

Date of poster presentation: 11 April 2022

The quest for renewable carbon

Bos HL, Smeding IW

Wageningen University & Research, the Netherlands

The transition towards a fossil free society (phasing out coal, oil and natural gas) urges us to rethink the feedstock provision for carbon based materials, such as textiles, plastics (packaging, building materials), etc. The transition towards renewable carbon sources for materials adds an extra entry point in the Water-Food-Energy Nexus.

Basically only three options/transition pathways are available for the production of renewable carbon for materials: biomass, CO₂ capture and use, and use of recycled carbon based materials.

To realise the transition to a fossil-free, circular and biobased economy, support from society on this transition is required. We have further developed the vision and transition pathways, to a more tangible picture and roadmap, and subsequently are developing a narrative to help disseminate this vision and turn it into an action plan for relevant groups within and outside WUR.

Keywords: Fossil free, renewable carbon, transition pathways, textiles, plastics