



Frequently asked questions

Forthcoming legislation

Tell me about current and forthcoming legislation

- f* There is already a responsibility on producers of waste through the Environmental Protection Act (1990), and in this legislation, waste has a very wide definition that includes used mobile phones.
- f* Currently there is a duty of care to ensure responsible disposal. Where hazardous or special wastes are concerned, for example batteries, the legislation is even more onerous.
- f* The forthcoming Waste Electrical and Electronic Equipment Directive (WEEE) is centred on 'producer' responsibility.
- f* **This is where the manufacturer or distributor of goods is made responsible for the whole lifecycle of those goods, including end of life.**
- f* One of the requirements of the directive is that consumers can return products free-of-charge to a convenient collection point. With mobile phones, that could be the retailers or service providers' outlets.
- f* In article 6.1 of WEEE it states that 'member states shall give priority to the re-use of whole appliances'. It then requires recycling rates for components, material and substance to a minimum of 65% by weight.

Shields Environmental manages all of the above on behalf of our Fonebak clients and ensures compliance with all current and forthcoming legislation.

What is Fonebak?

Fonebak is a scheme owned and operated by Shields Environmental for the safe return and recycling of mobile phones and accessories. It ensures compliance with current and forthcoming environmental legislation. The scheme is open to anyone (Network Service Providers, Retailers, Manufacturers). The founder members are the five mobile service providers in the UK and the Dixons Group.

How does Fonebak work?

Generally our clients provide their retail outlets as collection points, often providing customers with an incentive to return their used handsets. To support this, clients have also implemented envelope schemes where their customers can easily send their old phones in a Freepost envelope to our recycling facility.

What are the benefits of this scheme

- f* It's good for the **consumer** because it provides an easy way to return unwanted phones and they can do so with the knowledge that their phones are being properly and ethically recycled
- f* It's good for the **service providers, network operators, retailers and manufacturers** because it gives them instant compliance with forthcoming legislation while delivering financial benefits that they are able to pass back to their customers and selected charities.
- f* It's good for the environment because we are minimising the impact by providing an environmentally safe and responsible solution with a complete audit trail.



Frequently asked questions

How did the Fonebak scheme come about?

Shields have been recycling mobile phones for several years now and over the last year have recycled over 1 million phones for re-use and thousands of kilos of handsets, batteries, chargers and accessories for materials recycling, proving the workability of the scheme.

Shields then got together with its clients to formalise this into a scheme ensuring there is a solution that complies with not only the current legislation, but also forthcoming legislation.

What incentives are in place to encourage consumers to return their phones?

Incentives vary from company to company, time to time and by trade-in versus donation, but can include:

- f* a donation to charity
- f* a voucher for an accessory
- f* free air-time
- f* a sum of money discounted from the purchase of a new phone.

So what happens to the phones themselves?

Once handsets arrive at the Shields facility, the environmental hierarchy* of is followed.

1. Reuse
2. Reuse of components
3. Materials recycling
4. Disposal

For reuse, phones and accessories are tested and refurbished before re-marketing. Components are recovered from damaged phones so that they can be used as spare parts. Older phones and those that are seriously damaged are sent for materials recycling, where materials can be recovered and put back into productive use. Less than 1% of all material is sent for safe disposal. By following the environmental hierarchy, we are able to minimise the impact on the environment and preserve the Earth's resources.

Can you give examples of this recycling?

- f* Platinum, Gold, Silver, Copper are all found in small quantities in mobile phones. With Fonebak, all precious metals are extracted from phones during the recycling process and recovered for use in things like jewellery, copper piping and a range of other uses – they may even end up in new mobile phones.
- f* Nickel obtained from batteries can end up being used to make stainless steel for saucepans.
- f* With Fonebak, mixed plastics (those that contain metals and plastics) are sent to a specialist recycler in Sweden who incinerate the plastic and uses the energy to heat the local village. This is known as 'waste to energy'. Other plastics are sent for granulation and end up as traffic cones or are used on horse gallops.

Where do the phones go?

Phones that can be remarketed are sold in a variety of locations throughout Europe, the Middle East, Asia and Africa. All phones sold by us come with a full replacement warranty.



Frequently asked questions

Phones which are sent for materials recycling go through a process to recover the materials that the products or equipment are made of. For instance, a mobile phone, battery and charger is made up of approximately 50% metal. These metals can be recovered and returned to productive use.

By selling phones in these locations, aren't you just shifting the problem to developing countries?

There are three strands to this;

1. Re-use is top of the environmental hierarchy, thus preserving the world's energy and material resources. This is covered extensively in the WEEE directive.
2. In addition, because many service providers in these countries cannot afford to subsidise the cost of a handset (like they do in the UK), these products are often prohibitively expensive for consumers. By offering a quality pre-owned mobile phone, we are helping service providers in these countries to develop their businesses and encourage communication.
3. Most importantly, Shields have developed a Recycling Support Programme to assist developing markets in setting up recycling initiatives. This initiative deals not only with the phones that we market, but also those provided by manufacturers and others.

Do you just take the phones?

No, this is a complete scheme. Fonebak accepts the phone, battery, charger and we take all accessories, user manuals, boxes and even the network infrastructure equipment that operates the phone, ensuring reuse or recycling.

(Network Infrastructure is the equipment that transmits the signal to the phone and is made up of anything from a Switch to a base station).

Can you explain what you mean by re-use of mobile phones?

Reuse is top of the environmental hierarchy because reusing a product for its original purpose extends the life of that product and therefore preserves the Earth's energy and material resources. It also ensures it doesn't go into landfill. Most service providers will offer you an incentive for trading in your existing phone for an upgrade. This phone is then refurbished and remarketed. What we do is ensure that they are handled in the most environmentally safe and consistent way.

What do the manufacturers think of re-use?

To date they have seen it as direct competition. However, article 6 of the WEEE Directive includes a clause, "Member States shall give priority to the re-use of whole appliances". So we are hopeful they will join Fonebak. That said, they are committed to the environment and we have been providing materials recycling for many manufacturers for a number of years.

How many phones are in circulation in the UK?

At the end of 2001 there were an estimated 45 million mobile phones in circulation in the UK, representing 77% of the population.

How often do consumers exchange handsets?

Research shows that handsets are replaced, on average, every 18 months. This means that an estimated 15 million handsets are replaced each year in the UK alone.



Frequently asked questions

Mobile Phones and the Environment

Why does it matter if a phone goes into landfill

Landfills are non-sustainable, creating a long-term pollution risk to the environment, and represent the loss of valuable resources that should otherwise be recycled. The Fonebak scheme is an alternative to potentially dangerous landfill.

Mobile phones contain certain substances which, if deposited in landfill, would degrade over time and cause serious damage to plants and wildlife. Fonebak provides the solution.

What substances are in a mobile phone?

There are a number of heavy metals in phones that we must prevent going into landfill. Copper, silver, gold and palladium are among the main metals recovered. Plastic can be recycled or used for the creation of energy. Fonebak ensures these are effectively recycled, ensuring they are returned to productive use.

What hazardous substances are there in phones?

There are small quantities of hazardous metals such as lead, arsenic and beryllium present in each phone handset. These are necessary for the function of mobile phones, and create no risk during the life of the phone.

However, if these are not disposed of safely they can degrade and cause harm to the environment. Through Fonebak, they are safely recovered and put back into productive use rather than degrading in landfill.

How are the batteries recycled

There are three major recyclers of batteries in the world and we use a French company called SNAM. They have always passed our downstream supplier audits and these are evidenced by excellent environmental practices. The elements and metals extracted from the batteries are put back into productive use.

How do you ensure downstream suppliers don't dump things into landfill?

We were one of the first SME's to carry out downstream audits of our major suppliers, and have been doing this for several years. Supplier's facilities are checked for everything from licensing compliance through to the final destination of our material. These audits are extremely thorough, carried out by a qualified environmental auditor and we check any disposal or emission for compliance, ensuring best environmental practice. All our major suppliers have been recently audited and will continue to be audited once a year.



Frequently asked questions

Q&A Shields Environmental

Who is Shields Environmental

Shields is an Environmental Management company that has been supporting the telecommunications sector for over 20 years in minimising environmental impact. We were one of the first companies in the world to have an ISO 14001 certificated Environmental Management System. Shields operates the Fonebak scheme.

Who are your clients?

Our customers are some of the largest and most successful in the telecoms industry and include all the mobile operators in the UK, some of the landline operators, retailers and a number of customers in Europe and North America. For example:

- f* Mobile operators include O2, Orange, T-Mobile, Virgin, Vodafone and some of their European operations.
- f* Bouygue Telecom is another European mobile operator we work with
- f* BT, Cable & Wireless and Lucent are some examples from the fixed line sector
- f* the Dixons Group (Dixons, The Link, Currys and PC World) are among our retail clients.

Tell me about the environmental attitude of Shields

The basis of the solutions we provide is to follow the Environmental Hierarchy, ensuring prevention and reduction of waste. Our first priority is to reuse whole products for their original purpose. This is followed by the reuse of components. What cannot be reused goes for materials recycling. All of this prevents waste, preserves the World's energy and materials resources. We operate all our processes through an

ISO14001 Environmental Management System (EMS) and document them through a software system, providing an audit trail for our clients on all aspects of reuse and recycling. We also report publicly on our activities through an EMAS verified Environmental Statement.

How are you handling recycling in the countries where you sell your phones for re-use?

We have more than 20 years of experience in this field and therefore have much that we can offer in terms of intellectual and practical support. While we do not presume to go into these countries and dictate how they should operate their recycling programmes, we are providing advice and guidance and will offer selected sponsorship to universities or other bodies to ensure success.

We have also established a footprint in North America and Europe and plan to make Fonebak a global solution for service providers and retailers throughout the world.

How are you different from other companies in a similar business?

With regard to current legislation we are fully licensed and have the required technically competent personnel. We provide a fully documented audit trail of our re-use and recycling activities, therefore fulfilling the 'Duty of Care'.

With regard to forthcoming legislation, we provide a free collection point through approximately 1600 locations, optimise the re-use and recycling of the product achieving the required recycling rates specified by WEEE and through our audit trail provide the required information about weights and numbers.



Frequently asked questions

In addition, we systematically audit our downstream suppliers on all aspects of their business to ensure that our stringent environmental standards are met. As previously mentioned we document all of this through an ISO14001 Environmental Management System and report publicly via an EMAS verified Environmental Statement.

What is your business strategy?

Simply to provide a global solution for the reuse and recycling of telecoms equipment to the highest environmental standards, providing a return to our clients and to us.

What are your revenues?

Group sales were over £25 million for the year ending June 2002.

How many phones do you handle a month?

Currently we are handling over 100,000 phones a month. We also handle tonnes of accessories a month. The service has grown by more than 100% in the past 12 months and this is even before we have officially launched the scheme to the general public. We expect significant growth.

How much have you grown in the past 12 months?

Sales have grown by more than 100% in the last year

Definitions

What is ISO 14001?

It is the International Standard for Environmental Management. It is based on documenting all the affects you have on the Environment as an organisation, then rating them by significance and having a continuous improvement programme to minimise your impact on the Environment. So unlike some standards, which can just document mediocrity, this one really does have teeth and bring improvements.

What is EMAS?

It is the EC Eco Management and Audit Scheme. Any participant in EMAS must identify, manage and measure their impact on the Environment. This information must then be independently audited and verified, and made publicly available.

What is BiE?

Business in the Environment (BiE) is the business-led campaign for corporate environmental responsibility, established in 1989. Its aim is to inspire companies toward improving the impact they have on the environment. It measures the FTSE 350. Shields has been placed first in its category for the last three years. In 2001 it was also placed second overall. .