





Epoxy bio composites



<p>Description</p> <p>Bio-based recyclable, reshapable and repairable (3R) epoxy resins and fibre-reinforced sustainable thermoset composites for automotive and construction sectors.</p>	<p>Objectives</p> <ul style="list-style-type: none"> To undertake environmental analysis regarding the chemical modification of bio-based products in order to build up materials from renewable resources and to identify positive impacts considering waste management and post consumption implications, To measure operational costs of elements developed, to optimize processes and to decide if the feasibility of proposal, To identify social and economic benefits of applying composite-based elements and to design a strategy to stimulate preferences.
<p>Activities</p> <ul style="list-style-type: none"> Sustainability assessment: <ul style="list-style-type: none"> – Life-Cycle Assessment LCA, – Life-Cycle Costing LCC, – Social Life-Cycle Assessment SLCA. 	<p>Challenges</p> <ul style="list-style-type: none"> Input data complex to collect  Technical knowledge required  Legal & legislation barriers  Technology readiness level 

Expected outcomes

- Usage of raw materials coming from renewable sources,
- Implementation of recycling and reuse of materials,
- Implementation of green chemistry principles.

