RRF WINS #25-2010-June 18, 2010

This is the free Weekly Information News Service (WINS) which you receive as a member of the Resource Recovery Forum, I hope you find it useful. This service is a less frequent alternative to our daily Newsline service (which you can choose to receive free of charge). As a member of RRF, we can add any of your colleagues to receive either the daily or weekly service (also free of charge) - simply send us an email and we will do the rest.

We often refer you to websites where you can collect full copies of the material described. It seems that some readers have difficulty accessing the Internet with the same ease they receive emails. If you are in this position and would prefer me to send you copies directly by email, just let me know. This service is free of charge.

INDEX

01. World - in a world of abundance, food waste is a crime

What does the US have in common with countries in sub-Saharan Africa?

USA Today online reports that both America and Africa waste large, obscene amounts of food. Better knowledge and technology would reduce food waste, deter environmental damage and, especially in that region of the African continent, reduce the number of people who go hungry each day.

In sub-Saharan Africa, at least 265 million people are hungry, heightening the travesty of the food waste problem. More than a quarter of the food produced in Africa spoils before it is eaten. Farmers battle post-harvest losses caused by severe weather, disease and pests, or poor harvesting and storage techniques. Annual post-harvest losses for cereal grains, roots and tuber crops, fruits, vegetables, meat, milk and fish amount to some 100 million tons, or $48 million worth of food.

Preventive measures

To prevent these losses in Africa and elsewhere, the United Nations' Food and Agriculture Organization (FAO) is trying to provide the information and technology to begin turning this tide:

- *in Kenya, the FAO partnered with the Kenya Ministry of Agriculture to train farmers to take steps to reduce corn crop loss to mycotoxin, a devastating result of fungi growth.*
- *in Afghanistan, the FAO recently provided metallic silos to roughly 18,000 households to improve storage of cereal grains and legumes, protecting them from the weather and pests. Losses have dropped from 15-20 per cent to less than 1-2 per cent.*

Americans, of course, are blessed by an abundance of food. But that fact makes our waste all the more inexcusable.

Every day, the average American throws away about one-and-a-half pounds of food. Slightly wilted lettuce, half-eaten cheeseburgers, bruised apples end up in the trash instead of our stomachs. Better to buy and cook less food, and compost the rest. Although it doesn't sound like much, those nearly one-and-a-half pounds add up -31 million tons end in landfills or incinerators each year. That's roughly equivalent to the weight of 74 Golden Gate bridges. These dumps are not only unsightly, they produce 34 per cent of the methane in the U.S. - a greenhouse gas more than 20 times as potent as carbon dioxide.

US household waste

The waste goes well beyond households. Four to ten per cent of food purchases become waste in restaurants before ever reaching the customer.

Although, unlike sub-Saharan Africa, the United States has the technology to preserve harvested crops, too much of a harvest is left by farm equipment on the field to rot. To feed the hungry in the U.S., organizations such as the Society of St. Andrews recruit volunteers to visit farms after a harvest to glean, or pick up, the perfectly good produce left behind. In 2009, they were able to save and distribute 15.7 million pounds of produce.

Groups such as Food Runners, a non-profit in San Francisco run entirely by volunteers, deliver an estimated 10 tons of food each week to hungry people; otherwise, it would have been wasted. Taken from coffee shops, restaurants and supermarkets, this salvaged sustenance is used in shelters, soup kitchens, senior centers and other locations.

The U.S. and sub-Saharan Africa, now that they are catching up with other countries in this regard, can serve as models for the rest of the world when it comes to food waste. We can show the world how to feed its people while protecting the earth, too.

02. USA - sort & separate barcode bin makes recycling easier

Yanko Design reports on a new design for a high-tech household recycling system.

Sort and Separate Barcode Bin - ConceptRecycling. It's something we all know that we should do, but sometimes it's easy to be lazy and just chuck all our rubbish into a single bin. But what if that bin could sort our recyclables for us - separating out glass, metal, paper, and plastic for easy recycling?

Geekwithlaptop.com reports that this is the principle behind designer Woo Seok Park's Sort and Separate Barcode Bin: making recycling easier and more convenient for busy consumers.

The Barcode Bin - as demonstrated over Yanko Design- looks at first glance to be a fairly standard, somewhat futuristic set of recycling bins: each bin in the set is covered with a door marked with the type of material it accepts, with a separate container for paper, glass, plastic, and metal.

Rather than relying on you to make the judgement call and decide which bin should take the item you're holding, however, the Barcode Bin includes - as the name suggests - a barcode scanner in the top, along with a connection to an Internet-based Universal Product Code database. Simply scan the barcode and a lookup on the product is performed - which tells the bin what type of container you're holding in your hand. Armed with that information, the Barcode Bin is able to open the door to the waste hopper the item belongs in - and only that door.

Sort and Separate Barcode Bin - ExplanationIt's certainly a neat idea, and one which could take the hassle out of recycling for many - but although it solves the problem of having to sort your recycling out, it's not a perfect solution. The first issue is space: although it's only a concept design - and thus devoid of a sense of scale - the Barcode Bin appears to take up a not-inconsiderable amount of floor space. The requirement for power and an Internet connection is also going to cause placement issues in many kitchens. Finally, and most importantly, it still doesn't solve the problem of actually having to recycle the items it sorts: it's fine for those who are lucky enough to have kerbside recycling collections, but if you're too lazy to pre-sort your recyclables yourself then you're unlikely to make the trip to the bottle bank either.

03. UK - Axion targets leftover household waste recycling

Axion Consulting research suggests that pre-treatment of residual household waste before final disposal offers an effective way to get a rapid gain in recycling tonnages.

Buildingtalk.com The findings also say this can overcome the stubborn 'ceiling' levels collected from committed recyclers. Mixed plastic from leftover household waste that could be pre-treated before disposal to gain recycling tonnages, says Axion

Mixed plastic from leftover household waste that could be pre-treated before disposal to gain recycling tonnages, says Axion

According to Axion, many local authorities are augmenting their existing recycling schemes with large bulk treatment processes, such as energy from waste (EfW) and MBT plants that use the domestic black bin-bag waste as the main feedstock.

Installing a pre-treatment process to pick out the recoverable recyclables, such as mixed plastics, metals and aluminium, can capture a further significant tonnage from this waste stream that would otherwise be lost.

The UK recycling rate for plastic packaging is increasing, but approximately 80 per cent of all municipal plastic packaging still remains in the residual waste stream (commonly called black bag waste).

Residual municipal plastic packaging waste is defined as household plastic that is either not captured by or not suitable for inclusion in kerbside recycling schemes and is therefore left in the black bag waste stream.

It is this waste stream which can be targeted by the pre-treatment process prior to entering an EfW plant.

Axion Consulting provided technical support to a large international energy from waste operator to develop a segregation process for the plastics fraction from residual municipal solid waste at EfW facilities and to process this material to a grade suitable for resale.

Installing additional separation stages at the front end of the EfW facilities means the plastics fraction can first be identified and segregated prior to processing.

This would achieve greater recycling rates and maximise the capture of recyclable materials, helping to contribute to landfill diversion targets.

Axion's research for this project showed that around 37,000 tonnes of mixed plastic waste (rigid and film) arises from a typical English county each year alone - representing around 15 per cent of household residual waste.

This equates to approximately 1kg of mixed plastic waste per household per week.

In 2008, 238,768 tonnes of household derived plastic packaging waste was recycled, of which 90 per cent were plastic bottles.

The total UK plastic bottle consumption is 557,000 tonnes indicating a recycling rate of 39 per cent, but only 2 per cent of mixed plastic packaging waste is recycled.

This would indicate much of the other recoverable bottles and rigid plastics are in household bin bags.

Overall, the majority of mixed plastic waste remains in the residual stream together with approximately 60 per cent (circa 342,000 tonnes) of plastic bottle waste.

In recent years, greater volumes of collected and segregated plastics materials has focused attention on the need for more UK recycling capacity.

Further to this, the trend for more plastics collection at the kerbside alongside more widespread pre-treatment of mixed waste streams is creating continued growth in the volumes of comingled plastic wastes needing to find end markets.

Axion suggests the only way for UK based plastics processors to meet this increasing demand for more local capacity will be to build large scale plants based upon the best available technology and to concentrate upon making the highest quality of output polymers.

Axion's previous work on mixed-plastics separation processes indicate that the combined output from two adjacent waste collection authorities should be more than enough to justify investment in a dedicated plastics recycling plant.

04. Scotland - Energy from waste "offers alternative recycling option"

Scotland could generate a percentage of its electricity by converting its waste to energy, a report has suggested.

The Energy from Waste Potential in Scotland report revealed that the country could generate eight per cent of its existing electricity demand from energy to waste facilities.

Professor Jan Bebbington, vice-chair of the Sustainable Development Commission Scotland, which compiled the report, commented: "Strong performance in waste minimisation and recycling can go hand in hand with the use of energy from waste as part of an integrated strategy."

Making the move to develop energy production from waste could help Scotland to meet its government target of generating 50 per cent of its electricity demand from renewables by 2020.

The Sustainable Development Commission Scotland (SDC), on behalf of the Scottish Government, has been investigating the potential for energy from waste (EfW) to provide for electricity and heat demand in Scotland.

This work follows on from SDC's 2009 study Renewable Heat in Scotland, which provided background data to the Scottish Government's Renewable Heat Action Plan.

Renewable Heat in Scotland also drew on A Burning Issue; the SDC's earlier advice to Government on the sustainability of energy from waste. A Burning Issue concluded that EfW could be considered a part of a sustainable waste policy for Scotland, but set conditions for how it should be developed. These conditions included setting caps on the level of municipal waste that should be treated through EfW, setting minimum thermal performance standards, and doing more to support and encourage anaerobic digestion.

Renewable Heat in Scotland highlighted that currently use of renewable heat equated to 1.4% of Scotland's forecast heat demand, but that this was set to rise significantly over time. We estimated that projects then in construction would double the level of renewable heat, and that there were sufficient projects in development to take renewable heat output to 4.7% of the total. Included within this total are domestic and commercial plants that use or plan to use renewable waste sources to generate heat.

Scotland has significant medium term targets for renewable energy: 11% of all heat by 2020, and 50% of all electricity. This study analyses existing data on controlled waste streams in Scotland to assess how much energy (heat and/or electricity) might be available from waste-to-energy technologies. The findings demonstrate that energy from waste could make a contribution to these targets, though it should be noted that not all energy produced by energy from waste plants would necessarily be classified as renewable.

The SDC study shows that EfW in Scotland could contribute approximately 2.0 TWh of useful heat and 0.90 TWh of electricity per year. This is equivalent to approximately 3% of Scotland's total heat demand and total electricity demand. Waste diversion scenarios from the Scottish Government Waste Team were used to estimate proportions of all waste streams that might potentially be used to recover useful energy. Direct combustion of solid wastes (incineration) and anaerobic digestion (AD) with biogas capture are the main energy from waste (EfW) technologies considered.

This report contains outputs from the modelling (energy and capacity) and a discussion of these findings. The highest energy output could be achieved from EfW plants if all thermal output is used for heat production because overall efficiency is potentially 80% or more. The thermal-only output from waste streams identified as potentially suitable for combustion or AD would add up to around 3.5 TWh of useful heat per year, which equates to around 440 MW of thermal capacity. This is around 6% of Scotland's existing heat demand.

Without market support, most large EfW plants are likely to generate electricity as this is more valuable commodity. Typically two to three times as much fuel is used to produce a kWh of electricity than a kWh of useful heat. The 60% overall efficiency minimum recommended in the Zero Waste Plan consultation effectively ensures that all plant is CHP.

The potential CHP output from identified controlled waste streams amounts to around 2.0 TWh of useful heat and 0.90 TWh of electricity per year (245 MWth and 112 MWe capacity). This electrical output corresponds to around 7% of Scotland's current renewable electricity output; and the thermal output is two and a half times Scotland's current renewable heat output (note that energy from combustion of waste is not 100% renewable). Potential CHP output would contribute approximately 3% of Scotland's total heat demand and total electricity demand.

Copies of the SDC report Energy from Waste Potential in Scotland (0.4 MB) can be downloaded from:

http://www.scotland.gov.uk/Resource/Doc/311011/0098129.pdf

Or we can email you a copy

05. USA - Alaska business converting food grease into fuel

The Anchorage Daily News reports that Alaska Waste unveiled a new US$3 million biodiesel plant in South Anchorage Thursday. The plant is collecting waste fryer oil from 240 local restaurants, groceries, hotels and hospitals from Girdwood to Wasilla.

The plant has begun churning out its first batches of biodiesel. The fuel is being tested in the company's truck fleet, Chief operating officer Jeff Riley said the company wants to reduce air pollution and keep grease out of the landfill.

Before the company began producing biodiesel, most of the grease goo produced in area was barged to the Lower 48 states to be converted for other uses, or was tossed into local trash bins and landfills.

Will Taygan, a Peters Creek resident who owns Arctic Vegeworks, said some biodiesel home brewers were initially worried that the supply of oil in town would be drained.

But he said the company "has targeted more large-scale waste-oil producers," and home brewers still have a more than adequate supply from smaller restaurants.

The roughly 3,000-square-foot biodiesel plant is located behind the company headquarters. It was finished in April. The company last year began installing storage tanks at local commercial kitchens to store fryer oil.

Other suppliers include the Fred Meyer, Safeway and New Sagaya grocery stores, McDonald's, Carl's Jr., Walmart, the Lucky Wishbone and the Peanut Farm.

06. Australia - Queensland's Waste Strategy 2010-2020

The Queensland Department of Environment and Resource Management has released Queensland's Waste Strategy 2010-2020-Waste Avoidance and Recycling Consultation Draft for public comment.

This consultation draft outlines a new direction for waste and resource management in Queensland over the next decade. If Queensland is to effectively manage its resources and the wastes it generates, a fundamental long-term change is needed.

The reforms and actions in this draft strategy will encourage the behavioural change needed to avoid waste, recycle and responsibly dispose of any left-over waste.

This draft strategy outlines an approach for coordinating the future efforts of all stakeholders. When finalised, Queensland's waste strategy will be the primary document guiding state and local government agencies, business, the waste and resource recovery industry and the community.

It will enable focused policy and priority setting and deliver a more coordinated approach. It will provide certainty for new business investment in Queensland, and guidance and support for community and individual action. It will also provide a framework to work collaboratively with the Australian Government and other states, and establish the context for further strategic actions by local governments, business and industry.

Implementing this strategy will move Queensland towards achieving the following:

- *waste generation that does not exceed population growth * reducing the total amount of, and the environmental impacts from, littering and illegal dumping in Queensland*
- *65 per cent recovery and recycling of municipal solid waste (MSW) by 2020*
- *60 per cent recovery and recycling of commercial and industrial (C&I) waste by 2020*
- *75 per cent recovery and recycling of construction and demolition (C&D) waste by 2020*
- *15 per cent recovery and recycling of higher hazard regulated waste*
- *reducing green and organic waste to landfills without gas capture*
- *reducing the emissions from household waste to landfill by one-third*
- *strong regional collaboration and development to identify and implement local solutions to local issues*
- *industry investment and new green jobs*
- *detailed and accurate data being available for all wastes regardless of source, including construction and demolition and commercial and industrial*
- *an effective and responsive land-use planning system for waste management infrastructure and activities*
- *all businesses being aware of, and taking part in, work to avoid waste generation and improve resource efficiency*
- *accurate and timely information being available to local governments, businesses, industries and the community to help make informed waste management and resource recovery decisions*
- *Queensland Government departments and local governments supporting waste avoidance, reuse and recycling through smarter buying and green procurement opportunities. The Queensland Government will monitor performance and achievements towards the targets through three-yearly progress reports.*

View the Waste Avoidance and Recycling Consultation Draft (0.6 MB) at Queensland state's website at:

http://www.derm.qld.gov.au/environmental_management/waste/strategy/pdf/waste-consultation-draft.pdf

Or we can email you a copy.

The Department of Environment and Resource Management has developed a companion document to the strategy, providing further details on the proposed industry waste levy model. Copies of Queensland's Waste Strategy 2010-2020 Proposed Industry Waste Levy Consultation Draft (0.5 MB) at:

http://www.derm.qld.gov.au/environmental_management/waste/strategy/pdf/industry-waste-levy-con-draft.pdf

Or we can email you a copy.

07. Wales - consultation on draft municipal waste plan

The Welsh Assembly Government (WAG) is seeking views (deadline September 13) on Part 1 of the Municipal Sector Plan and the accompanying Sustainability Appraisal. This sector plan covers municipal waste collected by local authorities - from households, and from some businesses and public bodies. This plan supports 'Towards Zero Waste', our overarching waste strategy for Wales.

The Municipal Sector Plan proposes how this sector can contribute to meeting the outcomes and milestones set in Towards Zero Waste.

To build a sustainable future, the following milestones have been set:

- *2025 - Towards Zero Waste By 2025, there will be a significant reduction in waste, and Wales will manage any waste that is produced in a way that makes the most of our valuable resources. This means maximising recycling and minimising the amount of residual waste produced, and achieving as close to zero landfill as possible. This is an intermediate step on the way to the 2050 target of achieving zero waste and 'living within Wales' environmental limits'. This is needed because reducing the impact of waste in Wales to 'One Wales: One Planet' levels will require big changes in the way that products and services are designed, and the actions that consumers and businesses take.*
- *2050 - Achieving zero waste By 2050, we will have reduced the impact of waste in Wales to within the country's environmental limits. Residual waste will have been eliminated and any waste that is produced will all be recycled. This means that the ecological footprint of waste in Wales will be at One Wales: One Planet levels.*
- *Stakeholders - All stakeholders will need to take responsibility and play a key role in taking forward the Municipal Sector plan to achieve the outcomes and key milestones. The stakeholders include householders, Local Authorities, third sector organisations and businesses, other organisations and the Government*

The approach being followed for Part 1 of the Municipal Sector Plan is to take forward the following four key areas:

- *waste prevention - to reinforce the important role of local authorities engaging with householders and communities to reduce the amount of waste put out for collection. This will help WAG to meet environmental outcomes, increase opportunities for enhancing social wellbeing through waste reuse and reduce the costs of waste collection and management.*
- *preparing for reuse - to ensure that more waste collected by local authorities is "prepared for reuse". This will help meet environmental outcomes and increase opportunities for enhancing social wellbeing.*
- *recycling collection service delivery improvements - to deliver sustainable development outcomes in a cost effective way.*
- *sustainable treatment and disposal - to deliver sustainable treatment and disposal of municipal waste in a cost effective way.*
- *a series of actions are proposed for consideration and comment. The supporting evidence base is also provided.*

Copies of the relevant documents are available from the WAG's website as follows:

http://wales.gov.uk/consultations/environmentandcountryside/municipalsector/?lang=en

Draft Municipal Sector Plan Part 1 for Consultation (1.0 MB)

- *Municipal Sector Plan Sustainability Appraisal: Non Technical Summary (0.7 MB)*
- *Municipal Sector Plan Sustainability Appraisal (4.2 MB)*
- *Or we can send you a single, bundled PDF (3.8 MB) containing all three.*

08. Australia - SA Government department leads the way in cutting waste

South Australia Government's Department for Families and Communities (DFC) is in the forefront of waste and recycling practices after achieving a "perfect score" in recycling and resource recovery at their eight-storey Riverside building on North Terrace, Adelaide.

DFC reports that this followed a site inspection by waste management experts Rawtec, who confirmed that DFC had successfully implemented changes to its waste management practices which were in line with their recommendations from an initial assessment.

Department for Families and Communities Team Leader, Building Services & Sustainability, John McInnes, said this is an outstanding achievement and places the Riverside site as a leader in waste and recycling practices.

"This is the first site Rawtec has reviewed that achieved 100 per cent in recycling and resource recovery. DFC staff can be proud of their environmental leadership, " said McInnes.

DFC's work is supported by a Zero Waste SA programme that encourages public and private sector work sites to improve recycling and waste avoidance practices.

The department began its waste processes in 2005 by removing under-desk bins from staff work stations, and by late 2009 they had introduced a comprehensive recycling system that involves all waste directed into five streams, which are processed and recycled in different ways.

The department now has the following initiatives in place:

- *new bins for source separation of recycling streams, to maximise recycling*
- *recycling food organics and dry general waste to be recycled instead of to landfill*
- *changes in cleaning and waste collection practices.*

"These changes have reduced waste collection and disposal costs from A$35,000 to 15,000 per year, and we have also increased the percentage of waste streams being diverted to recycling or resource extraction from between 70 and 75 per cent (by weight) to 100 per cent, " said McInnes.

The five streams of recycling produced at Riverside are:

- *organic waste: converted and sold as mulch and compost by Jeffries Group*
- *general waste: converted into an alternative fuel by company ResourceCo*
- *recyclables: recycled by SITA Environment Solutions*
- *confidential paper: shredded on site and sent overseas for pulping and re-use*
- *general paper: sent overseas for pulping and re-use.*

09. UK - zero carbon Britain report published

The Centre for Alternative Technology (CAT) has published an extensive report on climate change and resources.

zerocarbonbritain2030 is a fully integrated solution to climate change. It examines how we can meet our electricity and heating requirements through efficient service provision, while still decreasing carbon dioxide, methane, nitrous oxide and other emissions.

The report starts by examining the current "context" in the Climate science and Energy Security chapters. It then moves on to how Britain can "PowerDown" heat and electricity demand largely through new technology, efficient design and behaviour change. Land offers tremendous potential not only to decrease emissions but also to sequester residual emissions.

The authors then move on to how the nation can "PowerUp" through the use of renewable technology and finally we examine the policy that can help bring this about and the job creation that will come with it.

Copies of the report zero carbon Britain (4.9 MB) can be downloaded from CAT's website at:

http://www.zcb2030.org/index.php/zcbreportmenu/category/1?download=1%3A2030

Or we can email you a copy.

10. Chile - pioneers South America's first carbon neutral winery

Nuevo Mundo, or 'New World' is the name of a new wine recently launched by De Martino wines.

With this, the winery has become one of six in the world to produce wine without negatively affecting the environment. The company are the second largest producer of organic wine in the world.

The Pulse (a Chilean English language newspaper) reports that the company is seeking to open its market to people for whom consuming organic and sustainable products is important and defines them as consumers as well as responsible citizens. From the start of the process to the moment the wine reaches the buyer, it produces zero greenhouse gases. This includes packaging, transport and even marketing.

Being carbon neutral involves compensating all the emissions a company produces. In 2008, De Martino asked to be audited by the Carbon Reduction Institute which measured the greenhouse gas emissions in all their processes. Once the company's carbon footprint was calculated, it started changing its processes in areas that were affecting the environment.

It all started by incorporating sustainable practices in vineyard management and energy use. They also reduced water consumption in their irrigation process by 18 per cent by using a new washing

technology. Additionally, they compost their own industrial waste through an Industrial Waste Treatment Plant located in their own facilities. The plant was inaugurated in 2006 and was certified by the United Nations, allowing De Martino to become the first winery in the world to trade in carbon credits.

Chemical use were nearly eliminated (reduced by 80 per cent) when opting for organic vines as the vineyard feeds off the compost made from organic waste, which also reduces Co2 levels to one seventh of what they were before.

The production process has al so changed to implement more eco-friendly practices. The grapes used are organically grown in the most extensive organic plot of Chile, located in the Maipo Valley. De Martino has 300 hectares strictly managed by BCS ÖKO-Garantie, the German certification company.

In terms of packaging, De Martino has reduced the weight of their bottles by nine percent and has certified their 'ecological friendliness' by making them out of 35 per cent recycled material. Nuevo Mundo bottle labels are all recycled and printed on low ink. The boxes have also reduced their weight and packaging and are made from entirely recycled cardboard. The product is certified by the Carbon Reduction Institute based in Chile and Green Solutions to be carbon neutral.

Energy consumption has also been reduced by 20 per cent between the years of 2008 and 2009. This was achieved by bottling only during daylight hours and installing more efficient machinery.

Transportation emission s have been reduced by favoring online marketing as well as neutralizing the travelling emissions of its sales team. Promotions and ads have all been produced from recycled material.

The winery is to be audited again sometime this year to find out if they have further reduced their carbon footprint, in which case they would have to purchase fewer carbon credits.

11. Europe - cutting down on e-waste

MEPs want better collection and treatment of the growing volumes of discarded fridges, phones and computers in the European Union.

UK Government's Department for Business, Innovation & Skills (BIS) reports that new collection targets should be based on actual waste generated, MEPs insist.

The Environment Committee voted at first reading on a proposed update to legislation on waste electronic and electrical equipment (WEEE). The report by Karl-Heinz Florenz (EPP, DE) was adopted with 54 votes in favour, 1 against and 3 abstentions.

Exemption for solar panels

The new legislation should apply to all types of WEEE, says the committee. However, vehicles, military material and fixed industrial installations should be excluded. MEPs also w ant solar panels to be exempt, bearing in mind the photovoltaic industry's voluntary target to recycle 85 per cent of modules. All exemptions should be reviewed within five years.

Collection targets

Member States should collect at least 85 per cent of WEEE generated in their country by 2016, argue MEPs. The Commission had proposed a 65 per cent figure, based on new products put on the market. MEPs emphasise that targets should be based on real waste because older goods are often stored or given away, rather than thrown away.

The Environment Committee voted to add an interim target for 2012: 4kg per capita (already in the current legislation) or the volume of waste collected in 2010, whichever is greater. Member States generate varying levels of WEEE and should be free to set higher national targets, say MEPs.

The legislative proposal demands that Member States should treat all waste they collect. MEPs want the Commission to propose standards to encourage this to be carried out in the best possible way.

Targets to recover, recycle and reuse

The Environment Committee suggests a simpler system of six categories of WEEE, to replace the current 10. Depending on the category, 70-85 per cent of WEEE should be recovered and 50-75 per cent recycled. Recycling doesn't just reduce waste, it recovers raw materials. MEPs say reusable appliances should be kept separate from other e-waste, and that a 5 per cent target for reuse should apply for the appropriate categories.

Member States should carry out tougher inspections on exported waste, according to MEPs. Although only reusable electronic goods may be exported, large amounts of waste are exported illegally to developing countries, where inadequate treatment can have serious health and environmental consequences.

Right to return

Thanks to the existing legislation, consumers can already hand in WEEE free of charge to dedicated facilities. MEPs want retailers to be obliged to accept small appliances that are returned to them.

Better designed goods

Action at the design stage can help to reduce and better process waste. MEPs are calling for eco-design requirements facilitating re-use, dismantling and recovery to be in place by the end of 2014.

Next steps

The plenary vote on the WEEE Directive is currently scheduled for September 2010.

12. USA - green is the new organic in wines

It's easy being green in Mendocino, California, where many of the county's 84 vintners are certified organic, biodynamic or carbon neutral.

Planet Ark reports Tim Thornhill, a transplanted Texan who formed the Mendocino Wine Company six years ago in the county north of San Francisco, is one of them.

Along with his brother, Tom, and former Fetzer Vineyards winemaker Paul Dolan he bought the Parducci Wine Cellars and revived the wine's reputation. He also used his background in horticulture to design a wetland area in the middle of the vineyard to reclaim wastewater, which is a byproduct of wine making.

"What I run into constantly are people who say 'I wish I could be environmental, but I can't afford to be,'" he said. "And it is always clear to me that they haven't figured out that being environmental is being efficient. And when you're efficient, money drops to the bottom line."

Water is a concern in California, where there is always a shortage. Wineries can produce hundreds of thousands of gallons of wastewater, mostly from the grape-crush, tank and barrel cleaning and bottling operations. Wastewater contains the grapes' natural sugars that deplete the water's oxygen.

Thornhill designed a system of gravity-fed tanks and trickle towers made from old wooden slats that oxygenate the water. The result is a small wetlands area and a pond that ducklings seem to favor.

"When you start seeing life, you know your water is getting clean and you look in here between the beautiful green filaments of algae, the duckweed, the rushes, the insects, the birds we're seeing. We've got life," he explained.

The water will be used for drip irrigation in the vineyards, to hose down redwood tanks where the wine ages slowly in large lots and it will be reclaimed to start the cycle all over.

Unlike Thornhill's vineyards, Chiarito Vineyards uses natural rainfall and runoff for its much smaller production.

"This is dry farmed. There is no drip irrigation. There's no nothing. They are totally dependent on the spring rains and the runoff from the mountains," John Chiarito said.

As a result, the vines send their roots down into the volcanic ash that lies under a topsoil of river deposits and sandstone. With a yield of less than three tons of grapes per acre, Chiarito estimated he makes about 800 cases of Zinfandel and Nero d'Avola.

It all started 20 years ago when he bought an abandoned walnut orchard and planted Zinfandel vines in "the old style, eight by eight foot spacing, head-trained. No wires."

Chiarito farms organically, but his wine is not certified because he said it involves too much paperwork.

Last week the U.S. Alcohol and Tobacco Tax and Trade Bureau and the Department of Agriculture issued new rules to clarify what wineries must do to use the word organic on their labels.

The same week the European Commission withdrew its proposal to have a wine classified as organic, saying it was unwilling to compromise on organic standards.

THIS INFORMATION COMES TO YOU FROM THE RESOURCE RECOVERY FORUM. DON'T FORGET THIS COMES FREE OF CHARGE TO YOU AS A MEMBER OF RRF. WE CAN ADD ANY OF YOUR COLLEAGUES TO THIS SERVICE, ALSO FREE OF CHARGE - THEY NEED THE SAME EMAIL DOMAIN (ie the suffix after @). JUST EMAIL THEIR ADDRESS TO US FOR IMMEDIATE ACTION.

Resource Recovery Forum
Yellow Cottage
Draughton
SKIPTON
North Yorkshire BD23 6EA, UK

T: +44 (0) 1756 711 363
F: +44 (0) 1756 711 360
E: info@resourcesnotwaste.org
I: www.resourcesnotwaste.org