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Mein Zeichen: PM
15.05.2015

Project Title: CroCO2PETs “Cross-linkable CO_2-Polyether polyols”
Partner: Covestro, DE
Institut für Textiltechnik, RWTH Aachen (ITA), DE
Institut für Kunststoff Verarbeitung, RWTH Aachen (IKV), DE
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Technische Universität Berlin (TUB), DE
Project duration: 01.04.2015 – 31.12.2018

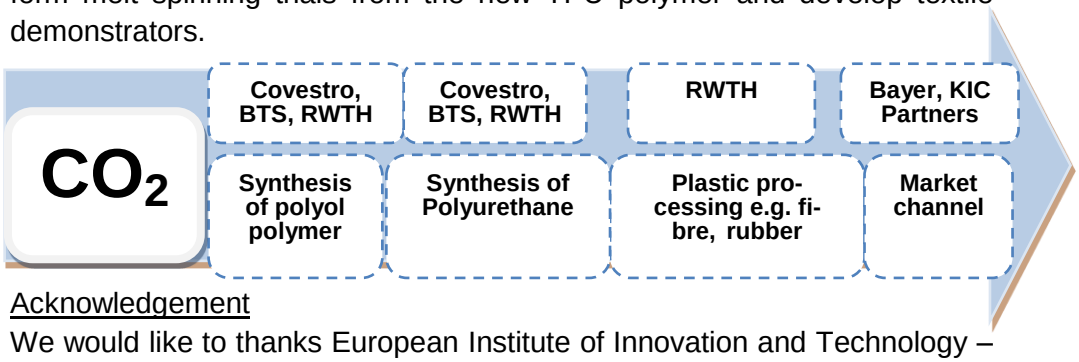
Funding agency: European Institute of Innovation & Technology

Mission Statement

This project is aimed to cope with global challenges of resource conservation and climate change through conversion of carbon dioxide from industrial emission into high grade plastic material suitable for being used in production of automobile parts, furniture, shoes and insulation material. The goal of the proposed project “CroCO_2PETs” relates to application of cross-linked CO_2 based polyol-polyurethane polymers as textile fibres, rubber and composites.

Solution:

Carbon dioxide is being used to develop carbon building blocks for production of polyol polymers, which will be further processed to develop polyurethane (PUR) having the equivalent properties like standard PUR. Thermoplastic polyurethane (TPU) will be melt spun into textile grade filament, suitable for further applications. Institut für Textiltechnik, Aachen will perform melt spinning trials from the new TPU polymer and develop textile demonstrators.



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