

Press release :
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A new LIFE Project aims at manufacturing bio-based epoxy resins by partially replacing BPA with lignin biomass.

7 Partners kick-started the LIFE project VIABLE on November 29, 2021 .



VIABLE stands for '*Valorization of lignin biomass into competitive components gradually replacing BPA in the formulation of Epoxy resins*'.

Bisphenol A (BPA) is a commodity chemical produced world-wide in a large volume every year. It is used in the production of epoxy resins and polycarbonates. However, its endocrine disrupting properties and its fossil-based composition raise concerns about its environmental impact and health toxicity as well as its sustainability. The VIABLE project therefore aims to improve the sustainability and the environmental impact of epoxy resins manufacture by lowering the BPA content in the formulation of epoxy resins by 20 to 50%.

The kick off meeting of the project took place on November 29th, 2021 in an online format with the 7 consortium partners, each highly specialized and recognized in its field:

- **VITO, as a co-initiator of Biorizon Shared Research Center** (Vlaamse Instelling voor Technologisch Onderzoek, BE) (Coordinator of the project)
- **CIMV** (Compagnie Industrielle de la Matière Végétale, FR)
- **SOLVAY** (UK)
- **HP Composites** (IT)
- **CRF** (Centro Ricerche Fiat, IT)
- **APESA** (FR)
- **POLYMERIS** (FR)

The project will scale up a breakthrough solution by gathering all stakeholders of the value chain to develop **lignin-based epoxy resins at a pre-industrial scale**. The solution developed by the consortium will constitute a **unique reference of bio-based material**.

CIMV will provide its expertise in lignin reactivity and will produce organosolv lignin. Through their LIGNOVALUE pilot plant, **VITO**, as a co-initiator of Biorizon Shared Research Center, will ensure the depolymerisation of lignin, the fractionation and the supply of bio-based alternatives for BPA to **SOLVAY** who will produce the lignin-based epoxy resins. **HP composites** will integrate the new epoxy resins in composites for both aesthetic and structural car parts. **CRF** will demonstrate the feasibility of these car components. In parallel, **APESA** will be in charge of monitoring the different impacts of the project. Dissemination and valorization of the results will be performed by **Polymeris**.

The LIFE VIABLE project is planned to be ongoing for four years. The project has an overall budget of €3 371 078, and receives a €1 854 090 contribution of the LIFE Programme of the European Union (*LIFE20-ENV-BE-000671*).

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