

# Research and Library Service Briefing Note

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# Tyre Disposal

At the Environment Committee meeting on 23<sup>rd</sup> September members requested information on how tyres are disposed of in Europe and the measures taken by countries to ensure an audit trail of tyre disposal.

Under the European Landfill Directive (2006) tyres are banned from being put into landfill. The EU Landfill Directive introduced a ban on whole tyres being sent to landfill in July 2003. The ban on shredded tyres came into force in 2006. This directive encourages the re-use of waste tyres.

In 2006 in the UK 93% of tyres were recovered for recycling. The UK is still ranked behind the likes of Austria, Belgium, Denmark, Finland, France, Germany, Hungary, the Netherlands, Portugal, Slovakia, Sweden and Norway, all of whom claimed 100% diversion of tyres from landfill.<sup>1</sup>

All EU member states have to be in compliance with EU landfill legislation and although they all must implement it, they are free to manage it in different ways. There are three different systems in place across Europe for managing end-of-life tyres:

- Free market system
- Producer responsibility
- Tax system<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>'UK leads Europe on tyre recycling' <u>http://www.letsrecycle.com/do/ecco.py/view\_item?listid=37&listcatid=217&listitemid=8977</u> accessed 06/10/2010

### Free market system

The legislation sets objectives but does not define how these are to be met. Therefore, all operators in the tyre recovery chain act in compliance with the legislation under free market conditions. Companies may cooperate on a voluntary basis to promote best practice.

Countries which use this system: Austria, Germany, Ireland, Switzerland, United Kingdom.

### Producer Responsibility

The majority of EU countries operate under this system whereby the producer of the tyre is responsible for the managing of end-of-life tyres. This system appears to be the most economical way to achieve a 100% recovery rate of tyres. For the end user it guarantees transparency through invoices at each stage.

Countries which use this system: Belgium, Czech Republic, Finland, France, Greece, Hungary, Norway, Netherlands, Poland, Portugal, Romania, Spain, Sweden.

#### Tax System

Each country is responsible for recovery and recycling of end-of-life tyres financed by a levy on tyre production which is passed on to the customer.

Countries which use this system: Denmark, Latvia, Slovakia

#### How tyres are disposed of in European countries

Across Europe tyres are remoulded for use as retreads or are recycled to make childrens' playparks, for use in cement kilns as an alternative to fossil fuels and are used across the engineering and construction sectors.

# <u>UK</u>

The way recycling and waste management operates in the UK is driven by legislation which largely derives from European Union directives. The key directive is the Waste Framework Directive which was revised in 2008.

The UK Environment agency introduced National Tyre Watch which aims to:

- Reduce the illegal disposal of tyres
- Support sustainable disposal and recovery processes
- Reduce the environmental risk from tyre stockpiles<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> ETRMA (2006) End of life tyres <u>http://www.wastexchange.co.uk/documenti/tyres/ETRMA\_ELTs\_report\_2006.pdf</u> accessed 04/10/2010

<sup>&</sup>lt;sup>3</sup>UK Environment Agency <u>http://www.environment-agency.gov.uk/business/topics/waste/32152.aspx</u> accessed 04/10/2010

Under the Environmental Protection Act 1990, Duty of Care is a legal requirement for anyone who produces, carries, keeps, treats or disposes of waste tyres. It requires these individuals to ensure that tyres are not handled illegally and that waste tyres are transferred to authorised persons with a waste transfer note.<sup>4</sup>

In the UK tyres are recycled to make a number of products such as for use in engineering, as an export material, or can be sold as retreads and part worn tyres.<sup>5</sup> By converting tyres into a reusable product they have a traceable audit trail for peace of mind and the Environment Agency's satisfaction.<sup>6</sup>

The Responsible Recycler Scheme (RRS) was established in 2001. It is a voluntary scheme which ensures that its member companies, who are responsible for the majority of used tyre collections in the UK, re-use, recycle or dispose of scrap tyres in an environmentally responsible way. Those who subscribe to the scheme are subject to a stringent audit process conducted regularly by independent environmental audit specialists.<sup>7</sup>

# Ireland

Tyre disposal in Ireland is monitored by the Department of Environment's Waste Management Regulations (2008). Much the same as the UK, wholesalers and retailers must use authorised waste collectors to take away waste tyres, and must provide details of tyres taken back and transferred to authorized collectors. These collectors are required to report on the quantities of tyres taken, and to acquire "Certificates of Recovery" from recyclers, retreaders, remoulders or any other recovery operators to show that tyres have been dealt with properly.<sup>8</sup> Businesses can sign up to TRACS (Tyre Recovery Activity Compliance Scheme) which monitors the movement of tyres in Ireland. The scheme is voluntary and members allow their waste tyres to be monitored and only allow the collection of waste tyres by licensed collectors.<sup>9</sup>

#### <u>Sweden</u>

In Sweden, producers are responsible for the collection and disposal of waste tyres. The Swedish Tyre Recovery Association is a producers' responsibility organisation which is obliged to report to the

<sup>&</sup>lt;sup>4</sup> <u>http://www.tyredisposal.co.uk/about.html</u> accessed 06/10/2010

<sup>&</sup>lt;sup>5</sup> Public Service Review (2006) 'Driving Tyre Recycling Forward <u>http://www.publicservice.co.uk/article.asp?publication=Central%20Government&id=216&content\_name=Waste%20and%</u> <u>20Recycling&article=5705</u> accessed 04/10/2010

<sup>&</sup>lt;sup>6</sup> <u>http://www.end-of-life-tyres.com/page2.html</u> accessed 04/10/2010

<sup>&</sup>lt;sup>7</sup> Tyre Recovery Association <u>http://www.tyrerecovery.org.uk/page/about-the-tra/the-tyre-industry-federation-responsible-recycler-scheme/</u> accessed 04/10/2010

<sup>&</sup>lt;sup>8</sup>'Ireland to introduce producer responsibility'

http://www.letsrecycle.com/do/ecco.py/view\_item?listid=37&listcatid=226&listitemid=8572&section=info/waste\_manage ment accessed 04/10/2010

<sup>&</sup>lt;sup>9</sup> Irish Tyre Industry Association http://www.itia.ie/tracs.html accessed 04/10/2010

Swedish Environmental Protection Agency on the amount of tyres collected and treated. They collect and publish data about the treatment of scrap tyres.<sup>10</sup>

#### <u>Hungary</u>

In Hungary, tyre waste sites are being taken over by companies which recycle tyres into other rubber products.<sup>11</sup> The producers, importers and distributors of tyres in Hungary must pay an environmental tax for disposing of tyres. Tyre recycling companies can be exempt from the environmental tax if they meet a required tyre recycling rate. They may enter contractual agreements with producers/distributors which involves the producer/distributor paying a fee to the recycling company to dispose of the tyres in an environmentally friendly way. The fee will normally be equivalent to/less than the environmental tax to encourage responsible disposal of tyres. Recycling companies may remove waste end-of-life tyres from garages for free. The recycling companies are responsible for checking the companies at each stage of the process are complying with regulations. Recycling companies must report to authorities on the number of tyres collected and recycled.<sup>12</sup>

<sup>&</sup>lt;sup>10</sup>Swedish Environmental Protection Agency Quality Report (2008) <u>http://www.naturvardsverket.se/upload/06\_produkter\_och\_avfall/avfall/avfallsstatistik/avfall-sverige-2008/kvalitetsdoku.pdf</u> accessed 04/10/2010

<sup>&</sup>lt;sup>11</sup> MeWa (2007) 'From used tyres to Rubber Powder' <u>http://www.mewa-</u> <u>recycling.de/fileadmin/user\_upload/PDF/MeWa\_News\_1207\_E\_l.pdf</u> accessed 06/10/2010

<sup>&</sup>lt;sup>12</sup>HUREC <u>http://www.hurec.hu/main.php?t=hatosagok&lang=en</u> accessed 06/10/2010

Flow chart showing how the different categories of used tyres and how they can be recycled to be used as road legal tyres again.  $^{13}$ 



<sup>&</sup>lt;sup>13</sup> Flow chart produced by European Tyre & Rubber Manufacturers' Association. <u>http://www.etrma.org/public/activitieseofItelts.asp</u> accessed 04/10/2010