

Issue 4

# junkmail

Devon Community Recycling & Community Composting Network News

## This issue:

### Gone to Waste

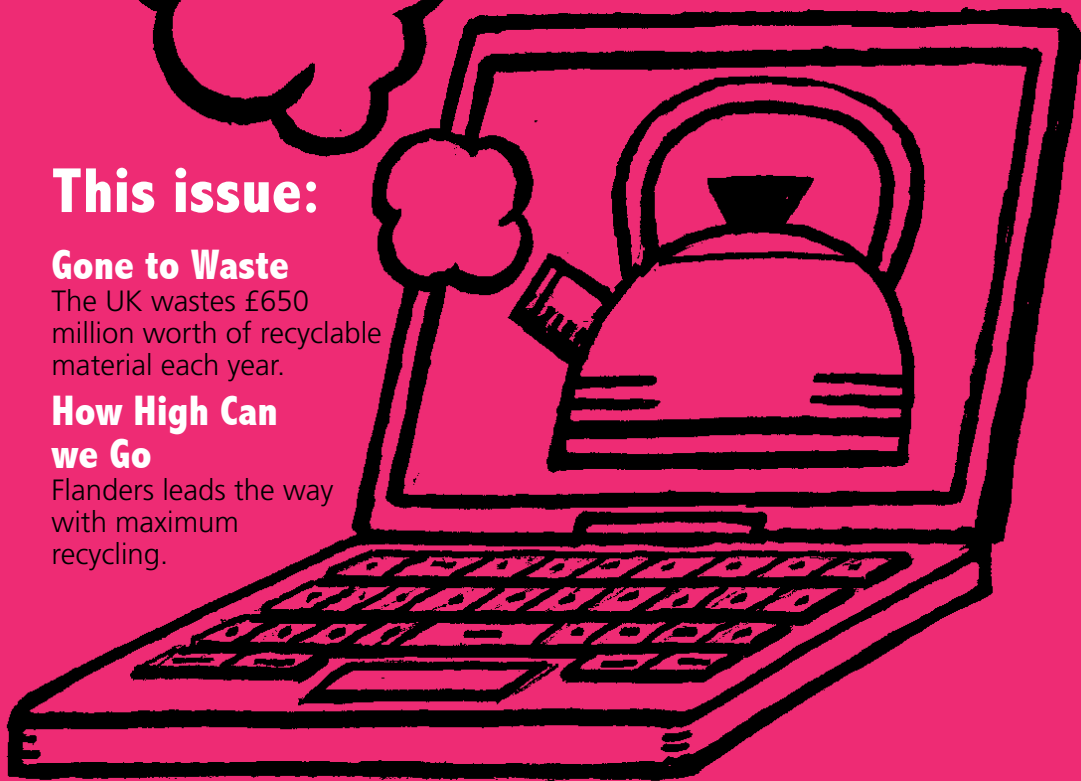
The UK wastes £650 million worth of recyclable material each year.

### How High Can we Go

Flanders leads the way with maximum recycling.

### Making Computer Use Greener:

Did you know - A Google search uses as much energy as boiling a kettle



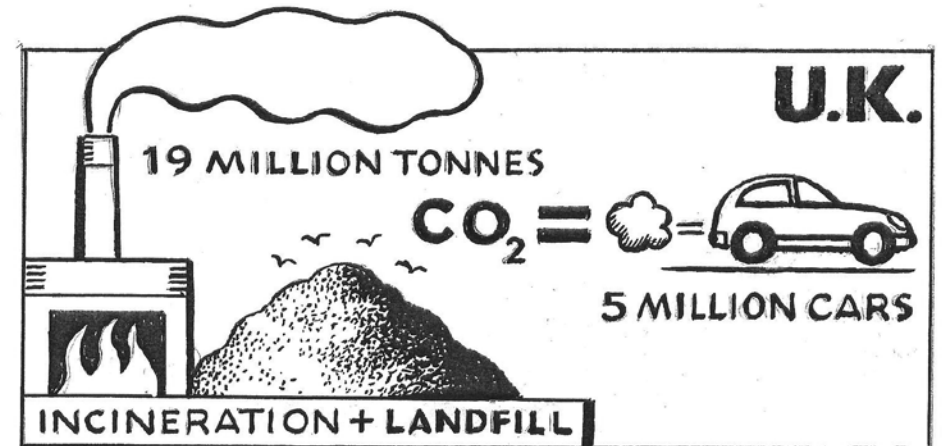
# Contents

## Features:

- 1 Gone to Waste**  
The UK wastes £650 millionworth of recyclable material each year.
- 4 How High Can We Go**  
Flanders can teach us about maximising waste.
- 8 San Francisco - dig it**  
San Francisco starts mandatory composting after 72% recycling success.
- 10 'BOGOF' Later**  
supermarket landfill issues
- 12 Transition Town Totnes**  
low carbon community
- 13 Home Grown Community Owned (HogCO)**  
A CCD project funded by the Big Lottery Fund's Local Food Scheme
- 14 Making Computer Use Greener**  
Get off the screen and into the garden
- 16 Symbols for Packaging and Plastics Recycling**
- 18 Recycling News**
- 20 Book Review:**  
Bio Char  
the biochar debate  
by James Bruges

# Gone to Waste

The UK wastes £650 million worth of recyclable material each year



The UK wastes £650 million worth of recyclable material each year. "We need to rethink how we view and treat waste in the UK. Why do we send valuable items like aluminium and food waste to landfill when we can

turn them into new cans and renewable energy? Why use more resources than we need to in manufacturing? We must now work together to build a zero waste nation - where we reduce the resources we use,

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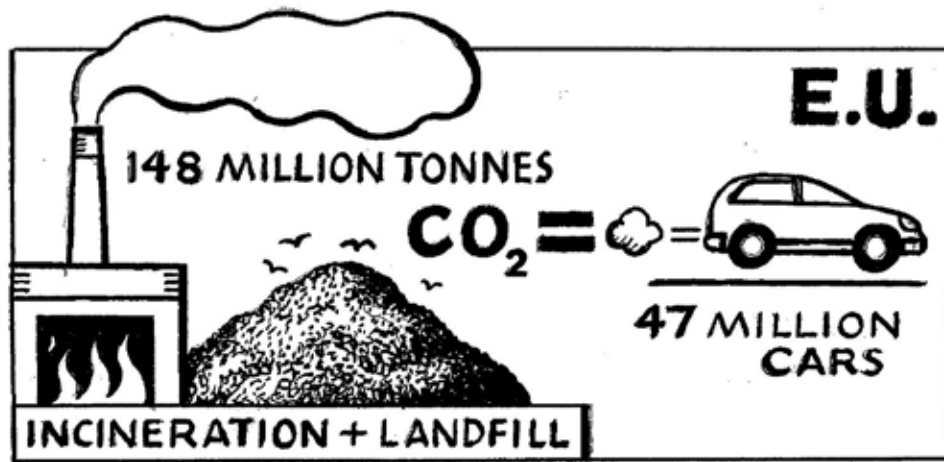
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reuse and recycle all that we can and only landfill things that have absolutely no other use". "To do this all of us - government, local authorities, businesses and

an estimated 19m tonnes of CO2 equivalent, roughly equivalent to taking 6m cars off the road. On an EU scale the figures are massive – potential estimated



consumers - must do our bit. And we must make this moment the turning point on our journey to eliminate wasteful waste." Secretary of State Hilary Benn A recent report by Friends of the Earth, 'Gone to Waste', claims that the UK landfills and incinerates 24 million tonnes of easily recyclable material every year, worth over £650m. These resources could be recycled - saving energy, CO2 emissions, create thousands of new green jobs, be a key driver for a low carbon economy, and help mitigate climate change. If recycled this would have represented a saving of

savings of 148m tonnes of CO2 equivalent, roughly equivalent to taking 47m cars off the road. Dr Michael Warhurst, senior resource use campaigner at Friends of the Earth, said: "It's time we recognised the real value of the materials we throw away every day. We only have one Earth and its resources are finite - making better use of them would save money and help tackle climate change." Much of the consumption of resources and associated environmental impacts goes on overseas to make consumer

products for our economies. Green campaigners point to the real costs of waste – firstly in the product manufacture and purchase cost, then in the waste collection and waste disposal costs, and lastly in other environmental terms such as CO2 emissions, loss of embodied energy, pollution, and remediation. Logic points towards waste prevention and maximum recycling/composting as top priorities.

### Bans

In assessing ways of improving the situation, FoE said it considered landfill and incineration bans on recyclable materials as "a valuable policy tool in driving recycling performance upward". Alongside current efforts to recycle more, UK authorities are considering either incineration/ Energy from Waste (EfW) or Mechanical Biological Treatment (MBT) as a way to reduce landfill and avoid penalties which will be incurred if they fail to meet landfill waste diversion targets. MBT extracts recyclables from residual waste by sorting processes before stabilisation through composting. In Devon, the South West Devon Waste Partnership is in the procurement process for a 25 year approx. £1bn waste disposal contract. Viridor are proposing to build an EfW plant with 275,000 tonnes per

annum throughput at Lee Mill in South Hams, which would deal with waste from Plymouth, Torbay, and south and west Devon. There is some opposition. Green campaigners point to the need to reduce & prevent waste and recycle more with a background of resource depletion, peak oil and climate change.

For more details of Devon plans see <http://www.plymouth.gov.uk/swdwp.html> For details of FoE's report 'Gone to Waste' and other papers on waste, resources and climate change visit <http://www.foe.co.uk/resource/index.shtml>



*The Wee Man at the Eden Project*

# Maximising Waste

## How high can we go!



**In this issue we report on two places breaking the 70% recycling 'glass ceiling' and look at the potential to raise recycling & composting in Devon higher.**

In this issue we report on two places breaking the 70% recycling 'glass ceiling' and look at the potential to raise recycling & composting in Devon higher.

Flanders in Belgium and San Francisco both recycle and compost 72% of their waste. They are now aiming even higher, with San Francisco introducing mandatory composting for bio-waste from all households and businesses which could take the rate above 80%. Flanders admits it is only capturing 40% of food waste, but still getting 72% recycling/composting rate, and it is aiming even higher!

Devon is now recycling and composting over 53%, as are many others, with Plymouth and Torbay about 32% (this is without food waste collection in many areas). At

Devon recycling centres the rate is about 80% recycling/composting. For kerbside recycling two Devon Districts are in the national top 6—Teignbridge and South Hams both around 57%, with the Cotswolds (60%) and Staffordshire Moorlands first on 61.5%. That's a great achievement, but waste remains a big problem. Local Authorities are at a cross roads where more bio-degradable waste must be diverted from landfill to meet targets, huge amounts of valuable resources still go to waste, disposal is getting ever more expensive, and waste prevention and reduction remain primary challenges. Tough decisions are being taken concerning waste disposal technologies such as Energy from Waste incineration. How high can recycling go in Devon?

### **Flanders – high recycling case study**

There are key factors underlying Flanders success. They are waste prevention and reuse, home composting, variable charging tariffs for different wastes, recycling yards/centres, source segregated kerbside collections, producer responsibility and retailer collections, and limiting residual waste treatment capacity to the minimum (incineration) to maintain an incentive to prevent

waste, reuse and recycle.

Flanders has about 6m people, including Antwerp with 470,000 inhabitants, which has poverty, high migrations, lots of tourism and students, but still manages 61.5% recycling. By 2010, Flanders is aiming for 75% recycling, with targets for 2% waste prevention per year (eg packaging, nappies, paper), to collect 10kg per inhabitant for reuse shops, and for a far reaching de-coupling between economic growth and waste generation.

Pre-paid collection fees (in the cost of bin liners), taxes and charges are used. For example, a 60 litre bag of mixed waste collection costs between 0.75 and 2.5 euros, and in urban areas, between 2.5 and 3.75 euro per 120litre wheeled bin collection. Dumping is not a problem.

Home composting is big - 25% of households do it. Free chickens are available for residents to encourage the use of kitchen scraps as feed. There are 5 trained volunteer master-composters per 10,000 inhabitants who explain how to compost at home, backed by communication and education campaigns. Neighbourhood composting is promoted in urban areas, so people in flats can take materials to communal compost

areas. The capture rate for food waste collections could be higher, with 40% of residual waste being food.

Waste prevention and eco-design initiatives target households, schools, events, shops, and businesses, and green procurement is encouraged to support more sustainable production and consumption. The target for residual waste is 150kg per household p/a. In Devon, Teignbridge and Sth Hams have 162kg & 167kg per person p/a, so clearly much work remains to be done in reducing residual waste.

There are 100 reuse shops, selling around 7.2kg/inhabitant per year, some have developed into department stores with sections for furniture, clothes, toys, electricals etc. Goods are donated, sorted, inspected, cleaned and repaired if necessary. The target is now 10kg/inhabitant, a 25% improvement.

There are 337 recycling container parks which collect 50% of household waste. A wide range of waste streams are separated for recycling: construction & demolition, oils, batteries, polystyrene, WEEE, paper & card, plastics and film packaging, metals, textiles, lightbulbs & fluorescents, wood, car and bike tyres,

Retailer take-backs include pharmaceuticals, ink cartridges & batteries (one box per 500 inhabitants). Waste electrical items and used car tyres are accepted by retailers even if a new product is not purchased.

Flanders cites key lessons. Source separation via separate collection is crucially important in obtaining higher recycling rates and high quality materials. Work on all levels of the waste hierarchy & take specific measures to prevent waste and increase reuse, recycling and composting. Introduce the polluter pays principle via different tariffs. Limit residual waste treatment capacity to the minimum to maintain incentives to maximise waste prevention and recycling. And ensure good communication and effective enforcement.

Flanders does not have data on participation rates. Lore Marien of the Flemish Waste Agency says it may be "difficult and expensive" to go over 80% recycling. Flanders spends 184 euro per household p/a on waste. However, figures show that if diversion of food and paper from residual waste could be improved there would be less than 60kg residual waste per person p/a!! (40% of residual

waste is food). Application of residual waste sorting processes, such as those used in MBT (Mechanical Biological Treatment where waste is mechanically sorted prior to composting to extract maximum amount of recyclables) coupled with targeted enforcement on participation could smash the 80% level. Eco-design could also be advanced where non-recyclable materials are designed out of products. So where is the real ceiling for maximising recycling, and how far away is zero waste?

### **Increasing recycling and composting in Devon**

All Authorities in the top 20 have alternate weekly residual waste collections with weekly recycling and best results are in areas with weekly food waste collections. Rates will increase as districts bring in new kerbside collections for food waste, cardboard, plastics and other materials. Proper use of available facilities now make it possible to have just a tiny amount of residual waste. It would seem key issues remain participation, enforcement, reducing residual waste & its collection. Focus must turn to waste prevention. Home and in-situ composting has much more potential, as does reuse. Producer responsibility must grow alongside an awareness

of resource conservation. Local Authorities require more resources.

At Recycling Centres rates can go above 80% if source segregation can be better enforced. This includes more vigilance at the tipping point and better storage and selling facilities so more items and materials are reused. On my last visit to Exeter Recycling Centre lots of easily recyclable material and reusable items lay in the residual waste pile, and good furniture was amongst the waste wood. A culture change needs more promotion, with infrastructure to enable it to happen.

Nationally, it would also appear that the amount of household waste arising has fallen by 4% over the year reflecting the recession and a longer term downward trend, with a 5 year average decline of 1% p/a. Defra figures for England reveal overall household recycling and composting rate in 2008/09 was 37.6%, up 3%, with a national target for 2020 of 50% recycling and composting. The urgency to reduce carbon emissions, use resources more efficiently, and peak oil, are powerful drivers pushing for much more rapid change than contained in current waste policy, practice, and targets.

# San Francisco -Dig it!

San Francisco starts mandatory composting after achieving 72% recycling rate

**Tossing food scraps into the garbage can is a crime - at least in San Francisco.**

San Francisco has become the first American city to require all people and businesses to segregate their food waste for composting. This follows a similar move by Seattle, but that excluded businesses.

San Francisco currently keeps 72 percent of its garbage stream out of landfill by recycling, which includes construction material and cooking oil.

While mandatory recycling laws start to take shape in several cities across America, San Francisco is moving things a step further by requiring all residents to compost. All food refuse is turned into compost,

which is then sold to Bay Area farms and vineyards.

Everyone in San Francisco is now required to separate their refuse into recyclables, compostables and trash in three separate color-coded bins. No one may mix recyclables, compostables or trash, or deposit refuse of one type in a collection container designated for another type. All properties are required to maintain and pay for adequate refuse services.

It's all part of an ambitious goal to reach zero waste by 2020 – to reduce waste and have the city sending nothing to landfills or incinerators by 2020.

Garbage officials in the city have been stunned and heartened by the tons of food waste that is already streaming in. After picking up kerbside food scraps, garbage trucks head to the south of the city to the Organics Annex, the heart of the citywide food waste operation.

Jared Blumenfeld, the city's environmental officer, says the



Organic Annex is already processing about half of the city's food waste, which is more than 500 tons per day. "We hear a lot about climate change, and what we can do and should do, and what's happening in Congress," Blumenfeld says. "But people want to know what they can, practically, do every single day, and composting your food scraps is probably the single most effective thing you can do as a citizen in the United States today."

Blumenfeld says composting is

simpler than it may seem. "This is not rocket science. This is putting some food scraps into a different pile and then turning it into compost. If we can't do that, then I really worry about our ability to do some of those more complex things."

Fines won't be levied until early next year to allow homeowners to get used to the new sorting; but once they do take effect, people not participating can expect penalties of anywhere from US\$100 - 1,000 depending on warnings.

# Supermarket 'BOGOF later' to food waste



**Up to 35% of supermarkets waste stream is wasted food, much of which was thrown away because it went out of its sell by date.**

One supermarket chain alone wasted the equivalent of 30 million portions of meat. Then add the estimated one third of food that householders buy and then throw away due to over-purchasing, and it reveals a staggeringly wasteful picture.

Tesco has launched its 'BOGOF-later' trial – no, not a response to Hugh Fearnley Whittingstall's free range chicken campaign, but a 'Buy One Get One Free Later' scheme in which customers get a voucher to claim the free item at a later date. Tesco says this will help cut down food waste. Tesco has reached its target to achieve 100 per cent diversion of waste from landfill, Sainsburys and Asda have similar targets. Tesco gets over 20 million shoppers a week throughout the UK. From over 500,000 tonnes of waste per year, 385,000 tonnes was recycled, and 146,000 tonnes was diverted from landfill via a mix of : in vessel composting (IVC) ; anaerobic digestion (AD) ; mechanical biological treatment (MBT) ; mechanical heat treatment (MHT) and energy from waste (EfW). So how far does Tesco have to truck its residual waste to avoid disposal via landfill? Quite a long way from Devon and Cornwall!

## Love Food, Hate Waste.....

More than 5,000 tonnes of wasted Tesco meat products are generating 2,500 Mega Watt Hours of renewable energy each year - enough to power more than 600 homes for a year. However, that

quantity of meat could have fed about 5 million families 1kg of meat each or provided the equivalent of 30 million meal portions – so why was that meat allowed to go to waste in the first place?

In a recent interview, Sir Terry Leahy, Tesco Chief Executive, when asked "what is your greatest hope for the next 10 years?" replied: "we have to move much further forward on climate change and allow the consumer to lead us to a low carbon future". (The Guardian).

As so many people use Supermarkets, they have a vital role to play in reducing waste and encouraging more sustainable consumer habits. What many would like to see supermarkets doing is: taking greater producer responsibility, for example preventing waste and thinking beyond recycling with reuse, refill and deposit schemes, packaging take-back schemes like Germany, reducing packaging, resource & energy efficiency measures, stopping wasteful practices (2 for 1, portion sizes, open freezers etc), minimising food waste, promoting more local and seasonal food, selling real nappies, improving fair trade and ethical business practices among other things.

# Transition Together



## Totnes 'Low Carbon Community' receives Government boost

Transition Town Totnes has been selected by the Government as one of only 8 pioneering communities across the country to accelerate their move towards becoming a low carbon community. They have been awarded £625,000. This follows an earlier award from the Esmee Fairburn Foundation of £39,000 to support the work of the 'Energy Descent Action Plan' developed by TTT and outlined in the last Junk Mail.

Rob Hopkins, the founder of the Transition Town movement, which began in Totnes and now involves thousands of communities across Britain and the world commented: "this is a really historic moment for both Transition Town Totnes and for the town itself. We have been engaging people across the community for the last 4 years in addressing the twin

challenges of peak oil and climate change. We have managed with very little money and a great many volunteers. This grant will enable us to make a real difference to a very wide range of people. We will be recruiting 15 Transition Streets where up to 10 households in each street are willing to work together to reduce their use of carbon and their fuel bills".

Minister Joan Ruddock said "we've had more than 300 communities register with the Low Carbon Communities Challenge, so there's a real appetite out there to save energy to help tackle global warming and save money on fuel bills. Communities like Totnes will help to develop the policies we need in the future to make the successful transition to a low carbon economy."

The project, called "Transition Streets", will bring together groups of neighbours in streets across the town. It has 4 stages. Stage 1 will support behaviour change

through the established programme of 'Transition Together' and achieve quantifiable reductions in energy consumption, food, transportation, water and waste. Step 2 will provide energy efficiency measures, including home energy audits, loft and cavity wall insulation. Stage 3 is help fitting appropriate renewable energy to homes. One participant from each Transition Street will complete training in assessing suitability for household micro-generation. Grants for fitting systems will be available. Stage 4 focuses on community awareness - Totnes Civic Hall will be made energy efficient and fitted with solar PV. The savings generated will be used to support further projects, with a public digital display showing the energy savings being made. In addition, 'Open Streets' events will showcase some of the upgraded houses so that the public can see what the project has achieved. During the life of the scheme TTT expect to work with about 350 houses in Totnes.

This model of educating and empowering people to decide for themselves how best to decarbonise their lives is one with huge implications for how Government tackles climate change in communities, offering genuinely bottom-up engagement coupled with ongoing behaviour change.

Transition Town Totnes now has about 20 projects running, overseen by various working groups, paid and voluntary staff.

**More details can be found on the website and you can get a free e-newsletter**  
<http://totnes.transitionnetwork.org/>

## 'Home Grown Community Owned' CCD Programme

'Home Grown Community Owned' (HogCO) is a CCD project funded by the Big Lottery Fund's Local Food Scheme. We are working across rural Devon to help communities develop local food projects - prioritising groups that involve people from all backgrounds and abilities, fostering innovative partnerships in some way.

HogCO will work with 70 groups over the next 5 years to develop food growing projects - these can include community gardens, orchards, seed saving groups, composting, and much more. Our website and resources are available to all, and we will be developing toolkits on legal tenure, planning and access issues (covering social inclusion and physical access) and we are delivering a wide range of training programmes free for community groups. So far none of our groups are doing community composting - so talk to us about your ideas!

HogCO has been widely supported by the community, and so far we have selected 20 projects to work with, including a community supported agriculture project, a Housing Association project working with residents to develop a community garden, and a market garden working with people with learning difficulties.

HogCO is also working with a range of public and private landowners, hoping to facilitate more land being made accessible for community growing, for example National Trust, National Park or PCT land.

Our website is up and running see [www.hogco-devonrcc.org.uk](http://www.hogco-devonrcc.org.uk) or email us at [info@hogco-devonrcc.org.uk](mailto:info@hogco-devonrcc.org.uk)



# Making computer use greener

Get off the screen and into the garden!



**How much energy does your computer use? Worldwide, ICT accounts for 4 per cent of carbon emissions - that's the same as the aviation industry.**

And it has been estimated that each search on google leads to the equivalent energy use of boiling a kettle - search engines are energy guzzlers.

Fact: 89lbs of waste can be generated by producing chips for just 1 computer! 40lbs of hazardous waste can be produced from the manufacture of a circuit board weighing just 4lbs !

## **Average Power Consumption of a PC:**

- Desktop Computers 60 -500 watts
  - o Sleep or standby 2-6 watts
- Laptops 15 -60 watts
- Monitors 100 – 150 watts
- Monitor LCD 35-45 watts
  - o Sleeping Monitors and turned off monitors can use 0-15 watts.

Your computer can use up to 650w, that's the equivalent of all the lights on in 3 or 4

rooms (unless you use low energy bulbs). A business with 400 computers can use 260,000 watts of power per hour.

## **How to be greener:**

- Allowing your computer to 'sleep' when idle is the most energy efficient method (keyboards often have a 'sleep' mode shortcut key)
- Use a 'smartplug' – when you switch off your PC it cuts the power to the computer, printer, monitor and anything else plugged into that socket. PC's, screens and printers all suck power even whilst off unless unplugged or used with a smartplug. Smartplugs are being distributed free by Eon and others, check the web.
- In order to save electricity on your home computer, don't use a screensaver!
- Screensavers use the same electricity as a computer being used, as the screensaver uses both the GPU and CPU on your computer.
- With the monitor on, there is no savings.

- Can you extend the life of your PC by servicing & upgrading it instead of replacing it?

The Carbon Trust estimates that 20% of carbon emissions from Government offices come from ICT. Each year the offices generate around 460,000 tonnes of co2, roughly the equivalent amount created by a million households in a month. Now The Government has saved at least £7 million over the past year by making its IT systems greener. Changes included extending the life of PCs, making double-sided printing the default option and making sure computers are turned off at night. These have all helped cut the carbon footprint of central

Government computers by 12,000 tonnes – roughly the equivalent to taking 5,000 cars off the road.

The Department for Work and Pensions (DWP) will save 200 million sheets of paper a year through cutting down the number of printers in the department and changing the default setting to double-sided printing.

"A year ago the British Government became the first in the world to set tough targets to tackle the huge environmental and financial costs of computer use," said Cabinet Office Minister Angela Smith. "I hope that private companies and individuals will also recognise the savings that can be made and get on board."

## **Computer Reuse specifications**

Guidelines: projects take computers with Pentium or Celerion 600 processors, which are on computers no older than 3 or 4 years. Older computers are too slow/obsolete. Printers are generally not accepted, and monitors should be 17" for reuse standards.

See [www.computersforcharity.org.uk](http://www.computersforcharity.org.uk) for details - based in Bude. They will wipe computer data and export to africa - over 20,000 so far. They charge to collect but want Pentium machines of 700 mhz. They cater for organisations with multiple units rather than individual householders.

[www.a1prp.co.uk](http://www.a1prp.co.uk) operate a computer reuse, recycling and training project based in Exeter 01392 202779.

[www.paperchain.org.uk](http://www.paperchain.org.uk) collect for recycling around Exeter.

[www.ics-computers.co.uk](http://www.ics-computers.co.uk) Independent Computer Solutions in Newton Abbott refurbish systems for reuse.




If you are disposing of a computer, and may have sensitive information on it, you should ensure that the hard drive will be or has been 'cleaned' or destroyed otherwise information may be recovered by someone else. Pc's are still designed to be short life disposable items as technology moves fast.

## **Printer cartridges**

1. Charity shop collection boxes eg Help the Aged & others
2. mail schemes with charities eg [www.actionaid.org.uk](http://www.actionaid.org.uk). &/or freepost to help the aged.
3. some LA kerbside recycling eg Teignbridge, Mid Devon,
4. some small computer shops have collection boxes,
5. Cartridge Line refill centres have collection boxes,
6. overview of options and links on [www.reducereuserecycle.co.uk](http://www.reducereuserecycle.co.uk)
7. A1 Positive Recycling Project [www.a1prp.co.uk](http://www.a1prp.co.uk) [neil@a1positiverecyclingproject.org.uk](mailto:neil@a1positiverecyclingproject.org.uk)

# Symbols for packaging & plastics recycling

With a background of increasing demand for plastics recycling, JM explains some of symbols used. What do they all mean and how can they help us to recycle better? Generally plastics must be clean and uncontaminated ie: no food residues. Plastics accepted at Devon Recycling centres will generally be numbers 1,2,3,5,and 6. No.4, plastic bags can be recycled at supermarket collection points, as can some food bags, but check labelling first. The main types of plastics and common uses are:

-  **Polyethylene terephthalate** - Fizzy drink bottles, oven-ready meal trays
-  **High-density polyethylene** - Bottles for milk and washing-up liquids, fruit netting & attached labels. Milk bottle lids.
-  **Polyvinyl chloride** - Food trays, cling film, bottles for squash, mineral water and shampoo, plastic double glazing frames.
-  **Low density polyethylene** - Carrier bags, bin liners, plastic film wrap, bubble wrap, plastic sheeting.
-  **Polypropylene** - Margarine tubs, microwaveable meal trays, many lids and bottle tops, plastic containers.
-  **Polystyrene** - Yoghurt pots, foam meat or fish trays, hamburger boxes and egg cartons, vending cups, plastic cutlery, protective rigid packaging for electronic goods and toys, cd cases.
-  7. Any other plastics that do not fall into any of the above categories. An example is melamine, which is often used in plastic plates and cups.

There are so many different types of plastic because it is a multi-purpose, versatile and adaptable material. Plastic is used in almost everything and we waste it in a disposable single use way. Reusable plastic containers are in common use in the home, so how long before packaging design incorporates plastic reuse? Many weekly shopping goods could be bought using refillable or reusable plastic containers.

In the mean time more standardisation, simplification, and ease of disassembly would make recycling much easier for the consumer and the recycler alike. The article on the Pullapart packaging website [www.pullapart.co.uk](http://www.pullapart.co.uk) shows that the more complex the range of materials used in combination by producers, the more complicated any recycling system will be. What's needed is simple eco-design and more reuse.

Germany has packaging take back schemes in supermarkets, this makes it easier for the consumer to recycle and reduces costs to the taxpayer. Encouraging producer responsibility enhances eco-design and standardisation for easier recyclability.

The UK labelling example shown below does not really help people recycle more easily as different services around the UK are varied. It seems to allow producers to pretend they are 'doing something' when they are in fact not tackling the issues of multi-material combinations of materials used, eco-design or a lack of recycling facilities for packaging. Compostable starch plastics often used with organic veg do not help recycling, in fact they lead to contamination in plastic recycling. Degradable bags disintegrate when reused. Plastic coated tin foil or card and plastic layers in tetra-paks are impossible to recycle.



"Widely Recycled" means 65% of people have access to recycling facilities for these items.  
 "Check locally" means 15% - 65% of people have access to recycling facilities for these items.  
 "Not recycled" means less than 15% of people have access to recycling facilities for these items.



The Green Dot confuses many people. It does NOT necessarily mean that the packaging can be recycled. It is a symbol used on packaging in many EU countries and signifies that the producer has made a contribution towards the recycling of packaging.



Indicates that an object is capable of being recycled - not that the object has been recycled.



Mobius Loop with %  
Shows the percentage of recycled material contained in the packaging.



## Household battery and vegetable oil recycling

Look out for battery recycling points as most major retailers, many smaller outlets, and Recycling Centres will now collect used batteries for recycling. Better still, use rechargeable batteries, but make sure you get the better quality higher Ah rated ones. In tests Uniross have performed best. With the advent of LED technology (light emitting diodes) rechargeable batteries will last a lot longer between charges.

Collection points for used household vegetable oil are also in place at DCC Recycling centres.

## PullApart packaging

[www.pullapart.co.uk](http://www.pullapart.co.uk) is an innovative Teignbridge based free to use packaging survey website that rates different types of household product packaging for their ease of recyclability, with the aim of helping people recycle more effectively and encouraging producers to package their products in more eco-friendly ways and identifying

best practice. Pullapart says recycling is complex and its approach mirrors this – it has developed a system of ‘traffic light’ ratings so that consumers can more easily identify which types of packaging are best and worst – many combine different materials, so for recycling they need to be designed to come apart easily for source separation, and not lead to a frustrated wrestling match with obstinate packaging. Recycling is about clean-streaming the particular material and minimising contamination so that the raw material quality is maintained, this relies largely on citizens goodwill and effective kerbside sorting. PullApart’s founder Micheal Butler has won a ‘GreenApple’ Environmental award. He says: “I have found it very frustrating that there isn’t a common kerbside recycling service between council areas We should all be able to easily recycle the same materials, in all the same way.

If packaging materials could be very specifically designed and strictly adhered to, taking into account the environmental and easy consumer needs, cost, hygiene, durability and absolute need, then we would, I’m certain, be recycling near 100%’.

See [www.pullapart.co.uk](http://www.pullapart.co.uk)

## Plasterboard recycling

Look out for additional recycling facilities for different materials as new ones are appearing regularly – separate recycling skips for plasterboard are now located at main Recycling Centres. Its uses include as a soil conditioner.

## WRAP Report

British households dispose of £12 billion worth of food and drink waste each year – two thirds of which is avoidable, a new WRAP report has claimed.

Just published the study indicated that 8.3 million tonnes of food and drink waste is disposed of annually, which equates to 330kg per householder per year, amounted to £480 wasted per household on unused food and drink each year.

WRAP – Government funded Wasted Resources Action Programme

## ‘Slumdog’ recycling

Readers may have seen on Channel 4 Kevin McCloud’s ‘Slumming it’, a programme which featured recycling in Mumbai’s largest slum Dharavi (India), home to over 1m people. Over 80% of Mumbai’s plastic waste is recycled in Dharavi’s recycling enterprises. So called ‘rag pickers’ source plastic waste from mountains of stinking rubbish, they are among the poorest who live beside the rubbish dumps and try and make a living from collecting and selling recyclables. They are proud and resourceful people. The rubbish seemed to consist of mainly organic and plastic waste. High value materials like plastic bottles have already been segregated upstream by people trying to make extra income.

What was striking was that food waste is not collected separately for composting, whereupon it would become a valuable resource for

subsistence farming and market gardening. It would then be easier, cleaner, and less hazardous to sort remaining recyclables from the residual waste. It begs the question, should the developed world be cleanly segregating all its unrecycled mixed plastic waste for sorting in the developing world where value can be reclaimed? With the advent of peak oil this may happen sooner rather than later.

The programme can be viewed on line at: <http://www.channel4.com/programmes/kevin-mccloud-slumming-it/4od>

## Freegle

Keen reusers are fleeing ‘Freecycle’ and setting up a rival ‘Freegle’ network following a dispute between US-based online reuse network Freecycle and its UK membership. Freegle will work in the same way and enable local groups to set up online forums in which users can trade, advertise or locate unwanted household items rather than disposing of them.

The newly formed Freegle claims that 141 local groups – almost a third of former Freecycle groups and representing over 638,000 members – have moved to the new co-operative umbrella organisation, and it said “around one million” are expected to follow.

Visit: [www.ilovefreegle.org/](http://www.ilovefreegle.org/) so far only Teignbridge was registered on the freegle network.



# Bio Char

## the biochar debate

charcoal's potential to reverse climate change and build soil fertility

James Bruges

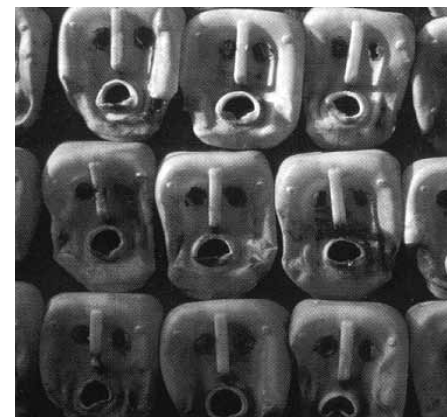
published by Green Books £8.00

Charcoal is a very stable form of carbon that resists oxidisation and if incorporated into soils rather than burnt can not only sequester carbon but hold onto water and nutrients creating and maintaining very fertile soils.

James Bruges has written a valuable book on this subject just at a time when interest in this ancient technique is being rediscovered for the incredible potential it has in reducing atmospheric carbon. As James Lovelock says, "There is one way we could save ourselves (from global heating) and that is through the massive burial of charcoal. It would mean farmers turning all their agricultural waste – which contains carbon that plants have spent the summer sequestering – into non-biodegradable charcoal and burying it in the soil ... This scheme would need no subsidy; the farmer would make a profit."

James Bruges tells of a recently rediscovered agrarian civilisation in the Amazon which collapsed finally, not because the soil was worn out as in nearly every other great civilisation, but because of the diseases brought by the Conquistadors which killed 9 out of 10 people. In fact the soils that they created, called 'terra preta' are still being used today as trucks regularly load up this ancient soil and sell it off at garden centres.

The only potential downside to Bio Char is that big businesses could take over bio Char in a big way for carbon credits for offsetting other polluting activities and, worse still grow crops just to make into char. Nevertheless I think there is a great opportunity for small composting groups to either get together with their local charcoal producer and get all the small stuff and dust to blend with their best sieved compost (bio-char needs to be mixed with compost otherwise it will pull nutrients from the soil, which can detrimentally effect the crop rather than boosting it) and sell bags of bio-char compost, or to start making charcoal from some of the woody materials brought to their sites and pulverising this to mix with compost, bearing in mind that charcoal dust is a pretty toxic substance so suitable care will have to be taken. According to further research undertaken courtesy of You Tube the production of Bio-Char involves a fast burn to create the char which is far preferable to the slow polluting slow burn that charcoal makers employ.



Plastic container sculpture by David Kemp

## Mixed plastics now accepted at Recycling Centres!

It's been a year since DCC Recycling Centres started accepting mixed plastic packaging as well as plastic bottles for recycling, but word has been slow to spread. This generally means rigid plastic packaging that has the plastic triangle symbol with a number 1-6 stamped inside it (see other pages for details) So get set for extra washing up because the plastic must be clean! Yes that means all those pots, tubs, trays, containers & lids.

Plastic bags are not accepted but these can be reused or recycled at supermarket collection points. Supermarkets will also collect some food bags eg bags from frozen peas, cereal plastic bags, fruit netting & attached labels, so check the packaging labelling carefully.

Plastics are collected from Recycling Centres by a compaction vehicle and taken to Peninsula Waste Savers in North Tawton, from where they are bulked for export to China for recycling.

Please look on the back cover of Junk-mail for the list of plastic recycling items:

## Local News

£1m investment in plastic recycling.

TQ Recycling Ltd based in Kingsbridge have secured investor funding including £95k from the SW Regional Development Agency to proceed with their planned state of the art 30,000 tonne p/a plastics sorting facility in South Hams. This will boost the recovery of plastics from the commercial and household waste stream, enable many businesses to reduce their waste disposal and create 11 new green jobs. TQ's co-founder David Newman said "this paves the way for real improvements in Devon's trade recycling capacity which will provide lasting benefits to local businesses.



Plastic bottle recycling

# Plastic Recycling Centre List

## MIXED PLASTICS - PLEASE MAKE SURE EVERYTHING IS CLEAN

- All plastic drink bottles (squash and put lid back on)
- Plastic milk bottles (squash and put lid back on)
- All plastic household cleaning bottles
- Pre formed biscuit or chocolate box trays
- Plastic sandwich containers
- Yogurt pots, margarine tubs, Ready meal containers etc
- Plastic fruit containers (unless made from expanded polystyrene)
- CD's & cases
- Plastic flower pots (must be clean)

## ITEMS NOT ACCEPTABLE AND NOT LISTED ABOVE – SUCH AS:

- Nothing contaminated with food, grease or oil (not clean)
- No 'biodegradable' plastic
- Nothing made from more than one type of plastic
- Plastic bags
- Bubble wrap, cling film
- Cereal packet inners, Cellophane wrapping
- Waxed juice type containers (Tetrapaks have separate recycling facilities)
- Paint containers, plastic toys, videos, ink cartridges etc
- Pet food pouches or soft drink pouches
- Expanded polystyrene packaging including EPS food trays  
wrappers from crisps and biscuits
- Anything lined with silver paper
- Toothpaste tubes or disposable razors
- Containers for hand and other skin creams (unless very clean)
- Any large items made from plastic - No furniture, toys etc

## ISSUES RELATING DIRECTLY TO THIS PUBLICATION

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