Case studies based on peer-reviewed Life Cycle Assessments – Carbon footprints of different carbon-based chemicals and materials

As climate change becomes more acute, the need to replace fossil carbon with renewable sources cannot be overlooked. Communicating the beneficial performance of materials and chemicals made from renewable carbon is crucial for the transition to a sustainable economy. However, in order to raise awareness and accelerate important policy decisions, practical examples are missing.

In November 2023, the Renewable Carbon Initiative (RCI) published a brochure of peer-reviewed Life Cycle Assessment (LCA) case studies focusing on the product carbon footprint. LCA is an internationally standardised and scientific method for analysing the impact on climate change. Therefore, LCA case studies provide a suitable instrument for providing scientific and comprehensible examples of substituting fossil with renewable carbon.

Currently, nova is working on behalf of the RCI on an addition to that brochure to include up to seven other case studies of renewable carbon products from RCI members. The aim of the case studies is to inform the public with scientifically validated yet digestible knowledge and to support decision-makers in their transformation to a renewable carbon industry. Those new case studies and the format of showing complex LCA information in this digestible way will be presented in this presentation.