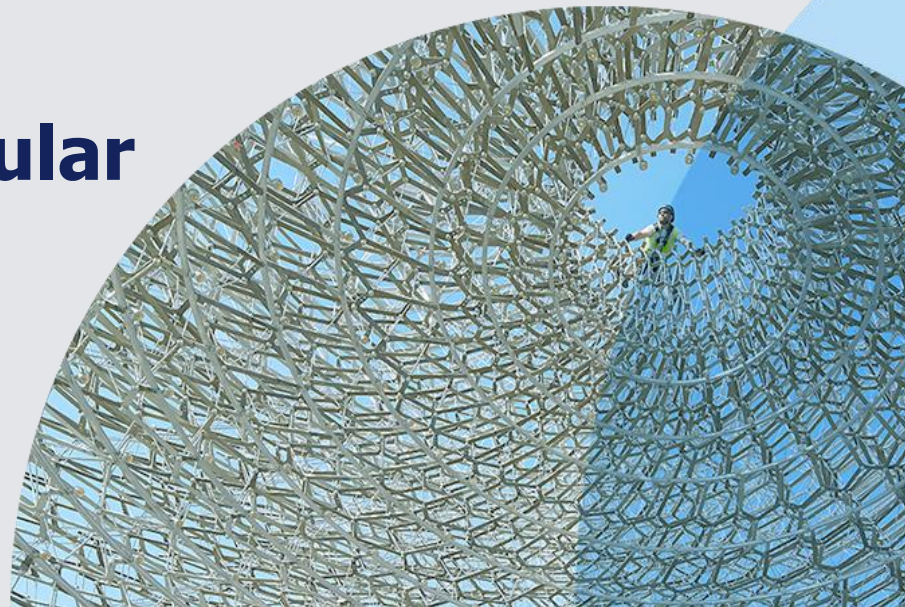


Building a Circular Economy for Wales

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WRAP Cymru



Today

- **WRAP – who we are**
- **CE Policy in Wales**
- **Resource management in Wales**
- **Plastics**
- **Challenges – Operation sword, Brexit etc**
- **Solutions**

Building a Circular Economy for Wales

- **Sustainable Development, central organising principle of Government.**
- **One Wales : One Planet, SD strategy**
- **Toward Zero Waste + associated sector plans**
- **Well being of Future Generations Act**
- **Environment (Wales) Act 2016**



Policy Environment



- **Toward Zero Waste**
- **70% recycling target for all wastes 2025**
- **Zero waste by 2050**
- **Statutory targets for municipal recycling**
 - Collections, Infrastructure and Markets Sector Plan
 - Industrial & Commercial Sector plan
 - Construction & Demolition Sector Plan
 - Food & Drink Sector Plan

Resource Management in Wales



- Growth in the sector
- Increase in service offering for businesses
- Strong recycling rates for some materials/sources 64%
but;
- Over reliance on export markets for recycled materials
- Poor quality
- Insufficient reprocessing capacity
- Reliance on RDF and SRF routes for disposal
- Disconnection with end users/markets

Recycling in Wales

- **Municipal recycling rate 64%**
- **3rd in Europe and potentially the world!**
- **Good performance on C&I as well**
- **On track to meet 70% recycling rate across all sectors by 2025**



Environment (Wales) Act 2016



Part 4 -

- Segregation at source for all waste – key materials paper, card, glass, plastic, metal, food and wood
- Ban on recyclates to landfill
- Ban on recyclates to EfW
- Ban on disposal of food to sewer (maceration)
- Power to apply civil sanctions
- Implementation date uncertain
- But it will happen!

Report from Cardiff Uni suggests 3 scenarios;

- **Adoption of the CE Package – UK tracks EU policy maintaining status quo, however UK will have no influence on future EU regulatory change.**
- **Deregulation – declining ambition, risks to cross border movement of waste, could see increase in EfW and landfill.**
- **Catalyst for new policies that exceed CE Package, driving high quality circular economy operating within national borders.**

Operation National Sword

Announcement in July – *“China informed the World Trade Organization (WTO) that it would not be accepting any more imported waste such as plastics, paper, slag from steelmaking, ash, etc”*

In 2016 China imported 7.3 million tonnes of plastic waste alone

56% of world's plastic waste

Ban on plastic and paper waste end of December

Last consignments left at beginning of October

Other countries already implemented bans on imports

ie India

791,000 tonnes of plastics scrap exported from UK in 2015



Plastics – a global challenge



Around 8,300 million metric tonnes (Mt) of virgin plastics have been produced globally (including resins and additives) generating around 6,300million Mt of plastic waste.

9% recycled

12% incinerated

The remainder – landfilled or somewhere else in the environment!

Plastic in Wales - Key data



Arisings – Inconsistent data

- Could be as low as 240,000 tpa or as high as 560,000 tpa!
- 40,000 tpa plastics collected by LAs (15% of all recyclates)
- Up to 68% of the plastic ends up in landfill (UK)
- 25% being recycled and 7% energy from waste.
- Opportunity to capture more (from households and commercial sources)
- Suggestion that Wales could be exporting up to 155,000t of plastics per annum**

Plastic arising by type, recovery and treatment in Wales

	Arisings	Recovery	Treatment	Reprocessed
Rigid	264Kt	49Kt	103Kt	35Kt
Film	209Kt	31Kt	60Kt	38Kt
Other	89Kt (unspecified C&I)	58Kt (reuse, unaccounted C&I)		
Total	562Kt	138Kt	163Kt	72Kt

Source : WRAP plastics investigation study 2012

Challenges

- **Quality of mixed plastics collected (black plastic and films major concerns)**
- **Lack of reprocessing capacity in Wales**
- **Lack of local demand for recycled materials**
- **Loss of economic value for Wales**
- **Majority of Wales plastics exported via third party UK based re-processors - concern over end destinations**
- **“Operation Sword”, Brexit – impact of changes in global markets**

Quality & Consistency

Research on 'Barriers to Use of Recycled Content by Welsh Manufacturers' (Databuild, 2014/15)

- **Experience/perceptions of poor quality**
- **Inconsistent quality**
- **Availability of supply**
- **Performance**
- **Not competitively priced against virgin**
- **Specification limits use**
- **Odour**

Reprocessing capacity

Local Partnerships research 2015

- **180,000 capacity for partial reprocessing**
- **70,000 capacity full reprocessing**

Evidence from new (2017) research identified

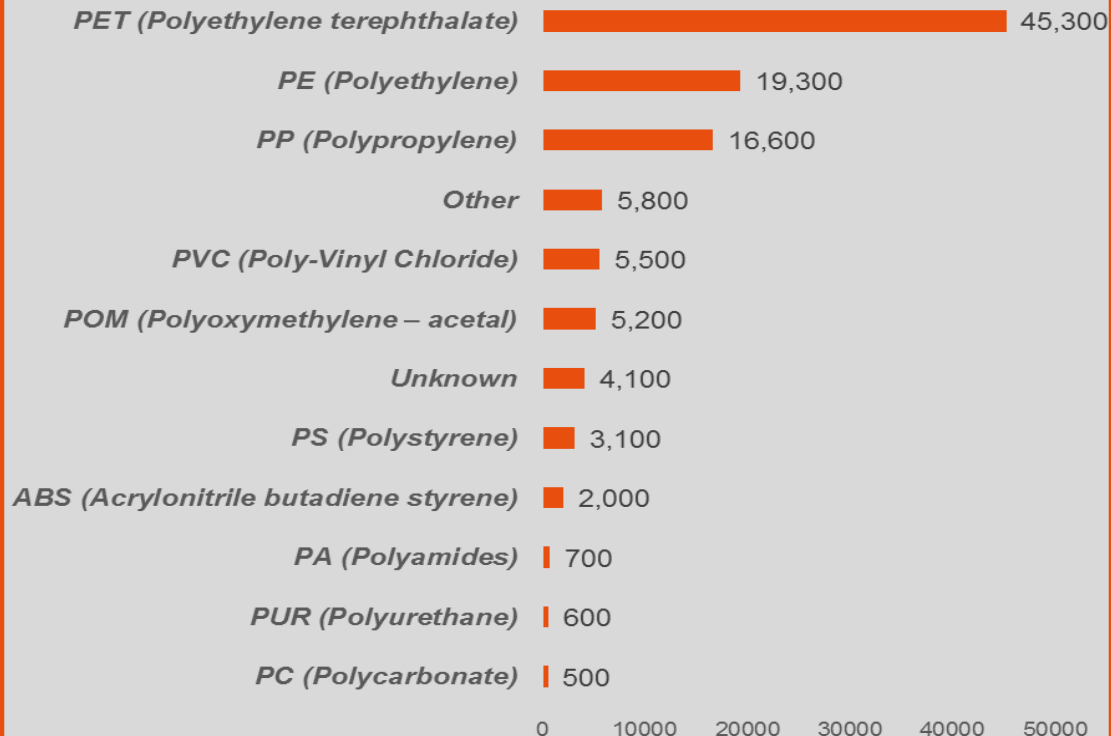
- **17 reproprocessors in Wales**
- **Receiving 62,000 tonnes waste plastic**
- **49,000 tonnes reprocessed plastic placed on the market**
- **Polyethylene Polyethylene Terephthalate (PET), (PE – HDPE & LDPE) and Polypropylene (PP),**

Polymer demand in Wales

108,800
minimum
demand

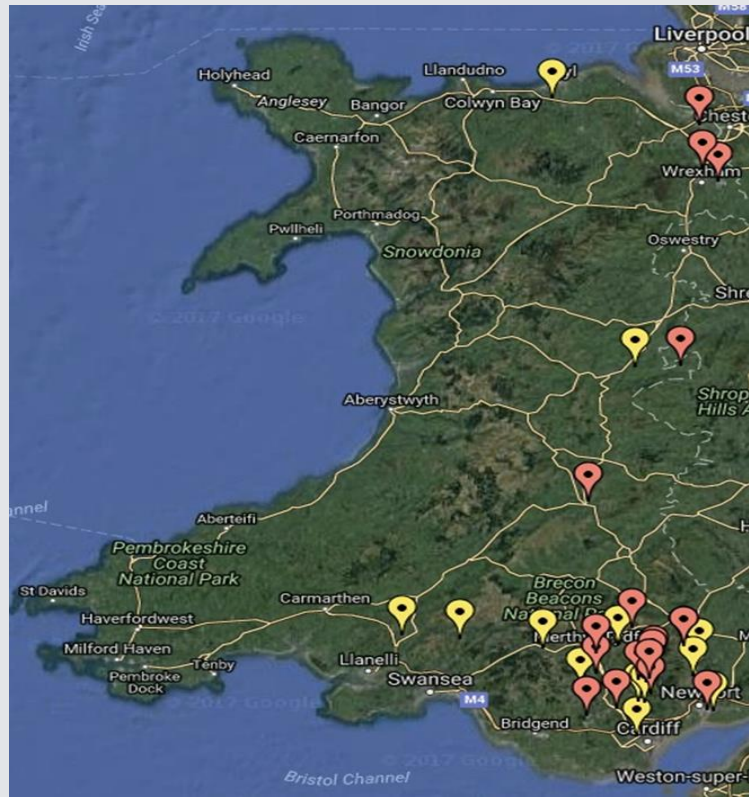
18 companies
responsible for
80% of demand

TONNAGES POLYMER DEMAND



Mapping demand to supply

- Yellow pins – reproprocessors.
- Red pins – manufacturer or moulder with demand for >1,000 tonnes per annum.



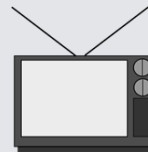
Key demand sectors

Automotive
6000 tpa, PP,
PA, ABS



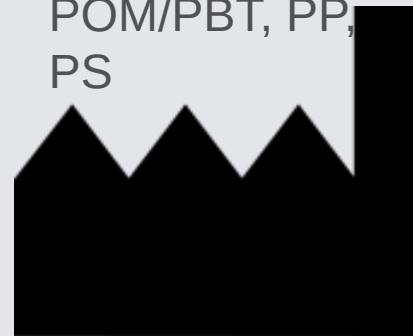
Construction
15,000 tpa PE

Medical/
pharmaceutical
10,000 tpa, PP,
PE, PS



Electrical
2000tpa,
ABS, PB

General
68,000 tonnes
PET, PVC,
POM/PBT, PP,
PS



WRAP Cymru support



ReMade in Wales (consultancy)— increasing recycled content in products and packaging

Business support for resource management

Extensive range of support online, technical, general, opportunities

Developing projects for next plan period 2018-2021

Who we work with

**Synergy
Plastics**



Hille



wrap
Cymru

Nappicycle

New Project



Plastic



Pellet



Product

Challenges Driving Policy Response

- Extended Producer Responsibility –
- Revision to the PRN system
- Deposit Return Schemes
- Awareness of environmental impacts of waste (marine litter)
- Driving manufacturing/retailer demand



Where next – can you help?



Circular Economy Plastics Route Map

Options;

- Policy
- Regulation
 - Tax, Levies, Bans, EPR, DRS etc
- Voluntary agreements
- Market forces
- Consumers

Contact us



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