

UK waste – this mess wants sorting!

UK needs to come clean and close its waste awareness gap *fast*

For a government with a passion for bettering its citizens' education, advocating lifelong learning, the Labour Government itself has failed at keeping up with developments and at grasping the most important lesson of current time: the importance of sustainable management and in particular, waste management. Promoting the three Rs was *the* measure to secure the future of Britain. Now it looks like the government has put all their eggs in the wrong basket, having largely ignored the three Rs that really matter: reduce, reuse, recycle. Its now noticeable ignorance of tried-and-tested waste management systems implemented by most of its EU counterparts is a case in point and may ultimately cost Britain its reputation as a leading economic and political force. More alarmingly, it does nothing to safeguard our children's future and living environment.

Barely a week into the New Year Britain learned that it had been branded the "dustbin of Europe". Embarrassing figures confirmed Britain as Europe's leader in dumping: 27 million tonnes of rubbish, 7 million more than any other European nation and double that of Germany who has 25% more people to produce waste.

So, why are we down in the dumps and lagging behind in such alarming proportions? Is it due to a lack of information and education or the lack of political will?

The answer is a bit of the former and a great deal of the latter!

Political Rhetoric and Hypocrisy

When Britain presided over the G8 some 18 months ago, Tony Blair made great promises and pledged to focus on the challenges of Africa (*i.e. Make Poverty History*) and climate change during his presidency. In an article published in the Observer around the same time he stated that he believed international politics suffered from "...a reluctance to face up to reality and the practical action needed to tackle problems." He went on proclaiming: "Again it is the world's richer, industrialised countries - the G8 - that have to take the lead." Now in 2007 he is again seeking to ratify a new worldwide climate treaty based on *binding targets* to reduce emissions. And he insists that everybody, in particular the emerging industrial giants in the developing world, namely India and China, comply fully and pull at the same string.

But how can the UK claim to take 'the lead' on a global solution, when the Government isn't even capable of cleaning up its own backyard, as it is blatantly unwilling to even stick to European regulations, in this case the EU directive on waste disposal and on packaging and packaging waste. This directive, in all other EU countries operated under the so-called Green Dot Programme, endeavours to prevent waste generation and to promote reuse and recycling in order to save primary resources and lower emissions. The UK implementation of the scheme has been well and truly bungled. Bearing in mind that methane gas from landfill

has 20 times the global warming impact of CO₂ – it is clear why being bottom of the league and operating a maverick interpretation of the EU directive is a downright environmental and socioeconomic disaster. It is simply a wasted opportunity, when an immense contribution to tackling climate change – the ‘most pressing problem facing mankind’ today – could be easily realised.

Green Dot System and Recycling in Europe Explained

While we are waiting for US scientists to realise their latest outlandish solution that intends to reflect the sun’s rays back into orbit, a kind of large global sun-block, we should utilise the tools at hand today that we know do work.



Green Dot is one such tool.

The Green Dot programme aims at reducing packaging waste at source and to maximise the recovery of used packaging, eliminate harmful materials and encourage the recycling of the recovered waste into new products and packaging. The Green Dot can be found on the majority of packaging in Europe, including products on the UK market. The logo itself is not necessarily green, but can be any colour. It is the most widely used trademark in the world and on the continent the trademark symbol is well-known and understood by consumers, while in the UK people either haven’t noticed it at all on packaging, or interpret it as a recycling symbol that represents that this packaging is recyclable or is made of recycled material. Neither interpretation is in fact, correct and this is largely due to a) a very low waste awareness in the UK, with many consumers being confused by the vast range of environmental symbols on packaging materials and b) the gratuitous use of recycling logos on UK packaging types that have no actual recycling stream.



Common symbols on packaging:

1. Made from recycled material;
2. 100% recyclable aluminium;
3. Dispose of responsibly;
4. Recyclable;
5. "Green Dot" – recycling paid for by producer in some EU countries (not UK);
6. Recyclable steel;
7. One of seven types of recyclable plastic;
8. Please place in a recycling bank;
9. "Recycle Now" campaign symbol

The Green Dot is in actual fact a ‘financing symbol’, i.e. recovery and recycling of the packaging has been paid for by the producer in – and here comes the crux of the matter – some EU countries, but not the UK, who are not users but only ‘cooperation partners’ in the scheme.

European countries are able to apply the Green Dot approach to finance their packaging waste collection systems and reprocessing industries. Each country's implementation of the system varies according to their 'interpretation' of the Packaging Waste Directive and so do their payable licence fees. Unfortunately, the EU Directive left room for interpretation and the UK government appears to have used this 'room to manoeuvre' to adopt a much watered-down approach, which may explain why the UK sends such huge volumes of waste to landfill. To better understand the differences a detailed investigation of the Green Dot scheme is necessary.

Green Dot is currently the standard take-back programme in 21 European countries and Canada and is based on the 'producer/polluter pays' principle. It denotes that for packaging bearing this symbol a financial contribution has been made by the producer to a packaging recovery organisation, a so-called compliance scheme. It originated in Germany in 1991 to finance the Duale System Deutschland (DSD), a not for profit packaging recovery organisation (in Austria, another country with an impressive recycling performance, the comparable organisation is ARA). Under German packaging regulations suppliers are under obligation to take back and recycle up to 70% of their packaging and submit audited documents to prove it. (In fact, every EU member and each one of our local councils must nowadays meet EU recycling targets). The Green Dot can be applied to the packaging when the licence fee has been paid, which in Germany and other countries using the scheme is calculated according to the volume, material type and weight of the packaging. Householders are provided with two bins for their waste, one for normal waste and one, usually yellow bin, for products bearing the Green Dot symbol. DSD arranges for the collection of the yellow bin and arranges contracts with reprocessing companies to reprocess the recovered waste. Even public areas such as railway stations, airports or shopping precincts, have multi-whole rubbish bins that encourage the public to separate waste. Contamination between the various material types is not a problem, as the recovered waste is being sorted again after collection.



Waste bin at a German train station © Martina Heintke

Germany's waste recovery rate doubled from 37.3% in 1991 to 76.7% in 2000 and regularly surpasses government-set recycling targets. The dramatic results and success of the system are manifold: Firstly, it is a system that is easy for householders to use. Secondly, it provides clear incentives for manufacturers to reduce their amount of packaging or develop lighter or better recyclable materials, as they are financially rewarded by paying fewer fees resulting in cost savings and ultimately higher profits. Thirdly, local authorities in Germany do not fund packaging waste collections as the costs are borne by producers, so the system has no bearing on the amount of householders' council tax. As always, it is the householder or end-consumer that pays when purchasing products. To put the cost to the consumer into perspective: it only equates to 0.01 of a euro (or £ 0.0067) when buying a packet of whipped cream for example. However, this is no 'extra' financial burden to end-consumers, because with or without EU directive, waste recovery or recycling, everyone would still need to find ways and financing of disposing of household rubbish anyhow!

The more comprehensively the system is being applied the lower the costs for all involved in the recycling loop – and by the same token the higher the profits. The system is, like any other, open to exploitation. Some companies benefit without paying. One scenario is the use of the logo without paying fees; another is that of packaging material not bearing the Green Dot and entering the recycling stream and being recycled for free. These so-called 'free riders' act against the Producer Responsibility Obligation and cause the licence fee to be higher than it should be. Stringent checks are being made and fines for free riders range around £30,000. Countries operating the more sophisticated Green Dot approaches are rewarded with greater success in waste prevention and management. Green Dot is responsible for Germany's recycling rates ranging between 60% and 70% for many materials and provides clear incentives to industry to reduce their packaging volume, use recycled materials or introduce re-usable alternatives, for example in form of deposit-refund schemes for beverages (think bottles). 91% of Germans separate their waste and the majority see waste separation as their own personal contribution to environmental protection. From this summer Germany is putting a ban on sending household waste to landfill. In Belgium disposal in landfill fell from 46.3% in 1995 to 6.8% in 2003 while recycling rose from 28.1 to 80.3%.

Recycling and Green Dot in the UK

So while the Green Dot financing model guarantees packaging recycling and has significantly changed the waste market in Europe, the UK has fallen behind since first introducing its interpretation of the directive in 1997, which gives preference to the much easier (since more homogenous) and cleaner recovery of commercial and industrial waste. Authorities and compliance companies largely ignore the post-consumer waste stream as it is logistically more difficult, but it is paradoxically also the point where most of the rubbish ends up! To compound this madness, most products on British retail shelves these days also carry the Green Dot symbol and one could be forgiven for believing that everything was sorted. Unfortunately, this is not the case as very little household waste indeed is separated and collected.

In contrast to other EU countries the UK Government put in place a highly complex and controversial shared-cost system as the Government was trying to get the backing of as many industry sectors as possible. Bowing to industrial pressure groups the scheme's main maxim was and is to achieve EU targets at the lowest possible cost to industry. Evidently this has hampered its performance, yielding limited environmental protection and value to society as a whole. It is a case of 'you get what you pay for' – in this case very little.

So what does the Green Dot logo on products sold in the UK stand for?

Unfortunately, very little indeed. The use of the trademark is licensed in the UK but signing up for it is voluntary. However, the symbol is widely used for at least two reasons: Firstly, non-country specific packaging is produced in one production run for a transnational market, i.e. it ends up on many different national markets that may or may not operate the Green Dot system. Secondly, companies may wish to print the symbol on their packaging as it may have advantages from a marketing perspective in that it implies the company acts responsibly paying due attention to environmental concerns. In either case companies take out a trademark licensing contract with the Green Dot Licensing Company, a subsidiary of VALPAK, one of UK's largest compliance companies. All it costs is an annual flat licence fee of between £100 and £500 pounds per annum per product and bingo, the Green Dot is legal. So far, not a single penny has been contributed towards the collection or recycling of said packaging. Valpak explains why joining the scheme makes sense for a UK producer on its website: [The licence fee is used] "not as a financing symbol in the UK [but] is ensuring the *integrity of the trademark* and that it is not used in a *misleading fashion or in derogation of its meaning* in any way". Under Consumer Protection the site states: "Licensing the Green Dot trademark protects the consumer from misrepresentations of its meaning. ... [The trademark] will not be used to 'deceive' the consumer. And according to Valpak this also "offers protection from future legislative changes in the UK (for example if the UK *were* to implement a similar interpretation of the packaging and packaging waste directive as its European counterparts)." So there you have it – we have to protect the integrity of a trademark, but not the environment! Smell a rat?

But the plot thickens further:

Under UK packaging regulations smaller businesses are exempt from their producer responsibility obligation. Producers only qualify as 'obligated companies' if they exceed the following thresholds: packaging handling must exceed 50 tonnes per year and the annual turnover must exceed £2 million. This ruling alone leaves an awful lot of packaging waste every year which still somehow needs to be handled and financed. It also totally negates the producer responsibility scheme's objective, which is to ensure that all costs of recovery and recycling are covered by the producer or polluter. It results in taxpayers picking up at least part of the bill to finance municipal collection, as local authorities are responsible for the recovery of waste from households.

Loopholes and Free Riders

Ironically, an identical product sold on let's say, the German market, means the producer would have paid for its recycling under the Green Dot Packaging Waste

Collection System there. **By contrast, the UK interpretation of the EU directive encourages free-riders and denies its citizens the chance to recycle.**

To illustrate this point lets take a look at the UK's love-affair with crisps and other associated snacks, which creates enormous packaging volumes due to convenient, snack-sized portion packaging. 16 billion Hula Hoops are eaten every year in the UK which would stretch 4 times around the globe if linked up. One can safely conclude that the packaging will stretch around the globe, well, maybe just once, but represents a sizeable rubbish heap. Hula Hoop bags display a lot of nutritional information, but none whatsoever on recycling, except for the symbol to 'bin your bag', presumably to 'keep Britain tidy'. Walkers' crisps, the nation's favourite, on the other hand puts 5.2 billion bags on the UK market each year, all bearing the Green Dot symbol. Walkers' Leicester plant alone produces "10 million bags 360 days a year" and yet Walkers', now owned by PepsiCo with headquarters in Switzerland (not an EU member), came under criticism last year for misleading its customers regarding the recycling of its packaging and for not contributing towards their packaging producer responsibility in the UK. Walkers exploited the legal loophole in the packaging regulation which allows companies whose 'master franchise' is abroad – even if the production takes place in this country – to get away with, well a free-ride, basically. The mind boggles, because surely, this amount of bags and turnover would exceed the aforementioned thresholds to make Walkers' an 'obligated' company irrespective of the Green Dot! The point is, by looking at packaging nobody is able to tell whether it can be recycled or not, nor whether recycling has been paid for – and even if one could tell, there's still no system in place to collect the said packaging from consumers.



Walkers lets its customers know that the packet is recyclable. If only facilities existed...

It's crunch time – and not just for snack manufacturers, as the problem extends to all products across the board with too many loopholes in the legal system to be exploited! The UK's Packaging Recovery Note or PRN system, whereby 'obligated' companies (see aforementioned thresholds) demonstrate that they have met their recovery and recycling targets, whether they perform this task themselves or through a compliance scheme, has been highly controversial and clearly lacks the sophistication and reliability of the Green Dot programme. The government's hands-off approach during the early years of the directive coupled with its decision to allow anybody to run a compliance scheme has led to over 20 compliance

scheme operators competing for business. While this has kept costs for industry down, it has produced a weight-oriented system with compliance operators and local authorities favouring heavy waste streams such as newspapers, magazines and glass as recovery targets are reached much faster.

Time for Change

The lack of a coherent national strategy and overarching legislation means there are huge regional variations in recycling efforts and success rates. In recent years local authorities have undoubtedly made vast improvements and public awareness is increasing. However, the picture is fragmented and the process of change is slow given the urgency of the problem of climate change. Nonetheless, good practice does exist with some councils successfully collecting 7 or more different materials in household collections – occasionally these even include kitchen and garden waste.

The majority of the British public is keen to recycle and people are generally positive about the improvements seen in recent years. In the absence of doorstep collection many take their paper, glass and bottles to bring banks when shopping at their local supermarkets. And yet, despite this increase in recycling activity, too much still ends up as residual waste that could be reprocessed and brought back into the cycle as a new resource.

Visualising one's personal rubbish heap

The material that is recovered and recycled by far the least in the UK is plastic. It is more labour-intensive as it comes in many different types that are incompatible with each other when it comes to recycling and therefore needs to be sorted first. However, made almost entirely from oil, plastic "...takes hundreds of years to degrade in landfill or produces toxic smoke from incinerators." What's more, it can be reprocessed and used again to make recycling bins, for example.

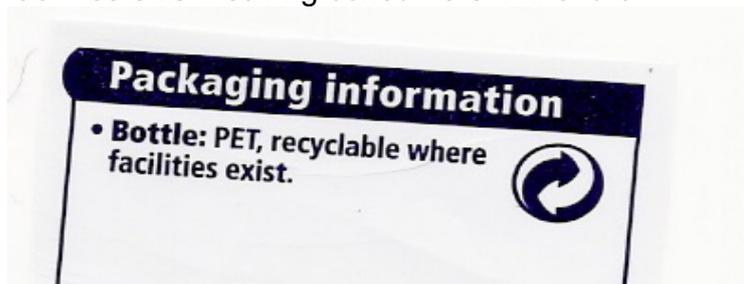
The problem with all this talk about waste, recycling and climate change is that it remains an abstract problem far removed from our everyday lives. This is because the ice melts thousand of miles away at the poles and our rubbish disappears from sight with weekly regularity. A sort of: 'out of sight, out of mind' scenario. In order to really grasp the scale of the problem, it is necessary to perform a reality check by visualising it. Take a plastic bottle of Heinz Ketchup for instance. It is made of strong stuff, hard to mark and almost impossible to damage with one's bare hands alone. Decomposing is likely to take a great deal longer than that of a human body. The same goes for many other plastic containers. Attempt not throwing any packaging in your rubbish bin for a week and watch the plastic mountain grow: pizza bases, mushroom and other vegetable boxes, wrappings, lids, blister packaging (can frequently only be opened with a sharp instrument), food trays, yoghurt pots, gift boxes, margarine and ice-cream tubs – the list goes on ad infinitum. Now imagine doing this exercise for a whole year and very quickly you would have to sacrifice a room for your waste. Companies' sales figures for an individual product can also provide a good indication of volume and illustrate the sheer amount of waste. A family of three having a healthy bio-yoghurt drink every day for one week creates an army of little bottles. A scary picture, no doubt.



Living cultures – dead waste. © Martina Heintke

If facilities exist ...

Packaging frequently bears recycling logos with the reference “recyclable where facilities exist” leaving consumers in the lurch.



The lack of facilities, however, is a wasted opportunity, as the example of carton recycling exemplifies. With just one dedicated carton recycling plant at the Smith Anderson paper mill in Fife, Scotland, for the whole of the UK, it is little surprise that carton recycling – that’s all our juice drinks plus milk sold in cartons – manages a meagre 1% recycling rate. Compare that with a whopping 97% in Luxembourg and it becomes truly shameful. The Scottish plant could process 1/5 of all UK carton waste; it follows that Britain needs 4 more reprocessing plants – strategically placed around the country to minimise transport costs and emissions. According to Tetra Pak’s website the challenge is “... to promote post-consumer carton collection schemes with local authorities and community recycling networks.”

The Green Dot scheme as operated in many other European countries eliminates this challenge and takes care of recycling in more ways than one:

1. What can and cannot be recycled is clear-cut: the Green Dot signals to consumers to put this packaging/product in their yellow bins for collection.
2. As licence fees are calculated based on the amount of material (tonnage) placed on the market under the polluter pays principle, producers have a clear incentive to prevent waste by way of designing more efficient packaging and products which are lighter, smaller and better recyclable.
3. The prevention of waste means a conservation of valuable resources.

4. As a result of recovery and recycling large amounts of primary energy is saved and greenhouse gas emissions are cut.
5. New industry, markets and jobs are created.

However, the infrastructure in support of waste collection systems has to be in place, otherwise industry has no chance of doing viable waste reprocessing business. Compliance schemes are service organisations and somebody has to pay for this service as the output from recycling processes is not always enough to cover the costs. Hence, industry only becomes involved when there are regulations and directives to force a society to collect waste and recycle it.

Furthermore, prevention of waste generation at source is of utmost significance here. And regardless of national recycling approaches, much more could be done at international level by large transnational corporations. A case in point are mobile phones and adapters. The average person in the UK – and this figure is probably similar in other western countries – changes their mobile phone every 18 months. This makes for a huge number of new phones, which are sold without fail with a new charger. How many chargers does one person need? Not so long ago, adapters could be bought individually, which would fit several appliances. If Nokia, Motorola, Siemens and the like agreed to use the same port and plug, the battery charger would only need to be produced and sold once or on request. Flat-packed furniture for home assembly does not need to provide Allen keys and tools, most households have these anyway, the screws will do. Cereal boxes should not add unnecessary toys and internet providers should stop blanketing the nation with CDs in their mail shots. Marketing practices, such as mail shots and special promotions, have a lot to answer for. These examples just highlight the necessity for a global congruence in production practices in order to combat climate change.



So many unidentifiable adapters. © M. Heintke

Intensive Care not Sticky Plaster

Climate change is not imminent – it is already here. The carrying capacity of our environment has been exceeded. It is no longer a question of whether and when to change our habits; the only issue now is how to do it. This globe is an ailing patient whose immune system has packed up. If we want this patient to go on living the treatment must be high dosage, full jolt chemotherapy not sticky plasters – offset schemes and carbon trading, particularly in isolation, are the latter. We cannot wash off our sins by paying somebody else for being good and ethical, or simply poor. The sensible thing to do right now is for rich industrialised countries to give

countries in hot climates solar panels so that people there won't need to cut down trees for fuel. Planting trees to offset the pollution from personal air travel is a good idea, but can at best be cosmetic, if we fell acres of trees or whole forests to make room for new runways and airports to accommodate low-cost flights. The rising expendable income of people from the emerging Asian economic superpowers, particularly China and India, will soon join the jet set en masse. Offsetting the extra emissions burden will be a tall order indeed. Who could possibly deny these people the pleasures that we in the West have taken for granted for decades.

Global economics must drop its maxim of growth and substitute it with sustainability, and this may have to mean freezing economic activity at its current level by improving environmental performance and impact. The material stock of the global economy, i.e. everything that is produced in the world, doesn't simply disappear into 'thin air' when disposed of. What goes in must come out – matter doesn't disappear; it only changes its form. It becomes a gas, an emission, a pollutant. Thick air that destroys the ozone layer.

Forcing the issue

If political will is lacking, we need to force the issue. It is not just a case of losing a 'few low-lying holiday islands in the sun', global warming is an all encompassing dispassionate leveller. We must ask our political leaders: "Are you with us or against us?" It is rather ludicrous when our so-called 'leaders' now call on the developing world, mainly China, to join forces and clean up their industrial act, while at the same time shipping millions of tonnes of waste to China to sort out our rubbish, in the full knowledge that these countries lack the technology to deal with the often hazardous waste. Leaders lead by setting good examples. If unanimous consent cannot be reached, then unilateral action will have to do. After all, going it alone is something both Bush and Blair have exercised with gusto before. If the US and UK can rapidly mobilise and organise the complex logistics to go to war, change jurisdiction with ease and expedience to put in place counter-terrorism measures, then it must surely be possible to enforce a relatively simple waste and packaging regulation! Weapons of mass destruction – they're right here under our noses.



Plastics are made of stronger stuff. © Martina Heintke

Important notice for the editor: references for all quotes are available.