

NORTHERN IRELAND USED TYRE SURVEY, 2000

EXECUTIVE SUMMARY

The objectives of the study were to:

- Provide accurate estimates of the number of used tyres arising annually and the total tonnage this represents;
- Identify the locations of tyre retailers, distributors, collection companies and reprocessors in Northern Ireland and the potential to increase the reprocessing services available;
- Determine the annual number of illegally dumped tyres;
- Identify the size and locations of any used tyre stockpiles;
- Determine the numbers of tyres reprocessed in Northern Ireland, sent to landfill and exported;
- Provide a data reporting methodology that can be used to support National and European waste reporting requirements.

Key findings

16.10kt was the best estimate for used tyres arising in Northern Ireland in 2000, the equivalent of 1,738,117 units. A predictive model generated this figure.

In 2000 the main destinations for used tyres identified by the survey were 32% for retread manufacture and 16% to farmers. Smaller quantities were identified as being reused as part worns, stockpiled, landfilled, burnt on bonfires and exported. In many cases there was no information on where the used tyre casings were being taken to or even who was taking them, hence 30% were being removed to an unknown destination.

The commercial market for used tyres was limited in Northern Ireland in 2000. The only reprocessing market available was the production of retreaded truck and car tyres. There were reuse markets in existence. The main application was the use by farmers for silage. However they were also utilised for landfill engineering and as crash barriers on racecourses. The other main destinations for used tyres in 2000 were for use as fuel in bonfires and landfilling.

The market cost for recycling tyres in Northern Ireland is seasonal. During April – June there is little business because tyres are stockpiled in preparation for July 12th. During this period recyclers have to drop their prices dramatically, and recycling becomes commercially not viable.

In 2000 an estimated 309,785 used tyres were either reused (in NI or abroad), retreaded in Northern Ireland, retreaded in England or reused on farms. As a proportion of the total number of used tyres arising identified by the survey this equates to a 47% recovery of the total used tyre units arising. As a proportion of the total number of used tyres arising identified by the predictive model this equates to a 20% recovery of the total used tyre units arising.

It is evident that Northern Ireland has a long way to go to achieve the 85% recovery target for used tyres set for 2005. There has also been little progress in developing crumb rubber as a key waste stream. In 2000, there were no facilities for processing used tyres into crumb rubber.

Indicators

Indicators were developed to identify trends in used tyre management in order that targets against key objectives can be monitored.

Five primary indicators were proposed:

- Tonnage of used tyres arising (per annum)
- % of used tyre arising incinerated with energy recovery (per annum)
- % of used tyres arising recovered through recycling and reuse (per annum)
- Total number of used tyre reprocessing and disposal facilities by type of facility
- Total used tyre reprocessing and disposal capacity (tonnes/annum) by type

Recommendations for Data Collection

On the basis of the study results and the reporting requirements for used tyres the following recommendations were made for data collection:

- Used tyres arising should be compiled on the basis of replacement tyre sales and tyres from ELVs until such time that the used tyre collection infrastructure improves in NI. This data can be verified by reference to the predictive model data.
- Data on total used tyres arising from the replacement markets should be based on sales and market share information from the largest tyre retailers.
- Data on the total used tyres arising from ELVs should be estimated on the basis of information on the number of ELVs arising obtained for compliance with the ELV Directive and average number of tyres per vehicle. Truck ELVs can be estimated using vehicle registration data using the methodology set out in the ELV Data Survey Report.
- Data on the number and capacities of processing and disposal facilities to be collected directly from the relevant facilities. With the implementation of the waste licensing regulations data on the capacities of processing and disposal facilities, the used tyres processed and the residual wastes arising will be able to be compiled from data already collected by EHS for licensed facilities. Where facilities are registered exempt the data will have to be collected directly.
- EHS to ensure that with the implementation of the waste licensing regulations that data collection meets the needs of these regulations and the other reporting requirements.
- Customs and Excise prepare UK financial regional trade data including Northern Ireland. Data is also prepared on import and export of materials and product by National Statistics for PRODUcts of the European COMMunity Inquiry (PRODCOM). EHS to talk to these organisations to establish whether there is a mechanism by which regional data might be obtained from what is currently being collected.