

# ECOCOMPOSITES

## Developing bio-based and recyclable composites



[r-lightbiocom.eu](http://r-lightbiocom.eu)



[mc4-project.eu](http://mc4-project.eu)



[furhy-project.eu](http://furhy-project.eu)



[forest-project.eu](http://forest-project.eu)



[repxyble.eu](http://repxyble.eu)



[suspensproject.eu](http://suspensproject.eu)

The EcoComposites Cluster brings together six Horizon Europe research projects fully committed to transforming composites in more sustainable materials through innovations like bio-based alternatives and recycling technologies. Targeting applications in sectors such as transport and construction, we aim to expand the reach and impact of our research, fostering greater visibility, acceptance and adoption of innovative solutions that address pressing global environmental challenges and align with EU Green Deal objectives.

Composite materials are valued in many industries for their lightweight, strength, versatility and adaptability. They are found in almost all areas of daily life: from car structures to construction applications over to aircraft components. Their main advantage lies in the high strength-to-weight ratio, which allows for lightweight yet durable structures, allowing manufacturers to adapt these materials to specific application requirements. However, traditional composites, typically derived from fossil fuels, pose significant environmental concerns. These materials contribute to high emissions, generate substantial waste, and are challenging to recycle. Their production processes are also energy-intensive and costly, further straining resources.

The projects of the EcoComposites Cluster are addressing these challenges by pioneering innovation in sustainable composite technologies. Our initiatives aim to mitigate the environmental impact of composite materials throughout their entire life cycle -- from production and use to disposal, and beyond with recycling. Our key priorities include reducing emissions and energy consumption, advancing efficient recycling methods, and promoting circular value chains to minimize waste and reliance on non-renewable resources. We are creating solutions that not only improve the sustainability of composite materials, but also support their adoption across industries, paving the way for a greener future.

**Join us in shaping and driving the future of eco-friendly, bio-based and recyclable composites.**

The EcoComposites Cluster has been established by ICONS in the context of the Horizon Results Booster services delivered to r-LightBioCom (GA N. 101091691), MC4 (GA N. 101057394), FURHY (GA N. 101091828), FOREST (GA N. 101091790), REPOXYBLE (GA N. 101091891), SUSPENS (GA N. 101091906). Views and opinions expressed do not reflect those of the European Commission. The European Commission cannot be held responsible for them.

