

JUNK MAIL

Newsletter of Devon's Community Recycling & Community Composting Networks

Spring 2007



SPRING IS COMING

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Editorial



Editorial.

Climate change awareness has hit the mainstream at last, precipitated by Al Gore's documentary film 'An Inconvenient Truth', the Stern Report, and the release of more scientific data underlining the urgency of the problem. For those who have not seen the film, it is out on DVD, and should be mandatory viewing. Many organisations and individuals will have been assessing their carbon profile and planning how to reduce their carbon emissions, so this issue we review 3 books on the subject, George Monbiot's 'Heat' 'The Rough Guide to Climate Change' by Robert Henson and 'Energy—use less and save more' Green books. Of course reuse, recycling, composting and zero

waste ideas all have a huge role to play in reducing carbon emissions, recovering embodied energy, and reducing the carbon footprint of our consumption (that is the area of the earth's surface required to produce the resources to make an item and to support our lifestyles). Recycling targets for Devon have been set at 50% for 2010, but it will be much harder to achieve the leap from 40% to 50%, as more marginal and difficult to collect materials will have to be concentrated on.

Having said that, leading Authorities in the UK have already touched 50% recycling, and much of Europe has been there for some time.

Richard Gomme

This Junk Mail was mostly written by Nicky Scott & Richard Gomme (DCRN) and prepared for printing by Nicky Scott (DCCN) with illustrations from Bob Gale (Proper Job!) & photos by Nicky Scott.

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Local Authority recycling info see: www.recycledevon.org

The packaging debate -

bio-degradable plastics and composite materials -

Readers may have become aware of the increasing range of degradable and bio-degradable plastics coming into more frequent use, as a result of producers attempts to 'greenwash' their image. Of course, neither plastic addresses the question of 'single use' disposable materials or the need to reduce resource consumption and waste. Bio-degradable plastic mineral water bottles have also recently come on to the market. Unfortunately, all this different packaging has caused confusion among consumers and is creating a headache for recyclers. Consumers simply want clear and consistent labelling or guidelines to make a decision about what is better, and for recyclers it is essential to get a clean and uncontaminated single polymer material to produce good quality recyclate. It only takes a small amount of biodegradable polymer to contaminate a load of conventional plastic for recycling, and it's now easy for biodegradable bottles to slip through sorting systems undetected and spoil a batch.

Is it possible to make the transition to all bio-degradable packaging? By 2020 the production of bio-degradable plastic is set to reach 3.6 billion kg per year.

Meanwhile, press reports have highlighted the question of

plastic recycling in China and its environmental impact.

Degradable plastics are still petroleum based and fragment into small pieces as they break down.

Bio-degradable plastics are made from natural polymers such as corn starch which can naturally break down leaving only carbon dioxide and water.

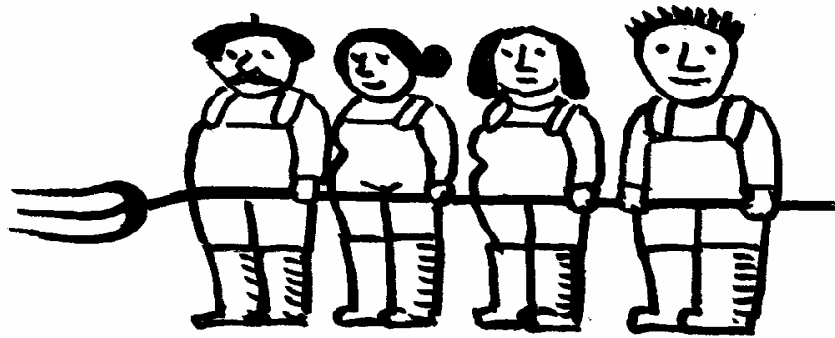
Tetrapaks, add to the difficulties with their composite makeup - coated paper with aluminium lining and built-in plastic lids. It is only possible to recover some of the paper fibre from Tetrapaks, and there is only one mill in the UK in Scotland capable of reprocessing them. Is more energy expended collecting and transporting them than is recovered through recycling? Is the answer more processing facilities or designing a packaging that is properly recyclable, reusable, or biodegradable?

Through this mish-mash, can we see a future where consistent resource efficient packaging and refillable reusable bottles and containers becomes a reality? Systems for reuse have existed successfully in Europe for a long time, and it would seem that it is Government timidity and the vested interest of the major retailers that is a major part of the problem here. It wasn't that long ago that greaseproof paper, reusable shopping bags, deposit return systems and other methods were the norm and used to adequate effect. The debate goes on.

Richard Gomme

Local Groups news

DEBI AWARD WINNER!



David Banks, Development Manager for Devon Furniture Forum has scooped an Environmental Champion Award at the Devon Environmental Business Initiative Awards for his work in reuse and recycling. DFF has grown to provide 4 reuse shops linked to a refurbishment warehouse and undertakes reuse collections from householders across 4 Devon Districts.

EXETER WOOD RECYCLING PROJECT & NATIONAL BIRD CONSERVATION CHARITY JOIN FORCES (TO DONATE BIRD BOXES TO LOCAL SCHOOLS)

Otter Rotters Timber Recycling project in Exeter is joining forces with the British Trust for Ornithology (BTO) to promote National Nest Box Week 2007.

For the last 10 years the British Trust for Ornithology has organised NNBW starting on Valentines Day - Feb 14th - the day when birds have traditionally found their mates. As natural habitats for nesting birds decrease the thousands of boxes put up through this scheme have provided valuable breeding sites for declining species.

John Woodland from the BTO said

"In our woods here in Devon the Pied Flycatchers arrive in spring often after the resident tits have started nesting and have taken over all the holes. Some 20 or more years ago this species nearly became extinct in Devon with just a few dozen pairs left due in large part to a lack of nest sites. Now following nest box schemes the population of the lovely little black and white bird has been saved and many hundreds nest in our woods. Proving a nest box is positive conservation and vital if we are to help our wildlife."

Otter Rotters is a local not-for-profit project committed to saving waste timber from landfill and produces a range of products for home and garden. With volunteers from the BTO and wider community OR have made a number of bird

boxes to donate to local schools' wildlife gardens. If your school would like to receive free bird boxes please get in contact on the number below.

OR's Dion Battersby said

"We are very happy to be supporting NNBW in this way. It is great to think that wood we have saved from the rubbish dump can then help save our wildlife. The BTO have supplied us with the designs: it is important that you provide the right box for the species you are trying to attract - many commercially available bird boxes are actually harmful to birds' breeding prospects."

BIRD BOXES AS PEST CONTROL

According to BTO Nest Record Scheme data, Blue Tits have an average of just over seven chicks per nest. Each chick is fed approximately 100 times a day so, between hatching and fledging, the average Blue Tit family will munch it's way through around 10,000 invertebrates, mainly caterpillars - and that's just the kids. Encouraging Blue Tits to nest in your garden could therefore provide you with the ultimate ecologically friendly form of pest control!

If you would like to get involved with NNBW and help attract wildlife to your garden whilst supporting recycling and community enterprise Otter Rotters has a large range of bird boxes for sale. For more information call them on 01392 466387. For details of the Devon branch of the BTO Email John Woodland: jwoodland@btodv.fsnet.co.uk

Photos of volunteers making the boxes etc are available. Please contact timber@otterroppers.co.uk

CONTACT DETAILS:

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TEIGNBRIDGE RESIDENTS CROWNED 'BEST RECYCLERS IN THE SOUTH WEST'

AND ENTER THE EXCLUSIVE 'TOP 10' OF THE
NATIONAL 'RECYCLING PREMIERSHIP'.

The official figures released last week show that Teignbridge's rocketing recycling rate has placed them as top recyclers in the South West and an impressive 9th nationally. Recycling rates reached the dizzy heights of 45% in 2005/06 thanks to residents' superb efforts using the new recycling and composting service and the hard work of the Teignbridge operations and collection crews.

Teignbridge also had the 3rd highest improvement in national recycling rates with a massive 19% increase from 2004/05 levels.

Portfolio Holder for the Environment and avid recycler Councillor Gordon Hook remarked

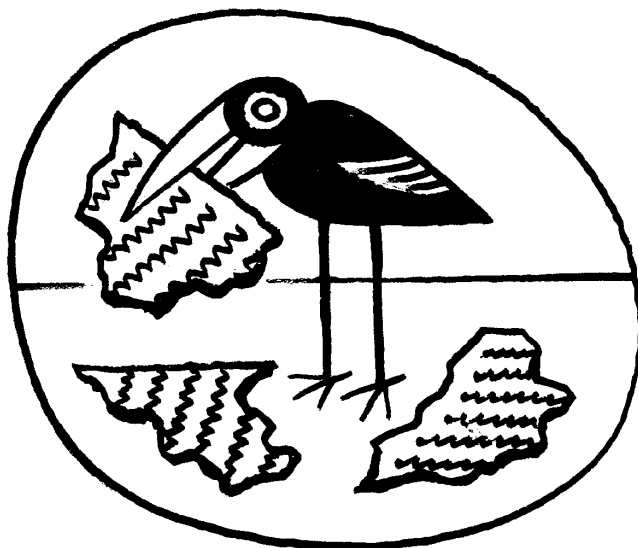
"This really is a massive pat on the back for all residents using the new recycling service and they can be proud of their national status as high recycling achievers. I'd also like to acknowledge the input from the collection staff who have been working extra hard on the ground to help us achieve such magnificent results. The overwhelming support from residents for recycling continues to amaze us and I want to say a huge thank you to all the dedicated recyclers out there".

Cllr Hook added

"Whilst such success warrants celebration we have now set our sights on the top of the recycling table and aim to achieve a recycling rate above the 50% mark. One key message is that reducing the amount of all the types of waste we produce will help us to even greater success whilst helping to combat climate change. This is particularly relevant over the Christmas period when we tend to consume more than usual. Gifts and celebrations that have less impact on our environment should be considered wherever possible".

Channings Wood prison project.

HMP Channings Wood in Teignbridge is planning a major environmental project which could see the prison generating all its own electricity, recycling its waste, recycling grey water, reclaiming heat from the laundry, using a wood chip boiler



for heating, and setting up reprocessing initiatives to deal with more recyclable materials locally which could provide work for inmates. Another recycling challenge is the thousands of foam mattresses which are annually renewed. The UK suffers from one of the highest re-offending rates at more than 60%, and projects such as this will attempt to engage prisoners in positive activities.

The Government has stated a target of 15% reduction in energy use by 2010 in all Government buildings, and has also published aims to offset carbon emissions from its departments activities by 2012.

Community Waste Sector outputs.

Between 2003-06 over £3m of National Lottery grant funding was attracted by the community waste sector in the southwest region through the CRED programme. Funding went to 30 projects, and the money would have been matched by at least £4m in match funding from other sources, mostly from income earned by the projects. This funding helped create 110 full time jobs, 44 part time jobs, 785 volunteering opportunities, and 2300 training places.

Devon groups accessed at least £1.3m of this funding to boost reuse, recycling and composting across the county.

The support structures and representation provided by DCRN, DCCN and DFF and the work to promote close partnership working with Local Authorities certainly helped to create a favourable environment in which funders have confidence that Devon is a good place to invest in active communities which can deliver successful results. Well done to all the groups and Officers who have made it all possible, and thanks to the Members who continue to support the work of the community sector.

LA Recycling updates:

Residents of Mid Devon, Teignbridge and East Devon can all now recycle batteries through their kerbside recycling collections.

Success in Mid Devon.

Battery recycling has proved so popular in Mid Devon with the recent launch, that amounts collected have far exceeded projections. Initial expectations were to collect 8-10 tonnes per year, but it is likely twice that amount will be collected. Following a recent decision by Mid Devon District Council that it could not afford to finance the introduction of battery recycling in the area, two local companies stepped in to save the day. A partnership agreement between Viridor and Mid Devon Community Recycling (MDCR) has seen the two companies underwriting the bill.

Dan Cooke, spokesman for Viridor, which manages the Broadpath landfill and composting site, near Uffculme, said, "Batteries are classed as a hazardous substance due to all the chemicals in them. We're investing in this initiative as part of our on-going commitment to best practice in waste management and to recycling in Devon". Mid Devon Community Recycling, who carry out Mid Devon's kerbside recycling collections, have taken out a special licence to store the batteries at their Silverton premises prior to sending them off to the Midlands for recycling. Ken Orchard of Mid Devon Community Recycling said, "We're committed to getting batteries out of the waste stream and are delighted that Viridor have been able to link up with us in this project. The residents of Mid Devon already have a really impressive record on recycling and Viridor's support will help to move us even further ahead of the national average".

Teignbridge have also added batteries, printer cartridges and mobile phones to the list of items collected in kerbside recycling collections.

East Devon were the first LA in Devon to introduce battery recycling last year through a WRAP funded trial.

Results of Which? compost test

Consumer body Which? has this week said that the "right compost can make the difference between struggling seedlings and a glowing garden."

In a trial testing 17 multi-purpose and 15 specific-use composts, Which? sowed 13,200 seeds, potted on 880 seedlings and planted up 276 pots with 828 plants. The results show that there is big disparity between the quality of different composts. Successful for the sixth consecutive year, New Horizon Multi-Purpose Peat-free Compost was awarded Best Buy in the peat-free multi-purpose compost category. Best Buy J Arthur Bower's Multi-Purpose Compost received top marks in the peat-based multi-purpose compost category, for raising seedlings and growing on young plants. With less need for watering than the other peat-based compost, this was a clear all-round winner. However, Which? advises staying away from Homebase Peat Free Multi-Purpose compost: it performed poorly at both raising seedlings and growing on young plants.

Recyclers seek a big heart and financial skills

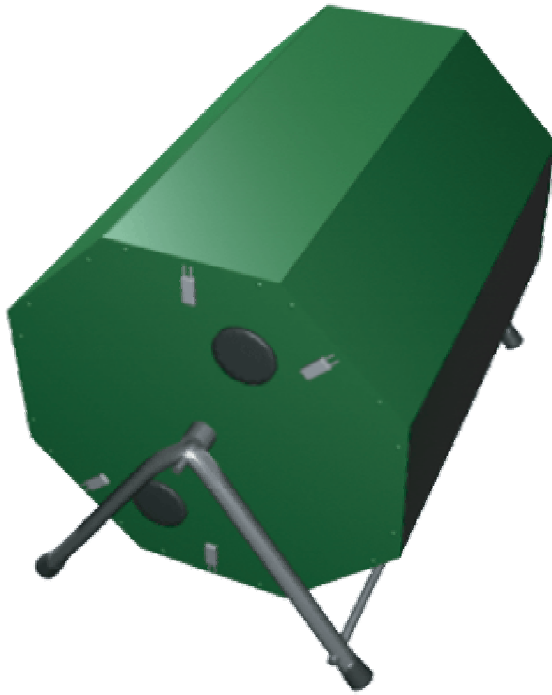
The Trustees of Mid Devon Community Recycling (MDCR), the local not-for-profit organisation which collects recycling from all of Mid Devon's households and businesses, are seeking a big hearted person with some financial expertise.

The organisation was set up ten years ago by a group of enthusiastic volunteer trustees and 2 employees. However, it has grown rapidly to a current staff of nearly 40 people with 12 trucks, and the Trustees need more support with financial expertise. They're now looking for a person with suitable experience and expertise who can help guide them.

Ken Orchard, General Manager of MDCR, said, "MDCR has been a real success story. We've always been innovative and cutting edge in the recycling world and if we're going to maintain that we've really got to become a bit more professional in our financial management. "We're looking for help from someone who wants to do their bit, both for the local community and for the environment. As a volunteer Trustee they would be required to help us with our strategic thinking and planning, particularly on financial issues". Anyone who thinks they might be able to help should contact Ken Orchard – on 01392 883031.

Rats and home composting— solution—buy a Jora 270 Home Composter Rat problem conquered!

The composter has ensured there is no trace
of food at all in the residual rubbish



At last a home composter that really works wonders. Great compost, no more smelly dustbins, no more rats, no 'soggy' stuff. And no more bio-degradable food waste to landfill.

I purchased a Jora 270 Swedish designed insulated compost tumbler a few months ago, and thorough trials have shown it to perform brilliantly for all types of kitchen food waste, cooked and uncooked, meat, fish and children's plate scrapings.

Previously, rats have been a persistent problem – I live in a rural hamlet - even when limiting food composting to fruit and raw vegetable scraps. Not only would rats burrow into the compost bin to pick through the contents, but any chance and they would be in the residual rubbish looking for cooked food waste, gnawing holes through plastic dustbins. They would vandalise all sorts of random items by chewing them, and even burrowed into my house through the old granite and lime mortar walls. Once inside under the floors they

chewed electrical wiring and sounded like beavers when they gnawed wood in the ceiling.

Neighbours suffered from similar occurrences. Periodically I had to call out the Council ratman to lay some poison down to control their population. On one occasion I had to take up floorboards to find a dead rat that was smelling badly (died of natural causes), and excavate outside the house under ground to stop up an access hole rats had established in the walls.

But the rat problems have now gone. There have been two parts to the solution. Firstly, the composter has ensured there is no trace of food at all in the residual rubbish other than packaging, and they can no longer snack on the food put into a home composter. Pests cannot gain access as the Jora composter stands above ground level on a tripod frame. Contents compost so rapidly that within a few days it is quickly unappealing to rats. Sawdust is added as a 'carbon' additive and soak when tipping the kitchen bucket, and the tripod frame allows the tumbler to be easily turned by handles with minimal effort which provides aeration through vents. There are twin chambers enabling continuous composting. Emptying is as easy as turning to empty one or both chambers through the access hatch. Though pricey at £340 for the large 270 litre size and £229 including delivery for a 125 litre version, I think a Jora is good value. It will process all that food waste previously consigned to the dustbin and transform it into good quality organic compost to grow mouth watering crops of tomatoes and salads, I now get pleasure every time I empty the kitchen caddy, my kids think it is fun, and there are no more smelly dustbins. I would now be happy to receive a fortnightly or even monthly residual waste collection, as there is so little rubbish to put out, and that's with a family of four.

The second part of the rat solution was a 'plug in' electrical device for the house that discourages vermin. It emits an ultrasonic pitch throughout the house electrical wiring and within the room or floor in which it is plugged – and it really works. At £25, it's been worth every penny, as we are no longer troubled by rat or mice prowling and have no need for nasty poisons.

The real cost of dealing with food waste should be seen in the context of the £10m spent so far in Devon on two in vessel composting plants and the collection infrastructure, and the £35m proposed for the new Exeter Energy from Waste Plant in order to meet the Landfill Directive, and other multi-million £ Mechanical Biological Treatment plants proposed elsewhere.

See www.smartsoil.co.uk for details on the Jora composters.

Richard Gomme

Home composters used in the UK are diverting an average of 145 kilogrammes of waste each year for every household using them, according to Defra.

The Department said this week (06 02 07) that new home composting bins being given out under a national scheme are diverting an average of 220kg per household each year, while existing home composting units have been found to be diverting around 60kg per household each year.

They suggest the total annual diversion from the national home composting scheme run by WRAP to be in the order of 170,000 tonnes of organic waste.

The full assessment of the project will be published at the end of WRAP's current business plan period in April 2008, local environment quality minister Ben Bradshaw said.

He explained that the WRAP scheme had seen 1.167 million home composting bins handed out to households up to December 31, 2006, including 624,000 bins in the calendar year 2006. Of these, he said 98.9% had been delivered within 28 days of householders requesting them.

Diversion

Revealing the performance figures, Mr Bradshaw said: "Research conducted by WRAP has demonstrated that the average diversion of biodegradable municipal waste from landfill attributable to each bin is 220 kilograms per household per year for new composters and 60 kilograms per year for existing composters.

"With the average mix of new to existing composters experienced by the programme so far, the average diversion per bin is currently estimated as 145 kilograms per household. This suggests that the total annual diversion capacity from the programme is of the order of 170,000 tonnes," the minister explained.

WRAP – the Waste and Resources Action Programme – has been developing a model that would help local authorities to calculate how home composting could count fully towards their government landfill diversion targets.

This model is expected to be issued for full consultation soon.

Composters and other systems

How do the finances stack up??

Of course WRAP are only talking about 'Dalek' bins here with limited capacity and NOT suitable for food waste. We need simple solutions for all compostable waste. Dalek bins with bases would be a start! No food in dustbins means an end to foxes, dogs and rats ripping into black plastic bags left out. Being able to home compost rather than a council collect means you don't have waste hanging around for up to two weeks with all the associated odour and fly problems. The problem is that the best composting systems are more expensive and the gap between a £12 Dalek and a £342 Jora is not easily bridged.

Other systems for food waste abound. The 'Green Cone' food digester is heavily subsidised by some councils in Devon. <http://www.greencone.com/>

You can buy un insulated tumblers cheaper than the Jora (not as effective though, especially in the winter)

Daleks with bases are available from South West Water: see— <http://www.sww2u.com/>

Food fermentation using the Bokashi system www.livingsoil.co.uk and West Country Worms.

Wormeries are sealed containers—but small domestic wormeries will not process much material at a time, plus most wormery instructions tell you not to put fish, meat etc in the wormery (it's really best to hot compost or ferment this stuff first).

www.westcountryworms.co.uk

Other solutions involve larger 'continuous throughput wormeries (I'm working on it!)

And larger ratproof bins at least a cubic metre in size which allows for natural insulation and a simpler composting method. I.e just chuck it all on, keeping a good mix of 'green's' and 'browns' as you go, of course. I'm working on these bins too and by the next JUNK Mail should be trialling the prototypes.

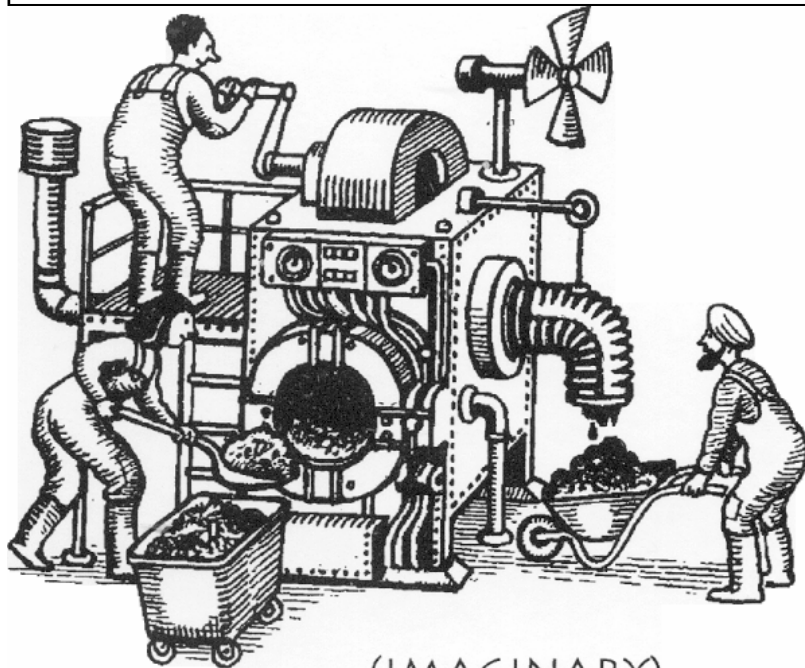
Nicky Scott

Devon Community Composting Network has started trialling the Jora 270 in schools and other establishments and have written a guide to using a Jora—useful for all in vessel composting systems and people wanting to tackle composting food waste. E-mail copies available from—nicky.scott@devon.gov.uk

The other in-vessel—or rat proof systems mentioned above are also being trialled in schools and some small businesses in Devon alongside some commercially available systems.

For more info please contact me, Nicky Scott, see above or page 2 for contact details.

New Technologies



(IMAGINARY)

What's happening with new technologies for waste treatment and why.

As previously outlined in JM, the South West will see lots of large waste treatment facilities being developed over the next few years. All Local Authorities must meet challenging targets to reduce the amount of municipal biodegradable waste going to landfill under the EU Landfill Directive. Targets are set by Government under a scheme called LATS (Landfill Allowance Trading Scheme). This means that Authorities can either commission treatment capacity to divert waste from landfill or purchase surplus credits generated by other Authorities who exceed their targets, or risk financial penalties.

Many Authorities believe the targets cannot be met by increased recycling and waste reduction or reliance on purchasing credits, so that large technologies must be invested in now to provide a solution. Government has not provided Local Authorities with necessary powers, drivers or resources to reduce waste or increase recycling to higher levels, so many LA's are acting sooner rather than later. Their position can be described as seeking to reduce and manage risk so that they avoid paying penalties and reach targets at minimum cost, whilst taking into consideration various other factors.

This has led to various different approaches being taken across the UK and the South West, usually involving either incineration with energy from waste, gasification and pyrolysis, or mechanical biological

treatment. There are pros and cons with each approach. Some are emerging technologies with little track record in the UK, but widely used elsewhere.

We outline below 3 different approaches being taken by 3 different Authorities in the region.

The reasons for the different approaches are likely to be a mix of local situation and context, preference, politics, relation to existing arrangements, and perceived risk management.

Devon:

Proposed new Exeter Incinerator:

The Executive Committee of Devon County Council has ap-

proved proposals for a 60,000 tonne per annum incinerator with energy from waste combined heat and power facilities. The decision was approved on November 28th 2006. An Environmental Impact Assessment will be undertaken early 2007, with a planning application due in spring 2007. The Planning Application will be submitted by Viridor, who will manage the facility for DCC.

Further information can be obtained from Devon County Council at www.devon.gov.uk, or from Exeter Friends of the Earth

<http://www.eclipse.co.uk/exeter/burner/index.htm>.

The technology is provided by Groupe Tiru www.groupe-tiru.com owned by EDF energy. A similar plant is in operation in Grimsby.

November also saw the opening of Devon's second in vessel composting facility, located at Broadpath, Uffculme. It will take 8,000 tonnes of mixed kitchen, garden and cardboard collections from 30,000 homes in Mid Devon. Mid Devons recycling rate has increased to 45% as a result.

Devon's Energy from Waste plant proposes to use proven mass burn principles utilising an oscillating kiln in which waste is burnt with air. Heat is captured to generate electricity and heat, and emissions must be within strict limits, being 'controlled' and 'cleaned' through processes. All the carbon contained in the waste is released during combustion. Gate fees will be about £100 per tonne.

Bristol's Compact Power gasification and pyrolysis

proposed plant will cost £20m, and process up to 34,000 tonnes of waste per annum. This process was initially favoured by DCC but was rejected on the grounds that the technology is unproven with domestic waste and funding could not be secured through DEFRA's new technology demonstrator programme.

Pyrolysis – waste is heated to 800c in the absence of oxygen. Hydrocarbons are converted to simple gases leaving a residue of carbon char, inert materials and heavy metals.

Gasification – carbon residues are totally reacted out with air and steam to produce hydrogen and carbon monoxide. Oxidation – gases are reacted at 1250c to destroy organic pollutants and particulates. Energy recovery – exhaust gases pass through a steam boiler. Steam is then available for power generation. Power generated counts towards renewable energy obligations.

The plant will produce up to 3.8mw of energy and 15mw of heat.

Meanwhile Somerset is moving forward with plans to treat 55,000 tonnes per annum of residual waste using MBT (Mechanical Biological Treatment),

also in partnership with Viridor, at its Bridgwater landfill site.

Mechanical Biological Treatment aims to mechanically extract metals and recyclables from waste before it is put into chambers for anaerobic digestion. Gas is given off which can be burnt to generate power. Once the digestion process has stabilised the material can be further treated to recover a soil conditioner or a refuse derived fuel or be sent to landfill as an inert material. RDF can be used in cement kilns. Viridor believe that around 25,000 tonnes out of 55,000 tonne input can be turned into soil conditioner and used for land restoration. MBT facilities use more land but its carbon emissions are lower.

Wiltshire have also announced that they are planning a £15m MBT facility.

Somerset are collecting source separated food waste on a weekly basis alongside dry recyclables, whereas Devon are collecting combined kitchen, garden waste and cardboard on a fortnightly basis.

Richard Gomme

PLASTIC FANTASTIC

2005 will surely go down as the year when India's major cities came to their knees, thanks to the monsoons. Plastic-choked sewers were acting as tributaries rather than drains and governments are making half-hearted efforts to ban plastic bags.

Alka Zadgaonkar has been putting this disposer's bane to some good use. Like most discoveries, it was chance that made her realise she was on to something. In December of 1997, the plastic waste she was processing in her college lab broke down into a brown, translucent liquid - a very raw, unrefined liquid that had fleeting properties of petroleum.

In scientific terms, breaking down chemical components is called depolymerisation.

So, did no one else think of this before? They did, but Zadgaonkar has devised a depolymerisation method that's least expensive and doesn't require any separation of plastic. Besides, the process yields zero residues.

The liquid she had derived, though pretty much close to petroleum, wasn't quite fit to actually power equipment smoothly. From then on, she worked on the depolymerisation process under various scales of pressure and temperature with alternate conversion periods. With support from husband, Dr Umesh Zadgaonkar, she's devised petrol, diesel and even Liquefied Petroleum Gas (LPG) out of distilling hydrocarbons derived from plastic.

Several tests by private and government agencies has proved that the fuel has a very low content of sulphur, a lower reaction temperature and better combustibility than conventional petrol and diesel. Nevertheless, that still doesn't detract from the numerous gains to be benefited from. Firstly, this process is the best way to get rid of all the unnecessary plastic waste that our civilisation generates. Secondly, it holds a whole plethora of possibilities and opportunities. Ask R Subba Rao, head of department of polymers, Amrita School of Engineering, Coimbatore. "It will straightaway mean saving in our crude import bills. And compared to all other depolymerisation processes, theirs is the least expensive." And consider this - this process can yield everything from LPG and kerosene, right up to petrol and diesel.

*See: this website for the full story
www.goodnewsindia.com/index.php/Magazine/story/alkaZ/*

Of course lots of more issues to debate here! I was in India recently and actually saw a cow which was in the process of swallowing the plastic parcel tape on a cardboard box, I managed to pull the tape out of the cow's mouth. Plastic accumulates in their stomach until they die. So making the plastic worth collecting by rag pickers means it will not be such an environmental problem See Junk Mail summer 2005 for full article.

Nicky Scott



books



Energy—Use less—save more
100 energy-saving tips for the home
Jon Clift and Amanda Cuthbert
Published by Green Books at £4.95

It does what it says on the cover! With all the doom and gloom about Global warming it may be tempting to stick your head in the sand. How much better to be positive and take the situation into our own hands. It is now official, virtually all scientists and politicians agree that global warming is caused by man's activities, therefore by changing our ways we can, and must, reduce our excessive squandering of energy. We must at least halve it. It is possible to reduce consumption and wastage by much more than this (for more on this see 'Factor Four—Doubling wealth and halving resource use' by Lovins, Lovins and Weizacker—Earthscan books) In fact the Factor Four book also talks about the 'Factor 10' club. (see www.factor10-institute.org) because far greater resource savings are available but have largely been suppressed by governments and multinationals.

Take for instance the electric car which was developed by General Motors because of legislation introduced in California to force car companies to make non polluting cars available. The car they developed was not sold, but leased, and proved hugely popular and was a high performance vehicle. However General Motors lobbied aggressively to overturn the legislation and was ultimately successful, recalled its cars and had them all shredded. (if you want to find out more you can buy or rent the film 'Who killed the electric car, <http://www.sonyclassics.com/whokilledtheelectriccar/> - or look on Amazon.co.uk)

This is just one example that highlights how we could already be leading greener lives if it wasn't for the industry's insatiable demand for fossil fuel.

But the message of the Green Books guide is simple, there's lots of things we can all be doing which, if we all did them would save enormous amounts of energy being needlessly consumed.

If you want to get a grant to fit solar hot water systems you must have every light bulb in your

house energy efficient, (and you turn them off when you don't need them, even if you are only leaving the room for a couple of minutes). Secondly we should all have 270 mm of insulation in our roof space. You probably remember when it used to be four or six inches—well now it's more like ten inches and if you have cavity walls, you must have them insulated if you want that grant and have thermostats on every radiator or in every room.

Our homes produce more CO2 emissions than our cars.

This book is a must read for everyone and although much of the information might seem glaringly obvious to anyone even faintly green, the idea is to point out how simple it is to save energy just by being more thoughtful.

For instance if 'standby' switches were not fitted to electrical items or at least NOT USED we could save the output of two electricity generating stations. TWO generating stations consuming massive amounts of fossil fuels to keep that TV winking away ready at a moments notice to spring into life—instead of two moments! Insane!

Now that "it is official, climate change is happening because of us folks," we need to make some lifestyle changes. I always think of what this Country achieved under the duress of the second world war when we had to be incredibly thrifty and resourceful. I believe we must wage war on climate change and just stop being so incredibly wasteful. We should all of us support the Government targets to cut greenhouse gas emissions, and, at the same time tell the Government to go much much further. The targets have to be made even more stringent and we have to do absolutely everything we can to make a difference. This book will start you off in the right direction, buy it read it, give it to someone else.

Nicky Scott

Will the last person to leave the planet please switch off the lights



books

'Heart' by George Monbiot.

RRP £17.99

Readers may have seen Monbiot's columns in the Guardian. This book presents all his ideas for tackling climate change, and is a stimulating, thought provoking and excellent read. He starts by underlining that the science is demanding a 90% reduction in carbon emissions by 2030, not the 60% cut by 2050 that the Government is putting forward. If by 2030, CO2 concentrations in the atmosphere remain as high as they are today, the likely result is a 2 deg. c rise in temperature. Two degrees warming is the point beyond which certain major ecosystems, such as the tundra or the Amazon begin irreversible collapse, releasing even more CO2 and methane. Things are then out of our control. So we are in for a much bigger shock to reduce our emissions, but Monbiot still thinks it is feasible to achieve the 90% cut by 2030. Much of the technology and capability is there, the ideas are there, it is economically feasible, but what remains to be seen is if the political will and acceptance for change is there.

One chapter outlines how it has been all too easy for vested interests to create scepticism and inertia by disputing the science, but it now seems that most people can no longer deny the evidence and what they see with their own eyes.

Another chapter looks at our leaky homes, and the urgency of creating super insulated low energy housing. Germany is already set to renew or bring up to standard 5% of its housing stock per year to address the problem within 20 years. But alas not the UK. Another section looks at the issues behind constant electricity supply, varying demand, how the national grid functions, and what it might mean if we can shift to local production and supply of energy, rather than generating it centrally and 'delivering' it over great distances. Over 70% of the energy used to produce electricity is lost before it reaches peoples homes, either in waste heat or dissipation.

Another chapter assesses how much renewable energy can realistically be supplied and by what means, and explodes some myths about bio-fuels and bio-diesels – the land take and energy to produce them in sufficient quantities does not stack up.

He also assesses big fix proposals such as pumping CO2 underground.

His discussion of transport demands and solutions is interesting, including a new generation of rapid coach travel with 'express coach lanes' while motorists sit in traffic jams.

Monbiot finally cuts no ice with criticism of 'carbon offsetting', arguing that we cannot buy our way out of trouble, there is no substitute to reducing emissions, and we in the developed world are the main emitters. China's smoke stacks are smoking to make cheap products for us. It's time to take responsibility.

The Rough Guide to Climate Change

by Robert Henson. 341 pages. RRP £9.99

This book explains a bit more of the scientific overview, technical points and political debate than Monbiot's book, but perhaps has less detail on radical solutions required and is more general in its approach. It is a good book to dip into following the rough guide format.

In a nutshell this guide sets out the symptoms, the science, the debates and the issues as well as looking at some of the possible solutions. It has an index, links to various websites, and thumbnail reviews of related books. Another cracking good read Gromit.



How lucky we are

If we could shrink the earth's population to a village of precisely 100 people, with all the existing human ratios remaining the same, it would look something like the following: There would be:

57 Asians
21 Europeans
14 from the Western Hemisphere, both north and south
8 Africans
52 would be female
48 would be male
70 would be non-white
30 would be white
70 would be non-Christian
30 would be Christian
89 would be heterosexual
11 would be homosexual
6 people would possess 59% of the entire world's wealth and all 6 would be from the United States.

80 would live in substandard housing
70 would be unable to read
50 would suffer from malnutrition
1 would be near death; 1 would be near birth
1 (yes, only 1) would have a college education
1 would own a computer

When one considers our world from such a compressed perspective, the need for acceptance, understanding and education becomes glaringly apparent.

The following is also something to ponder...
If you woke up this morning with more health than illness...you are more blessed than the million who will not survive this week.

If you have never experienced the danger of battle, the loneliness of imprisonment, the agony of torture, or the pangs of starvation ...you are ahead of 500 million people in the world.

If you can attend a church meeting without fear of harassment, arrest, torture, or death...you are more blessed than three billion people in the world.

If you have food in the refrigerator, clothes on your back, a roof overhead and a place to sleep...you are richer than 75% of this world.

If you have money in the bank, in your wallet, and spare change in a dish someplace ... you are among the top 8% of the world's wealthy.

If your parents are still alive and ... you are very rare, even in the United States and Canada.

If you can read this message, you just received a double blessing in that someone was thinking of you, and furthermore, you are more blessed than over two million people in the world who cannot read at all.

