

Current Conditions for Investment in Europe Plastics Recycling

Plastics Conference

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Verde Research and Consulting

- Consultancy specialising in materials recycling, wastes management the circular economy strategies.
- Commercial, operational and technical due diligence.
- Facility assessments & audits.
- Technical impact assessments on policy and legislation.
- Advice on secondary materials markets and monthly *Recovered Plastics and Fibres Report*.
- Support on company CSR and circular economy strategies.

Policies behind the legislation

- Roadmap to a Resource Efficient Europe (2011).
- An EU Action Plan for a Circular Economy (2015)
 - Product design, recycling targets, markets for secondary material. Plastics a focus.
- European Strategy for Plastics in a Circular Economy (2018)
 - By 2030 all plastics packaging reusable or recyclable.
 - More than half of all plastics recycled.
 - Economic incentives for sustainable design.
- Circular Economy Action Plan (2020)
 - Recycled content. Packaging, construction, vehicles mentioned.
 - Harmonisation of separate collection.
 - Reducing exports.

Legislative changes of particular note

- Packaging and Packaging Waste Directive (revision 2018).
 - 50% plastic target by 2025 & 55% by 2030.
- Waste Framework Directive (revision 2018).
 - New calculation point for recycling.
 - EPR full net costs for collection, sorting & recycling.
 - Fee modulation.
- Single Use Plastics Directive.
 - Recycled content targets.
 - Separate collection target plastic beverage bottles.
- Basel Convention changes on plastic codes.

Continuing revisions to & new legislation

- Packaging and Packaging Waste Directive.
 - Packaging recyclability.
 - Recycled content.
- Waste Shipment Regulations.
- Recycled plastic material and articles intended to come into contact with foods.
- Upcoming revision of Waste Framework Directive.
- Changes at Member State level - sometimes beyond EU legislation.

Economic

- EU plastics levy on plastic packaging POM but not recycled.
- National plastics taxes related to recycled content.
- EPR fee modulation incentives for recycled content.
- Impacts of financial drivers can be cumulative.
- Public & private sector funding.

Development in technology

- Sorting – NIR / optical sorting developments, digital watermarks, AI, robotics.
- Mechanical recycling: focus on quality r-polymer, e.g. in filtration, decontamination, deodorisation.
- Development of new physical recycling technologies, e.g. dissolution.
- Chemical recycling, e.g. pyrolysis, solvolysis.

Action by industry

- Brand owners, e.g. packaging design, recycled content pledges, minimisation.
- European initiatives, e.g. Circular Plastics Alliance 10MT target & European Plastics Pact.
- Global initiatives, e.g. Ellen MacArthur Foundation, Alliance to End Plastic Waste.
- Polymer / format industry initiates, e.g. CEFLEX, PCEP, SCS.

Changing competitive environment

- Stronger position for recovered plastics suppliers: contracting supply can be a challenge for recyclers.
- Stronger position of recyclers for sales of recycled polymer: CSR and legislative drives.
- Increased vertical diversification over last 5-10 years.
- Lot of new capacity coming online in Europe, a mixture of:
 - Primarily new mechanical recycling capacity.
 - Larger scale mechanical recycling increasingly in evidence.
 - Lot of planned activity in chemical recycling. Some feedstock and legislative uncertainties remain.

Summary

- Supportive macro environment but success will link to individual business plans.
- Significant differences in terms of impacts of drivers based on:
 - Input polymer and grade.
 - Output grade of recycled polymer produced.
 - Scale and technologies.
 - Associated business activities.
- Uncertainties remain:
 - How recycled content targets are set.
 - Role of new technologies.
 - Impact of taxes on intra-EU flows of recovered plastics and recycled polymer.
 - Impact of brand owner actions – CSR actions, packaging choices, etc.
- Competitive environment likely to remain strong. Failure to fully understand the macro drivers and adapt as necessary a business risk
- However, good opportunities for those with a strong business model.

Thank you for your attention

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