



# BPF Recycling Group Annual Return Report

Analysis of 2013 Data



# Objective and conduct of the study

This survey sought to obtain useful information that will help the BPF to support the Recycling sector of the UK Plastics Industry.

The survey was conducted by the British Plastics Federation (BPF). The questionnaires were administered by the BPF and all information received from specific companies has been treated confidentially. Analysis was conducted by the BPF staff in strictest confidence.

The survey was conducted, as with all other BPF surveys, in line with UK and EU Competition Law.

The survey was conducted via a questionnaire sent to all members of the BPF's Recycling group. A total of 27 responses were received.

The British Plastics Federation has taken every possible care to ensure that this document is correct in all aspects. However the BPF cannot be held responsible for any errors therein, nor accept any responsibility for any use which may be made of the information in this report. All information given in this report is given in good faith, but without legal responsibility.

Francisco Morcillo Senior Executive – Industrial Issues British Plastics Federation

September 2015

#### 1 Scope of the data

Total Members of BPF Recycling Group: 39 Total Plastic Related Turnover: +£900 million

Total responses: 27

Employees represented by the report: 4776 Turnover represented by the report: £867.2 million

#### **2** Tonnage Declaration

#### ■ Total Tonnes Sold during 2013

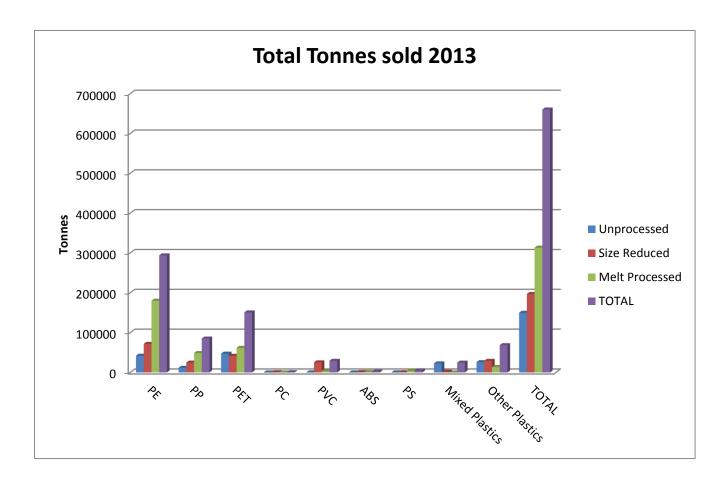
Material	PE	PP	PET	PC	PVC	ABS	PS	Mixed Plastics	Other	Total Tonnes
Unprocessed <sup>1</sup> (tonnes)	42,061	11,691	47,223	0	122	38	162	22,760	25,863	149,920
Size reduced <sup>2</sup> (tonnes)	71,772	24,760	41,906	580	25,324	1,030	642	1,876	29,159	197,049
Melt Processed <sup>3</sup> (tonnes)	180,242	48,646	61,630	0	3,800	1,184	4,190	0	13,620	313,312
Total	294,075	85,097	150,759	580	29,246	2,252	4,994	24,636	68,642	660,281

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<sup>&</sup>lt;sup>1</sup> *Unprocessed* – No physical change to the size, shape or appearance of the individual items received as input waste raw material / feedstock. Sorting and separation of individual plastic types may have taken place and re-packing in a different physical format (such as baling) for onward sale to customer.

<sup>&</sup>lt;sup>2</sup> Size reduced – waste plastic that has been shredded, granulated or milled down to a smaller particle size. Typically described as 're-grind plastic chips' or 'cut flakes'. Most washing processes also include size reduction.

<sup>&</sup>lt;sup>3</sup> *Melt Processed* – plastic that has been though a high-temperature, thermal re-melt process to homogenise the polymer material. Typically sold as extruded resin, pelletised compound or moulded components / profiles



### How does this compare to the amount of plastics recycled in the UK?

We estimate that in 2013, the total plastic waste generation was about 3,600 kt<sup>4</sup>. This include plastic waste for a whole range of different sectors such as packaging, building & construction, automotive, electrical/electronics (WEEE), house wares, leisure, sports, agriculture, furniture and others.

In the UK, the mechanical recycling rate in 2013 was 25%<sup>5</sup>, or a total of 900kt.

Waste G	enerated	Mechanica	l Recycling	Material handled by BPFRG Members		
3,600kt	100%	900kt	25%	660kt		

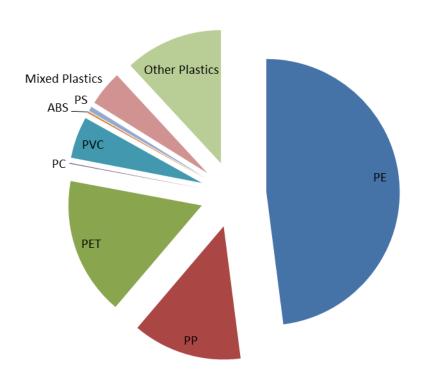
<sup>&</sup>lt;sup>4</sup> Estimation based in data from PlasticsEurope.

<sup>&</sup>lt;sup>5</sup> Estimation based in data from PlasticsEurope for 2012, NPWD and other sources.

# ■ Materials: Proportion of Total Tonnes Sold during 2013

% of Total	PE	PP	PET	PC	PVC	ABS	PS	Nylon	Other	Total Tonnes
Unprocessed	28.1%	7.8%	31.5%	0.0%	0.1%	0.0%	0.1%	15.2%	17.3%	100.0%
Size Reduced	36.4%	12.6%	21.3%	0.3%	12.9%	0.5%	0.3%	1.0%	14.8%	100.0%
Melt Processed	57.5%	15.5%	19.7%	0.0%	1.2%	0.4%	1.3%	0.0%	4.3%	100.0%
Grand Total	44.5%	12.9%	22.8%	0.1%	4.4%	0.3%	0.8%	3.7%	10.4%	100.0%

# **Materials: Proportion of Total Tonnage**



# Installed plant processing capacity in 2013

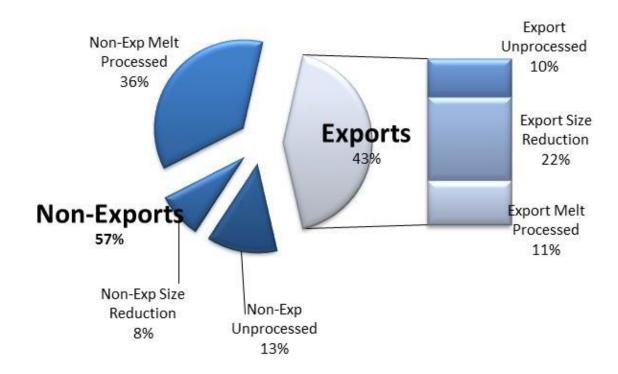
	Total Tonnes
Overall input Raw Material Capacity	897,500
Size Reduction	424,920
Sorting / Separation	323,150
Washing / Cleaning	356,300
Melt Processing	273,250
Overall Output Capacity as Product	777,200

### ■ PRNs/PERNs Issued in last calendar year

	Tonnes issued
PRNs issued	156,511.7
PERNs issued	123,061.5
Total	279,573.19

## ■ Proportion of Tonnage exported in 2013

	Total Tonnes Sold 2013	Total Tonnes Exported 2013	% Export Same Category	%Total Export	
Unprocessed	149,920	65,576.28	43.7%	9.9%	
Size reduced	197,049	142,333.74	72.2%	21.6%	
Melt processed	313,312	75,319.57	24.4%	11.4%	
Total	660,281	283,229.59	42.9%	42.9 %	



# **British Plastics Federation**

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