



# FOREST

## Advanced lightweight materials FOR Energy-efficient Structures

The **FOREST** project will develop innovative bio-based polymers & additives and recycled carbon fibres that will facilitate the decarbonisation of the transport sector for the next three and half years.

The project will contribute to the decarbonisation of the transport sector by developing and implementing innovative bio-based polymers & additives and recycled carbon fibres. The goal will be achieved by combining three key drivers: **Reduce, Recovery, and Reshape.**

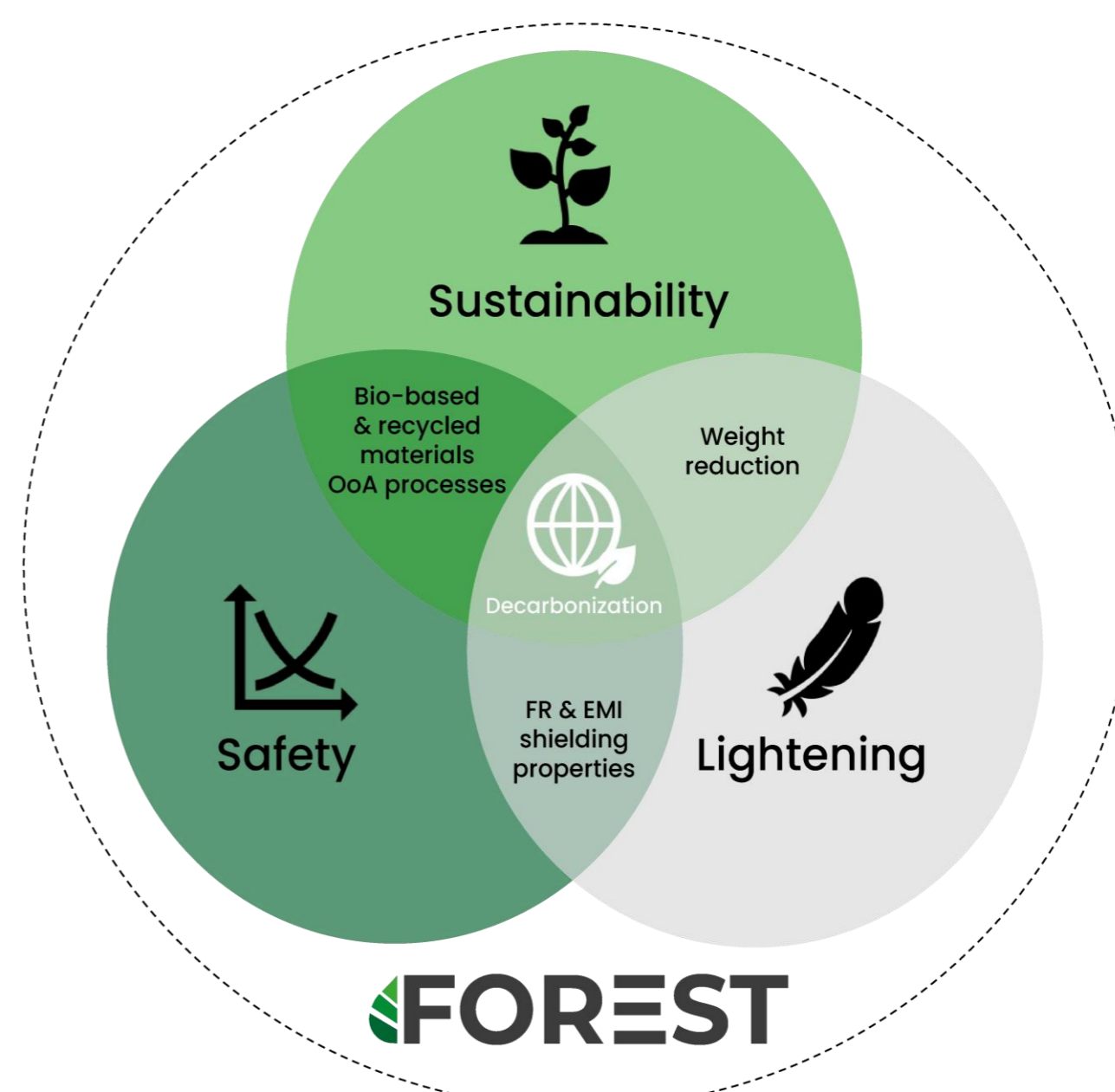
### Concept

**FOREST** will develop novel lightweight multifunctional biocomposites as a competitive alternative to conventional composites. New chemistries will be developed based on bio-based materials (reactive and nonreactive polymeric systems and fire-retardant additives) in combination with fully recycled carbon fibre and EMI particles.

These biocomposite candidates will be obtained using one-shot manufacturing techniques, involving Out-of-Autoclave (OoA) processes to build and test prototypes (TRL5) with improved multifunctional properties (mechanical resistance, fire-retardant, EMI-shielding) for transport application.

**FOREST** will increase the focus area on the sustainability in Circular Economy (CE) by effective circularity solutions applied to multifunctional biocomposite constituents with >50% sustainable materials contained in lightweight products.

### PATHWAY TO MOBILITY DECARBONIZATION



### Partners



### Funding

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