Designing novel manufacturing and recycling systems for vehicles, railways and the aircraft industry

Multi-material composites for a greener and more effective transport Industry.

The transport sector plays a critical role in the European economy and society in terms of employment, growth and mobility. Around 10 million people are actively employed in the field and transport, which accounts for 5% of the entire EU GDP. A streamlined, safe, sustainable and connected transport system is vital for Europe and its ambition to achieve concrete decarbonisation and the green transition through tehnological innovations.

Recotrans, Sparta, Jospel and Eliot are four European-funded projects that address air/ground transport sector manufacturing with a focus on market factors like time-to-market, cost and energy consumption and advanced recycling solutions to reduce the environmental impact and the carbon footprint.

Challenges addressed

- Realising smart, green and integrated transport.
- Reducing manufacturing costs & energy consumption.
- Developing a cost-effective curing based on microwave radiation for thermoplastic resin and improving metal-composite joining through laser assisted technique for producing multi-material recyclable parts for transport sector.
- → Developing potential recovery solutions for thermoplastic composites and biocomposite waste from EoL aircraft and other transport industries.
- Tackling the increasing demand for composite materials, biocomposites and recycling technologies in the transport industry: aerospace, railway, automotive, truck, etc.

Results

- Realising smart, green and integrated transport
- Reducing manufacturing costs & energy consumption and improving recyclability



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Who benefits?









Join our community and discover how we will contribute to a smarter and greener transport sector:



RECOTRANS - Integrated manufacturing of REciclable multi-material COmposites for the TRANSport sector. **recotransproject.eu**

Grant Agreement No.768737



ELIOT - End of life for biomaterials. **project-eliot.eu**

Grant Agreement No.886416



JOSPEL - Low energy passenger comfort systems based on the joule and peltier effects.

Grant Agreement No.653851



SPARTA - ScraPping cArbon Reinforced ThermoplAstic. **project-sparta.eu**

Grant Agreement No.887073



GREEN TECHNOLOGY SOLUTIONS

FOR TRANSPORT SECTOR



