forge close links with business, and we will be looking to both the business community and the public sector to show leadership by creating a strong demand for recycled materials and products. We must also help the waste and recycling industries to respond to that demand with high quality, reliable products.

A partnership approach is vital. There are already many people and organisations doing impressive work in this area, and we look forward to working with them to achieve our common goals.

Recycling and using recycled products must become the first choice. It should be second nature.

Vic Cocker CBE  
Chairman

This is just a single example of why sustainable waste management is one of the biggest challenges faced by any modern economy. WRAP has been created to help respond to that challenge, and as its Chairman, I am determined we will do so with passion, vision and focus.

Our vision is a step change in attitudes and in the reality of waste minimisation and recycling. To bring that about, we have devised a demanding programme of work for the next three years, and set ambitious targets by which our progress can be measured.

Waste and recycling are such important issues they should be on the agenda of every board in the country – directors need to know how much waste their organisation produces, how much of it is recycled, what

# Executive summary

Creating and operating sustainable waste management and recycling presents WRAP with tremendous challenges and opportunities. Separating and re-using material from the waste stream may be the logical start to the resource cycle, but it is only after effective reprocessing that WRAP is able to achieve its real reason d'être: the establishment and satisfaction of demand for recycled products.

## What is WRAP?

WRAP (The Waste and Resources Action Programme) is a new organisation which has been established to promote sustainable waste management. Its particular focus is creating stable and efficient markets for recycled materials and products. A company limited by guarantee, WRAP has substantial Government funding of over £40 million for the period 2001 to 2004, provided by the DETR, DTI, the National Assembly of Wales and the Scottish Executive.

## Why was it set up?

Sustainable waste management is one of the biggest challenges faced by any modern economy. Britain currently produces more than 400m tonnes of waste each year, and most of this is sent straight to landfill. In its UK Waste Strategies, Government has recognised that this is no longer sustainable, and has set demanding targets to reduce waste and to increase recycling and re-use. WRAP has a key role to play in helping to meet those targets.

## Why should we recycle?

Many of our natural resources are limited, so it makes sense to use them carefully and to re-use them wherever possible. Sending waste to landfill also contributes to the production of methane – one of the most powerful greenhouse gases – and uses scarce land resources. Recycling is often the most sustainable option.

## What will WRAP do?

WRAP sees itself operating on both the supply and demand sides of the market in order to:

- Create market confidence
- Improve the economics of recycling
- Deliver sufficient high quality material to recyclers

We aim to create a continuous demand for recycled products and to ensure that demand is fulfilled.

## How will WRAP achieve this?

WRAP will undertake seven programmes of work. Three will be focused on generic areas where action is needed if there is to be a step-change in recycling: financial mechanisms, procurement and standards and specifications. The remaining four programmes are focused on specific material streams – paper, glass, wood and plastic.

The cumulative effect of the programmes should be to ensure that at least 15% recycling is achieved across all of our key material streams. This is already the case for some materials but others, such as plastic, will present more of a challenge. However, over the three year life of WRAP, we will do everything in our power to deliver a recycling rate of 15% in plastics.

## Who will WRAP work with?

WRAP will work with potential users to identify why they don't use recycled products now, what would persuade them to do so, and then help the waste industry and the reproducers to meet those requirements.

WRAP will also be working closely with all those currently engaged in recycling – local authorities, who are responsible for collecting the material, waste management companies and the community sector who collect and separate it, and reproducers who transform it into a valuable resource. WRAP has already established strong links with the newly-formed Market Development Network and supports its aims in recognising the importance of sharing information and experience and avoiding duplication of effort.

# Key actions and targets

## PAPER

WRAP recognises there are great opportunities to raise the level of paper recycling, to find new uses for recycled pulp and to increase the uptake of recovered fibres in many products. Priorities include stimulating a significant increase in newsprint reprocessing capacity, analysing fibre requirements across the UK paper industry and investigating whether overseas price stabilisation mechanisms could be introduced in the UK.

Targets include: Supporting investment that will create new manufacturing capacity to deliver a 500,000 tonnes a year increase in newspaper recycling

## PLASTICS

Among WRAP's priorities are marketing existing recycled plastic products and removing discriminatory standards. These will be linked to the development of 'buy recycled' policies with large public and private sector buyers and backed by an R&D programme to develop plastics recycling technology.

Targets include: 20,000 tonnes increase in mixed plastics reprocessing for industrial products

## WOOD

WRAP's priority is to stimulate demand for recycled wood products through a marketing and education programme to while driving a research programme to support development of new uses for recycled wood, including composites with plastic.

Targets include: Doubling wood packaging recovery to 350,000 tonnes a year by the end of 2003/4

## FINANCIAL MECHANISMS

WRAP will undertake a series of initiatives to stimulate investment in capacity to process recovered materials and, where necessary, to stabilise market conditions. Improving communication between recyclers and potential investors is a priority.

Targets include: Attracting at least another £10 million investment a year in reprocessing capacity with the potential to leverage the investment through WRAP's own resources

## PROCUREMENT

WRAP's programme will encompass both stimulating private and public sector purchases of recycled goods and materials and establishing a reliable supply of feedstock from the waste stream. Priorities are identifying what buyers really want, working with companies which already have a strong 'buy recycled' record and promoting 'best practice' in the collection of high-quality municipal waste.

Targets include: Commitment from at least half of all local authorities to adopt a 'buy recycled' policy, tailored to suit their local circumstances by end 2003/4

## STANDARDS

WRAP will seek to demonstrate that secondary materials are capable of meeting the same standards as virgin materials and can be used for the same purpose. The programme will also tackle discrimination against secondary materials in existing standards and specifications.

Targets include: Programme of standards development and implementation for compost products in 2001/2, complete by end 2003/4

# Action plan

CREATE MARKET CONFIDENCE	CREATE A CRITICAL MASS OF DEMAND	IMPROVE THE ECONOMICS OF RECYCLING	DELIVER SUFFICIENT HIGH QUALITY MATERIAL TO THE RECYCLERS
<p>Review key standards, specifications and testing procedures in most promising areas for using recycled glass</p> <p>Deliver an R&amp;D programme to develop plastics recycling technology and support composite product development</p> <p>Undertake a standards programme featuring a national grading scheme for the use of reclaimed timber</p> <p>Undertake an urgent review of existing product standards and prioritise those offering the greatest potential for boosting the use of recycled products and materials</p> <p>Develop comprehensive standards for compost products with support for implementation and monitoring in start up phase</p>	<p>Develop greater take up of recovered material in the graphics, printings and writings sectors</p> <p>Investigate the potential for alternative fibre applications and support development in these areas</p> <p>Undertake a standards and specifications programme to remove discriminatory specifications and introduce standards for plastic recyclates</p> <p>Boost the demand for recycled paper by effective marketing and raising awareness of the benefits of recycling</p> <p>Encourage more awareness of recycled glass products</p> <p>Raise awareness and understanding of the range and quality of recycled plastic products available with a marketing initiative, and develop buy recycled policies with large public and private sector buyers</p> <p>Stimulate demand for recycled wood products through a marketing and education initiative</p> <p>Support development of new uses for recycled wood, including composites with plastic</p> <p>Commission market research on business attitudes to identify key decision makers on resource use and what influences their buying decisions</p> <p>Demonstrate that buying recycled materials and products makes good sense by making it easy for them, and already make it work for them, and work with companies in the same sector to show them how to adopt similar practices</p> <p>Seek to modify standards and specifications that discriminate unnecessarily against recycled material or products</p>	<p>Investigate paper sector price stabilisation mechanisms used in other countries and establish whether they could be introduced in the UK</p> <p>Conduct a research and business support programme to identify and bring to market high volume, high value uses for recovered glass</p> <p>Develop a source of advice and support for recycling businesses to help them put together strong investment proposals and identify the best sources of capital</p> <p>Develop a more detailed understanding of financial needs of recycling businesses, and develop appropriate financial support, e.g. loan guarantees fund</p> <p>Assess feasibility of an 'intermediary body' or other mechanism to hedge prices in sectors where price instability is a major issue</p> <p>Create a critical mass of demand (see column left)</p>	<p>Help divert higher volumes of glass from municipal and commercial waste streams</p> <p>Develop a quality sourcing initiative to promote best practice in the collection of municipal waste for recycling</p> <p>Develop a recycling performance benchmarking scheme</p> <p>Develop a training programme for managers and operational staff</p>
<b>OTHER KEY ACTIVITIES</b>			
<p>Stimulate a significant increase in newspaper reprocessing capacity</p> <p>Analyse fibre requirements across the whole UK paper industry</p> <p>Stimulate a significant increase in recycled fibre plant capacity</p> <p>Encourage product design that supports efficient recycling, and encourage the incorporation of recycled plastics in existing product lines</p> <p>Stimulate increased investment in the paraffin-based recycling of fibre greater amounts of recycled wood</p>			

# Direction

Resolving the Government's targets for recycling is a major challenge. Business presents tremendous opportunities. But it is not easy. Many of the things we could benefit from are not being implemented. We have a long way to go.



We have deliberately framed this business plan to be strategic, action-oriented and to set specific targets. This is a hard-edged approach and sets the tone for our work over the next three years.

We will develop WRAP's programme in co-ordination with the many examples of good work already being carried out in this area and I am grateful for the high level of co-operation we have already experienced. I would like to take this opportunity to thank the hundreds of individuals and organisations who contributed to our working papers, attended our seminars and commented on the draft business plan.

I am looking forward to the next three years. This business plan sets a demanding agenda, but we are fortunate to be a well resourced organisation, and all of our energy will be focused on achieving our targets.

Jennie Price  
Chief Executive

As a newcomer to the waste and recycling sector, it is evident that this is a time of real change. The Landfill Directive, the producer responsibility legislation and the Government's waste strategies are just examples of the increasingly strong emphasis on sustainable waste management and recycling.

We want to establish that recycling is a process, not an event. Separating and retrieving material from the waste stream is a vital first step, but alone it will not be enough. Once the material has been retrieved, there must be sufficient capacity to reprocess it, and genuine demand for the finished product. Only when the product containing recycle has been purchased and is in use has recycling taken place. It is the last stage – creating demand – that is WRAP's raison d'être, but the other stages must also work well so that the demand we will stimulate can be satisfied.

## Setting the context

# Focus

**1994-2004** Water is vital to life but only 1% of it exists as freshwater. So, today, man intervenes in the water cycle – cleaning water before and after we use it. It is a finite resource – the water we drink today has existed for thousands of years.



WRAP is a joint initiative between Defra, the Welsh Government, Scottish Government and the Environment Agency. It is a partnership between Defra, the Welsh Government, Scottish Government and the Environment Agency. It is a partnership between Defra, the Welsh Government, Scottish Government and the Environment Agency.

WRAP's plan to achieve its strategy is to undertake seven programmes of work which will:

- Create market confidence
- Create a critical mass of demand
- Improve the economics of recycling
- Deliver sufficient high quality feedstock to the recyclers

We will identify the areas where we can add most value, avoiding duplication with the many experienced and successful organisations already active in this area. We will have a strategic focus and will stimulate demand by seeking to ensure all three key elements of an efficient market are in place, namely:

- Reliable supply of high quality materials
- Sufficient and sophisticated reprocessing capacity
- A healthy and diversified level of demand for the end products

Our business plan will be a rolling, not a fixed, document with regular reviews to reflect changing circumstances.

Our work may also extend to the construction and demolition sector where its waste stream affects the flow of materials on which WRAP will focus, such as wood, or where it offers a potential market for materials. We will not, however, deal with mining wastes or sewage sludge.

Our approach will take full account of the needs and interests of the devolved administrations through discussions with the Scottish Executive and the National Assembly for Wales.

### STRATEGY TO ACTION

WRAP's vision is to bring about a step change, not only in attitudes but also in the reality of waste minimisation and recycling. We want waste and recycling to be on the agenda of every board of directors of every business in the country.

The first stage of our strategy is to concentrate on achieving a significant increase in recycling. In the context of WRAP's overarching mission, to promote sustainable waste management, this is only a starting point and other options higher up the waste hierarchy also merit attention. But in these early days of WRAP's life, we need a sharp focus, not a broad brush.

\* Department of the Environment, Transport and the Regions (DOR). Waste Strategy 2000: Part 1, p.10 - originally from the Environment Agency municipal waste survey 1987 and national waste production survey 1987. [www.defra.gov.uk](http://www.defra.gov.uk)

## Setting the context

# Framework

The four material streams on which we will focus have been chosen because they offer the best potential for tonnage gains (paper and glass) and the opportunity to develop markets where current recycling levels are low but have potential for significant increases (plastics and wood).

The four material streams on which we will focus have been chosen because they offer the best potential for tonnage gains (paper and glass) and the opportunity to develop markets where current recycling levels are low but have potential for significant increases (plastics and wood).

Other materials will receive support through our work in the generic programmes, notably organics in the programme on standards and specifications. Establishing and implementing standards for composted products will overcome what is perceived to be the major barrier to growth in the market for composted products.

In time, our generic programmes may present opportunities for work on other materials, for example tyres and waste oils.

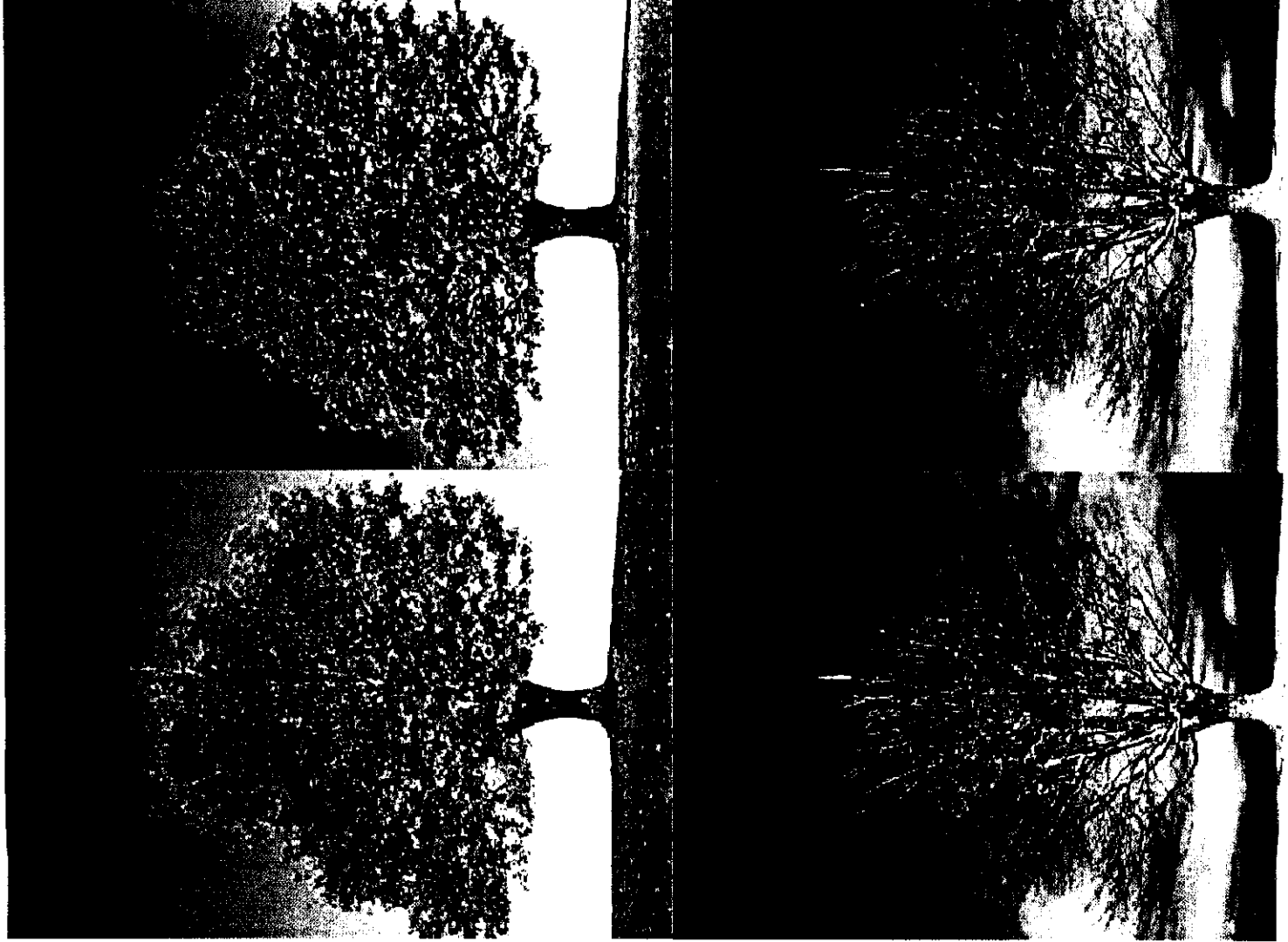
The programmes and the priorities identified within them will be reviewed regularly to ensure they reach our targets.

The cumulative effect of the programmes should be to ensure that at least 15% recycling is achieved across all of our key material streams. This is already the case for some materials but others, such as plastic, will present more of a challenge. However, over the three year life of WRAP we will do everything in our power to deliver a recycling rate of 15% in plastics.

The seven programmes are a starting point. As they evolve, we will address the wider agenda on sustainable waste management, including reducing waste and design for recycling.

We will devise and implement a separate strategy for communications, information and education to support them and will work with other stakeholders in these areas to ensure efficiency.

We will retain a clear focus to ensure we do not duplicate the work being done by other organisations such as Envirowise (in business waste minimisation) and the emerging regional market development initiatives. We will take a step-by-step approach to developing our capabilities and our contribution to the wider agenda.



## Our seven programmes

WRAP recognises the complexity of the paper industry and the wide range of products it produces. We use the term 'paper' here for brevity, noting that it covers a wide range of products and recovered grades.

Our priorities are to:

- stimulate a significant increase in newsprint reprocessing capacity
- analyse fibre requirements across the whole UK paper industry to identify areas where more recovered paper could be used, such as in corrugated packaging and tissue
- investigate price stabilisation mechanisms used in other countries and establish whether they could be introduced in the UK

Following these priorities, we will then also develop greater take up of recovered material in the graphics, printing and writing sectors, for example in magazines. To support this demand, we will stimulate a significant increase in recycled fibre (RCF) plant capacity.

We will also investigate the potential for alternative fibre applications, such as MDF, moulded pulp and insulation and support development in these areas.

We intend to boost the demand for recycled paper by effective marketing and raising awareness of the benefits of recycling.

To support investment that will create new manufacturing capacity to deliver a 500,000 tonnes a year increase in newspaper recycling

To increase the use of recovered paper in graphics, printings and writings sector by 180,000 tonnes a year

To benchmark use of recycled papers in this sector and achieve 100% increase in market share

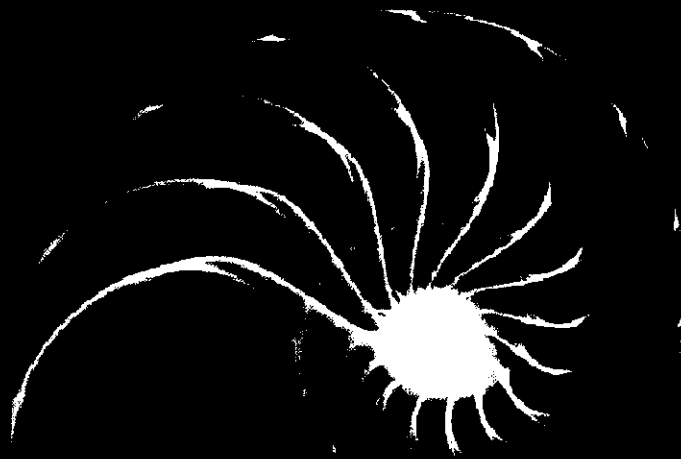


You can already buy excellent quality recycled paper for office use. UK Paper, for example, produces 100% recycled, quality business papers which are visibly clean and offer high whiteness and brightness levels comparable with virgin fibre products.

The plant which produces this range has the capacity to use 180,000 tonnes of post-consumer waste a year, equivalent to 16% of the nation's office waste paper.

**RECIRCULATE** A drop of blood contains millions of red cells which constantly travel the body, delivering oxygen and removing waste. Bones continually produce new cells – each lasting around 120 days.

## Our seven programmes



**REPROCESS** The shell is a prime example of Nature's reprocessing abilities. It is grown from organic matter as the home of a sea creature. Discarded, it is ground down by the action of the sea and becomes sand. Reclaimed by people, sand is used in manufacturing processes including glass and computer chips.

Our priorities are to review key standards, specifications and testing procedures in the most promising areas for using recovered glass, backed by a research and business support programme, so that we can identify and bring to market high volume, high value uses of recovered glass.

We will also encourage more awareness of recycled glass products and help divert higher volumes of glass from municipal and commercial waste streams – paying particular attention to the education needed to support this diversion.

Bottle banks are the most publicly visible and well established methods of collecting waste glass. Numbers of these have steadily increased, especially during the last decade, but more needs to be done to encourage their use and to make them more readily accessible.

WRAP recognises the need for bottle banks to be appropriately located to maximize usage and will encourage an increase in the availability of bottle banks to reach a ratio of 1,400 households.

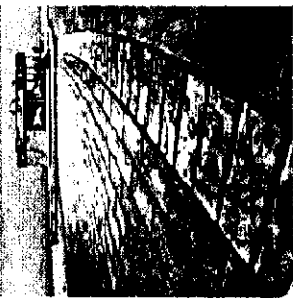
35% (770,000 tonnes) recycling of municipal waste glass a year  
 Securing an extra 350,000 tonnes of glass a year from all sources for recycling, including 100,000 tonnes from commercial sources

Absorb 100,000 more tonnes of glass a year through new uses including shot blasting, aquaculture and glass fibre insulation

Divert at least 200,000 tonnes of green and possibly mixed-colour glass into the construction industry for use as an aggregate

20% increase – 20,000 tonnes – in flat glass collection for recycling

### CASE HISTORY – FREE FORM ARTS TRUST



Recycled glass products for urban design and regeneration schemes are being developed by Free Form Arts Trust. The products include high-quality glass paving blocks which are now widely specified by local authorities and other designers. Transforming recycled glass into visually pleasing and durable products for public art, landscaping and construction has highlighted many new uses for kiln formed glass.

The trust has established a Green Bottle Unit to create the high quality, 100% recycled products and to demonstrate how wider involvement in recycling glass can

contribute to environmental regeneration. The unit works with the glass manufacturing and waste technology sectors to find ways of recycling industrial waste which bring positive benefits to the community and the urban environment.

The use of recycled glass products such as those produced by Free Form help reduce energy consumption, eliminate the need for quarrying, save raw materials, reduce air pollution and water consumption and reduce landfill (glass makes up 8-10% of landfilled materials).



## Our seven programmes

This is a photograph of a tiny section of a plastic cola bottle, showing its moulding and scratches from a journey in the sea. The image was created by Paul Kenny who found it on a beach in Ireland. It is about the impact of people on nature and of nature on a synthetic product.



Our marketing initiative will raise awareness and understanding of the range and quality of recycled plastic products already available. It will be linked to the development of buy recycled policies with large public and private sector buyers. These two projects will be our early priorities in this programme.

We will also undertake a standards and specifications programme to remove discriminatory specifications and introduce standards for plastic recyclates, including uses for plastic film.

WRAP will deliver an R&D programme to develop plastics recycling technology and support composite product development.

We will also encourage product design that supports efficient recycling and work with plastics manufacturers to encourage the incorporation of recycled plastics in existing product lines.

20,000 tonnes increase in mixed plastics reprocessing for industrial products

Sector-specific targets for increases in recycled content of products

Identify at least one new technology to produce a composite product using recycled resins with wood or rubber

A significant increase in plastic bottle recycling, amount to be determined following a focused research project to be completed within six months

### CASE STUDY – FORD

Motor company Ford has a Total Waste Management (TWM) programme built on two simple concepts – assigning responsibility for managing all of the waste at a facility to a single, professional waste management supplier, then establishing an incentive-driven payment plan which promotes the “reduce, re-use, recycle” philosophy.

Since its implementation, Ford’s TWM programme has resulted in significant waste management and disposal cost savings. At one plant alone, for example,

the volume of waste per vehicle produced has been more than halved from 8kg per vehicle to less than 4kgs.

Ford was the first manufacturer in Europe to install 100% recycled batteries made from old and disused batteries. Ford uses soft drink bottle caps removed from domestic waste as source material for manufacturing heater and air conditioning components. This project alone saves around 2,000 tonnes of waste material annually that previously would have been sent to landfill.

This is just part of the 20,000 tonnes of non-metallic waste material which Ford Motor Company recycles into quality car parts each year throughout Europe.

Elsewhere, steel drums are recycled for use in foundry processes instead of being sent to landfill, recycled plastic is being used to make protective seat covers and research is continuing to devise a way of using paint sludge as a vehicle insulating material.

**Result:** The ebb and flow of a tide is created by the gravitational pull of the moon. This constant receding and returning action is part of the process which turns stone fragments into smooth, rounded pebbles.

## Our seven programmes

Our seven programmes are: 1. Stimulate demand for recycled wood products through a marketing and education initiative. 2. Double wood packaging recovery to 350,000 tonnes a year by end 2003/4. 3. Achieve 40% recycling and re-use of construction and demolition wood waste a year, an estimated additional 100,000 tonnes to reach 480,000 tonnes.

Our priority is to stimulate demand for recycled wood products through a marketing and education initiative. This will be targeted at the construction industry and local government, and will highlight the opportunities and benefits of using recycled products such as coloured mulches and extrusions.

Our research programme will support development of new uses for recycled wood, including composites with plastic, and we plan a standards programme featuring a national regrading scheme for the use of reclaimed timber.

We will also seek to stimulate increased investment in the panelboard industry to utilise greater amounts of recycled wood.

To double wood packaging recovery to 350,000 tonnes a year by end 2003/4

To achieve 40% recycling and re-use of construction and demolition wood waste a year, an estimated additional 100,000 tonnes to reach 480,000 tonnes

### CASE STUDY - TRACEY TIMBER RECYCLING LTD.

Large volume timber recycling can be highly successful. Tracey Timber Recycling Ltd converts more than 50,000 tonnes of waste wood each year mainly into a variety of wood chips. Sources include pallet manufacturers, demolition and construction industry waste, sawmills and haulage contractors.

The level of sophistication and technology required to produce woodchip is constantly rising as mills and other users demand

higher standards, but they can be achieved by the use of new technologies and stringent production controls.

Tracey also produces a range of its own products based around the wood shredding process, including a range of decorative coloured woodchips which can also be used for gardens, golf course paths, horse arenas and children's playgrounds, where the product has attained BS EN 1177.

## Our seven programmes

Our seven programmes are designed to address the key areas of our business and to ensure that we are meeting our obligations to our stakeholders. The programmes are: **1. Environmental** - To reduce our environmental impact and to ensure that we are meeting our obligations to our stakeholders. **2. Health and Safety** - To ensure that our employees are safe and healthy. **3. Quality** - To ensure that our products and services are of the highest quality. **4. Customer Satisfaction** - To ensure that our customers are satisfied with our products and services. **5. Community Relations** - To ensure that we are contributing to the communities in which we operate. **6. Employee Relations** - To ensure that our employees are satisfied with their work and that we are providing them with the opportunity to develop their skills and careers. **7. Governance** - To ensure that we are operating in a transparent and ethical manner.

We need to build the confidence of buyers and specifiers in using recycled materials. The first step in that process is to listen to them, so WRAP will commission a major piece of market research on business attitudes to identify key decision makers on resource use, what influences their buying decisions and any technical barriers to the use of recycled products. This information will help us to identify the priorities for our work on standards and specifications and will be the foundation of our work in promoting a buy recycled culture.

The second step is to demonstrate that buying recycled materials and products makes good business sense. We will identify companies who are already making it work for them, and work with their colleagues in the same sectors to show them how they can adopt similar procurement practices.

Targets will be set for both followers and leaders.

A suite of good practice guidance available electronically and on paper, and a helpline will complement this work.

And in order to secure high quality feedstock from the waste stream, WRAP will develop a quality sourcing initiative to promote best practice in the collection of municipal waste for recycling. Our approach will focus on high participation rates, recovery rates and low levels of contamination. This work will be supported by a recycling performance benchmarking scheme, and a training programme for managers and operational staff.

A specified amount (dependent on data obtained in current usage) of recycled materials to be used in three named industry sectors by end 2003/4.

Commitment from at least half of all local authorities to adopt a 'buy recycled' policy, tailored to suit their local circumstances by end 2003/4.

To develop the current recycled paper procurement project in Government across other products and set procurement targets in three specific areas by end 2001/2.

A measurable increase, which will be set after evaluation of a baseline survey of attitudes, in the positive perception of recycled products by business leaders by end 2003/4.

Although weather forms a distinct pattern and follows a cycle which alternates between high and low pressure, its behaviour is difficult to predict. The frequency and intensity of these cycles are the subject of major studies and research directed at improving our ability to survive and live comfortably within them.



## Our seven programmes

Our focus is on the recycling of food waste. It is a growing recycling market, but a relatively unexplored one. Companies are beginning to realise the value of their waste and are looking for ways to recycle it more effectively.

Addressing communication between recyclers and potential investors is a priority.

We will develop a source of advice and support for recycling businesses, particularly SMEs, to help them put together strong investment proposals and identify the best sources of capital. Our second priority is to develop a more detailed understanding of the potential financial needs of businesses involved in recycling, to enable us to develop appropriate financial support such as a loan guarantee fund or an equipment lease guarantee scheme.

WRAP will review the commercial mechanisms used in countries with more established recycling industries to identify mechanisms which could work in the UK, and will assess the

feasibility of an 'intermediary body' or another mechanism to hedge prices in those sectors where price instability is a major issue.

To attract at least another £10 million investment a year in reprocessing capacity, with the potential to leverage the investment through our own resources

To identify and facilitate the creation of at least one market stabilisation/risk minimisation tool by 2002/3

**RESOLVE Money circulates – we all recycle it most days of our lives. Our key objective is to create stable, efficient and commercially viable markets for recycled materials and products.**

### CASE STUDY – J SAINSBURY

The retail sector offers some excellent examples of good recycling practice.

J Sainsbury recycles, donates or composites nearly 60% of its waste – more than 111,000 tonnes of cardboard and 3,600 tonnes of plastic packaging each year. Food sold in its organic range is packed in fully biodegradable materials.

Sainsbury's has been involved in composting store food waste for five years and has 46 stores linked to three composting trials in the UK (in Berkshire, Suffolk and London). Between 1998 and 2000 the firm cut the amount of waste sent to landfill by 9,000 tonnes. Customers at 340 of the chain's UK stores are encouraged to use on-site recycling bins.

## Our seven programmes

Working on our four key material streams, plus composted products, we will undertake an urgent review of existing product standards, and prioritise those which offer the greatest potential for boosting the use of recycled products and materials. We will work with existing standards rather than seeking to create new ones specifically for recycled materials, as a separate set of standards could reinforce the negative perception problems that already exist for some recycled products.

Another priority is to develop comprehensive standards for composted products, complete with support for implementation and monitoring during the start up phase, and advice on best practice in inputs and compost processes.

Where existing specifications and standards do discriminate unnecessarily against recycled materials or products, we will seek to modify them and, where appropriate, provide input to British Standards Institute's five year rolling review programmes.

Delivery of the review of existing standards (and prioritisation for action) by end 2001/2

Focused activity on 6 standards/specifications issues each year, identified through our prioritisation process, to deliver greatest potential uptake of recycled materials

Programme of standards development and implementation for compost products in 2001/2, complete by end 2003/4

### CASE STUDY – B&Q

Under its QUEST programme, the DIY store B&Q has helped some suppliers reduce packaging volume by 25%. Removing polystyrene trays from one product alone saved £100,000 per year. In total, waste reduction saves the firm £750,000 annually. In-store waste is segregated by staff, hauled back to a central distribution centre and recycled. Unsuitable paint and wallpaper, scrap timber and broken ceramic tiles are

donated to schools and community groups for re-use, strengthening community links. In 2000, the company recycled 11,000 tonnes of cardboard, 1,361 tonnes of plastic, 2,915 tonnes of scrap timber and 376 tonnes of metal. B&Q customers are in the loop too being able to buy a garden trellis made from post-consumer recycled polystyrene waste, and peat-free compost made from decomposed green waste.

**REGENERATE** In an average human life cycle, the body is made up of more than 100 trillion cells and the heart beats three billion times. During a lifetime, the body is maintained in a state of continuous repair and renewal and through processes this process is endlessly repeated.

# Priorities and resources

Our seven programmes will be supported by a small core of full-time staff, supplemented by external specialists on short-term contracts. We expect a significant proportion of the seven work programmes to be delivered by permanent staff, to build up and maintain expertise within the organisation.

WRAP has more than £40 million of Government funding for the three year period commencing 2001-2002. We also want to stimulate funding partnerships between public, private and community sectors.

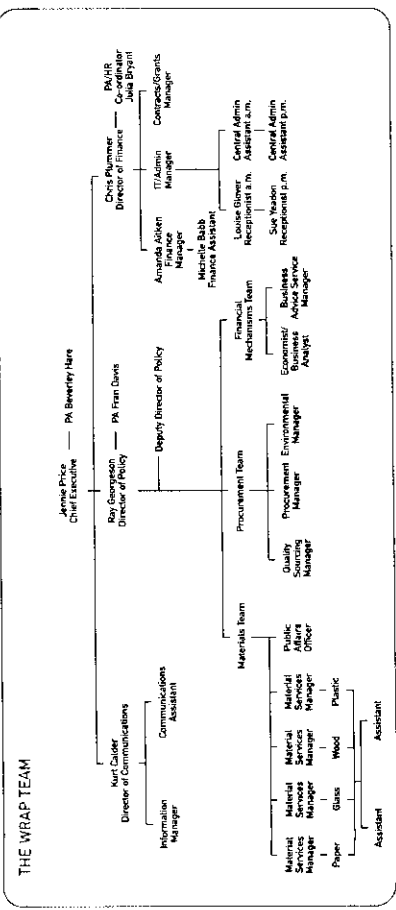
Our priorities, which reflect the funding profile, are outlined in each of our seven programmes, and will be underpinned by detailed action plans. Because procurement action lies at the heart of our mission, all aspects of this programme will be given a high priority during Year 1.

Our work will be led by a small core of full-time staff, supplemented by external specialists on short-term contracts.

We expect a significant proportion of the seven work programmes to be delivered by permanent staff, to build up and maintain expertise within the organisation.

FUNDING				
£m	2000-01	2001-02	2002-03	2003-04
DETR	1.5	5.0	10	10
DTI	-	2.5	5	5
NAW*	-	0.45	*	*
SE**	-	0.5	0.8	0.8
<b>Total</b>	<b>1.5</b>	<b>8.45</b>	<b>15.8</b>	<b>15.8</b>

\* Levels of funding for years two and three to be confirmed  
 \*\* Scottish Executive  
 \*\*\* Welsh Government



The oldest trees in the world are said to have been growing for several thousand years – although the age and identity of the oldest is a matter of dispute. The rings inside a felled tree trunk are nature's own time capsule, recording age, growth and changes in weather.

# Accountability

Our targets will be... Specific Measurable Actionable Realistic Time limited... and will be reviewed at the end of Year 1 in the light of our data gathering activities and feasibility studies. We will then adjust them if necessary.

A public recruitment process is underway for a further four non-executive directors of WRAP. This will bring the Board up to its full complement. WRAP wishes to ensure that a full range of skills and experience are available to the company, and that there is broad (but not direct) representation of stakeholder interests at Board level.

The executive team will prepare an annual work programme for Board approval. This will form the basis of WRAP's annual grant-agreement with the sponsoring Government departments and the devolved administrations.

Our work programme will be monitored quarterly and, together with the financial provisions, will be subject to annual audit.

- Vic Cocker CBE, Chairman
• Michael Averill, Group Chief Executive of Shanks Group plc
• Professor George Fleming, University of Strathclyde EnviroCentre
• Richard Bird, Head of Energy, Environment and Waste Directorate, DETR
• Jennie Price, Chief Executive

The Board is advised by David Dougherty, founder and former Executive Director of the Clean Washington Center, Seattle.

## ENERGY SAVINGS

Making products from recovered materials WRAP will initially prioritise can cut the amount of overall energy needed, compared with starting with virgin raw materials, by as much as 85%.

- Some examples:
Newsprint 75%
Plastic up to 85%
Glass 10-25%

\* Averillford Newsprint (1998), Newsprint: a lifecycle study www.averillford-newsprint.co.uk
\*\* RECOPRI: Recycling Plastic Series - The Energy Efficiency of Recycled Plastic, published by the Department for the Environment, Transport and the Regions, London (2000)
\*\*\* Murdoch University (1998), Sustainable Industrial Development and promotion of energy conservation technology, www.unidb.org

# Engaging

We plan to build positive and constructive relationships with all stakeholders in sustainable waste management. The need for a step change, not only in attitudes but also in the reality of recycling, will be demanding upon all. It will be a hard-won victory.

WRAP is conscious that there are already a number of organisations doing excellent work in this field, and will seek to work collaboratively with them wherever possible. In particular, we will work closely with the emerging regional market development initiatives which have a vital role to play in facilitating the local coalitions and partnerships needed to deliver market development at regional level. WRAP has committed financial resources to the UK Market Development Forum, which has been established to provide networking and co-ordination opportunities for the various regional initiatives.

Our work will require a sustained and intensive effort to engage the public sector and the wider business community in both the uptake of recycled materials and products by their organisations, and improvements in their own recycling and waste minimisation performance.

- To ensure regular and open dialogue, including formal communication and increased web site activity
• To deliver programmes that do not duplicate existing successful work
• To work within existing networks and groupings as a matter of course, and only to create new vehicles for discussion and delivery when appropriate to support our programme activity

## REGISTER AN OPINION:

Why not tell us how you think we can achieve our objectives? Please write to:

Jennie Price
Chief Executive
Waste and Resources Action Programme
The Old Academy
21 Horse Fair, Banbury
Oxon OX16 0AH

Tel: 01295 819900
Fax: 01295 819911
E-mail: info@wrap.org.uk
www.wrap.org.uk

RE-READ You are now invited to re-read the Business Plan. It is all about resources. Finite resources. Infinite possibilities.