

Fraunhofer Institute for Process Engineering and Packaging IVV

Process development for polymer recycling

About this organisation

Machine translation

This organisation has been machine-translated based on data provided in German.

As an institute for applied research, we are leaders in the fields of process engineering and packaging. We create real added value on behalf of industry, government and science. The circular economy is a major challenge that we are facing up to. And we are already offering innovative solutions: With our patented solvent-based recycling process, for example, we recover high-quality plastics from post-consumer waste.

The Process Development Polymer Recycling department develops concepts and processes for high-quality plastics recycling from post-industrial and post-consumer waste. With the solvent-based recycling process developed at the institute, the Fraunhofer IVV offers a recycling process with particularly high cleaning performance, so that even plastics from composites and contaminated post-consumer waste can be processed into high-quality and pure polymers. Gentle processing makes it possible to produce recyclates with virgin material properties. Fibre-reinforced plastics or other plastic composites are frequently used in lightweight construction in particular, which often cannot be recycled using conventional recycling processes. Solvent-based recycling is a suitable solution for this.

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85354 Freising
Bavaria
Germany
www.ivv.fraunhofer.de

Main areas covered Recycling, Polymer recycling, Plastics

Infrastructure Recycling plants

Certifications

Keywords Plastic recycling

Memberships



Organisation type

Non-university research institution

Sectors

No specific sector

Employees

250 up to 499

Turnover

€10m - €50m

Funding

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Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Offer			
<i>Products</i>			
Services & consulting Consulting, Testing and trials, Technology transfer	✓	✓	
Field of technology			
<i>Design & layout</i>			
<i>Functional integration</i>			
<i>Measuring and testing technology</i>			
<i>Modelling and simulation</i>			
<i>Plant construction & automation</i>			
Recycling technologies Downcycling, Material separation, Recycling, Upcycling	✓	✓	

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	Research	Development	Manufacturing & Supply
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Manufacturing process

Additive manufacturing

Coating (surface engineering)

Fibre composite technology

Forming

Joining

Material property alteration

Primary forming

Processing and separating

Textile technology

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	Research	Development	Manufacturing & Supply
Material			
<i>Biogenic materials</i>			
<i>Cellular materials (foam materials)</i>			
Composites Aramid fibre composites, Basalt fibre-reinforced plastic, Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Metal-fibre-polymer composite, Natural fibre reinforced plastics (NFRP), Laminates, Particulate composites, Textile-reinforced concrete	✓	✓	
<i>Fibres</i>			
<i>Functional materials</i>			
<i>Metals</i>			
Plastics Thermoset plastics, Elastomers, Thermoplastics	✓	✓	
<i>Structural ceramics</i>			
(Technical) textiles Yarns, rovings, Meshes, Laid webs, Crocheted fabrics, Woven fabrics, Knitted fabrics, Nonwovens, mats	✓	✓	

Contacts

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