

About prospects and challenges of a bio-based industry



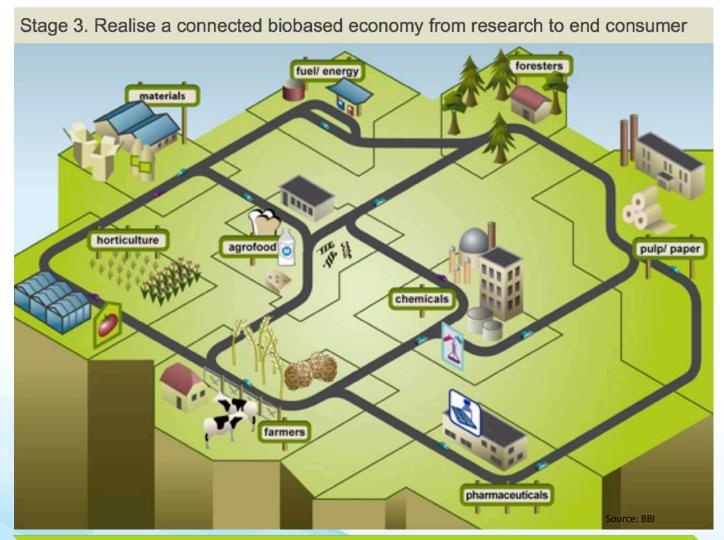
Stage 1. Reinforce innovation and extend current infrastructure across the economy



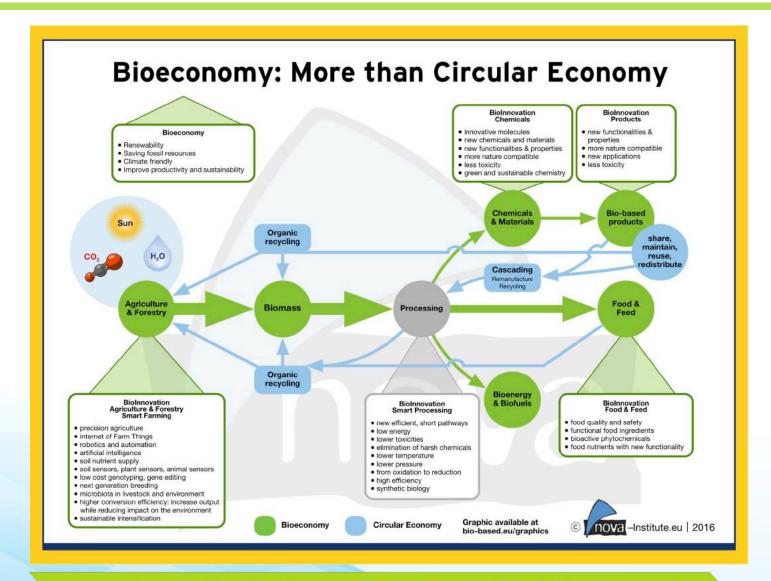


Stage 2. Build and strengthen value chains across industry sectors foresters fuel/ energy materials horticulture agrofood o pulp/ paper chemicals farmers pharmaceuticals Source: BBI









Example for a marketable added value chain: **BIOPLASTIC**



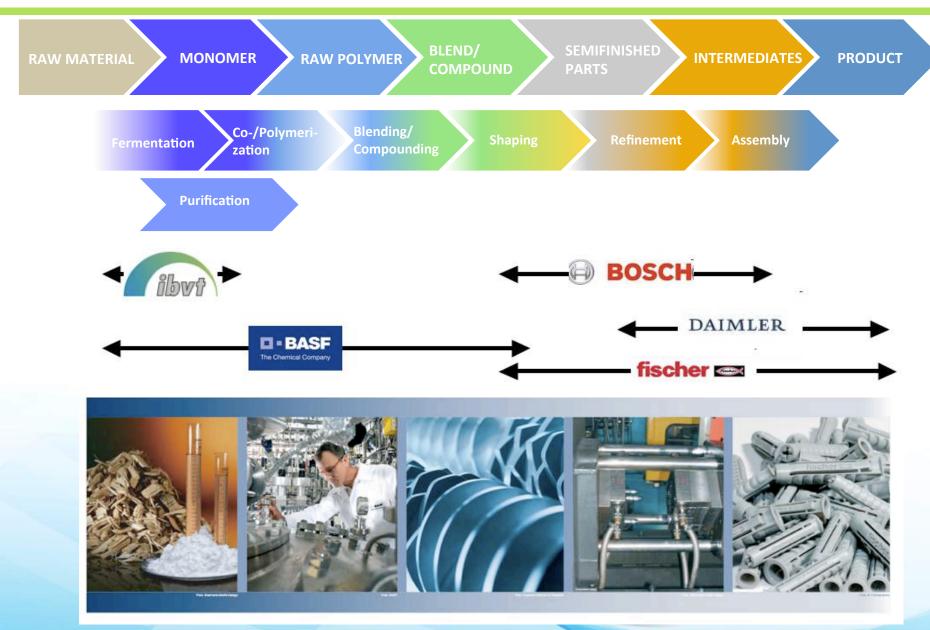
RAW MATERIAL MONOMER RAW POLYMER BLEND/ COMPOUND SEMIFINISHED INTERMEDIATES PRODUCT

Fermentation Co-/Polymerization Blending/ Compounding Shaping Refinement Assembly

Purification







Suggested value added chain 1 for DanuBioValNet: **ADVANCED-PACKAGING**





Bio-Plastic

Biodegradable & Bio-based nondegradable Est. increase from now 1.4 to 7.7 Mio t (2020)

Reaches in Every Market

Drop-in or new material properties

> Paper 8 Pulp





Indoor Environmental Quality

> Water Efficiency

Durable and Maintainable Design

> Energy Efficiency

Eco Friendly Material Use

> Waste Reduction

Suggested value added chain 3 for DanuBioValNet: PHYTO-PHARMACEUTICAL





Plant based

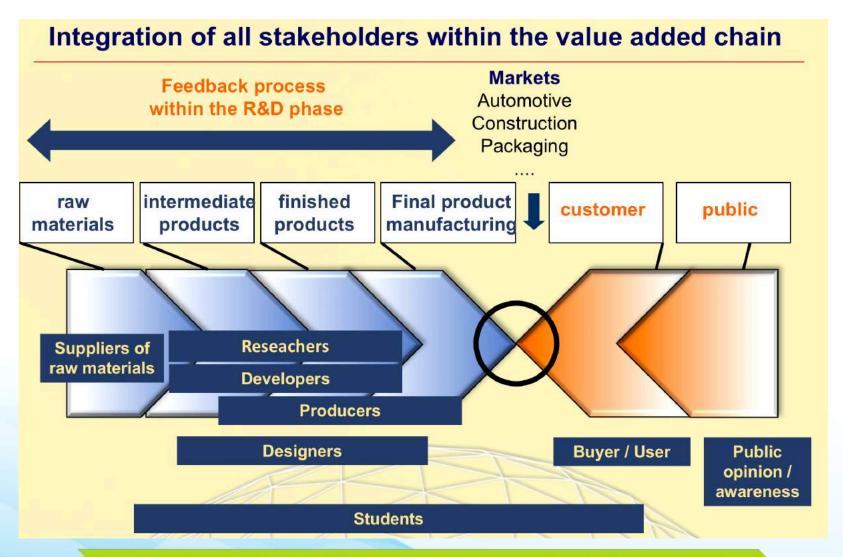
1 or more active substances

Rational, scientific data, Clinical trial

Rational High Value

Matching industry and consumer





9 EU countries + 5 non-EU countries; 1/5 of EU's territory 114 million people





15 Project Partners + 2 Associated Partners **10** Countries **Danube Transnational Programme DanuBioValNet** Slovakia Germany **BIOPRO Baden-Württemberg** Prounion **GmbH** Romania ClusterAgentur Baden-Ministry of Economy Czech Republic Württemberg Clustero Germany Institute of Economical Slovakia Ukraine **Forecasting** Hungary Austria Moldova evenia Croatia Romania Czech Republic Bosnia and National Cluster Association Herzegovina Serbia **Austria** Montenegro Foodcluster OÖ Bulgaria Bulgaria Cleantechcluster OÖ Association of Slovenia **Bulgarian Clusters** Ministry of Science Serbia Institute of Mechanical Anteja ECG Croatia -Engineering Ministry of Economy, **Entrepreneurship and Crafts** Croatian Wood Cluster Danube Transnational Programme area



Workflow of the DanuBioValNet project





Phase 1 - Data Survey

Phase 2 – Establishing bio-based networks

WP1 - PROJECT MANAGEMENT - LEAD BIOPRO

WP2 - COMMUNICATION - LEAD NCA

WP3 - VALUE CHAIN MAPPING - LEAD ANTEJA

WP4 - STRATEGY/POLICY ACTION - LEAD MIZS

WP5 - TOOL DEVELOPMENT - LEAD CLUSTERO

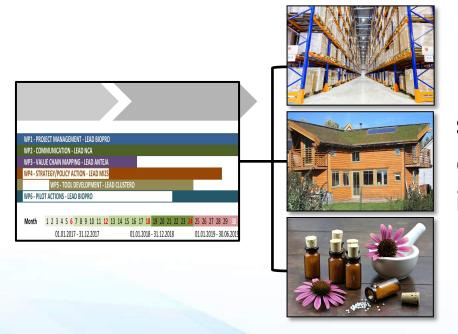
WP6 - PILOT ACTIONS - LEAD BIOPRO

Month

1 2 3 4 5 **6** 7 8 9 10 11 **12** 13 14 15 16 17 **18** 19 20 21 22 23 **24** 25 26 27 28 29 30 01.01.2017 - 31.12.2017 01.01.2018 - 31.12.2018 01.01.2019 - 30.06.2019

DanuBioValNet is **groundbreaking** for further projects

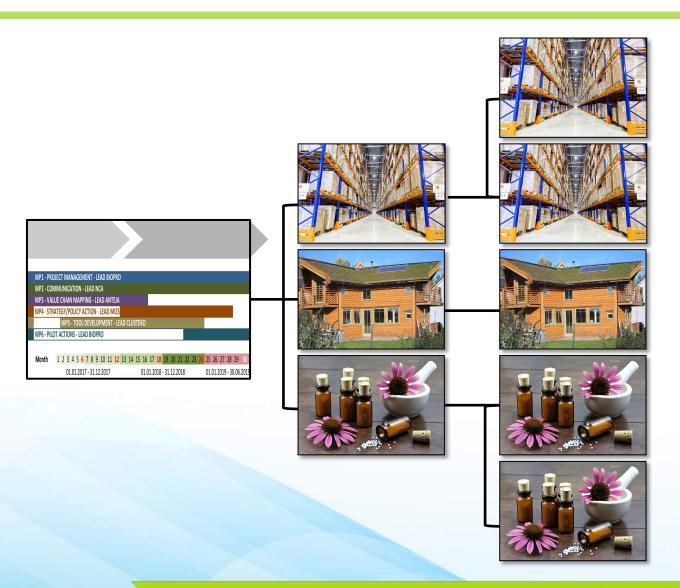


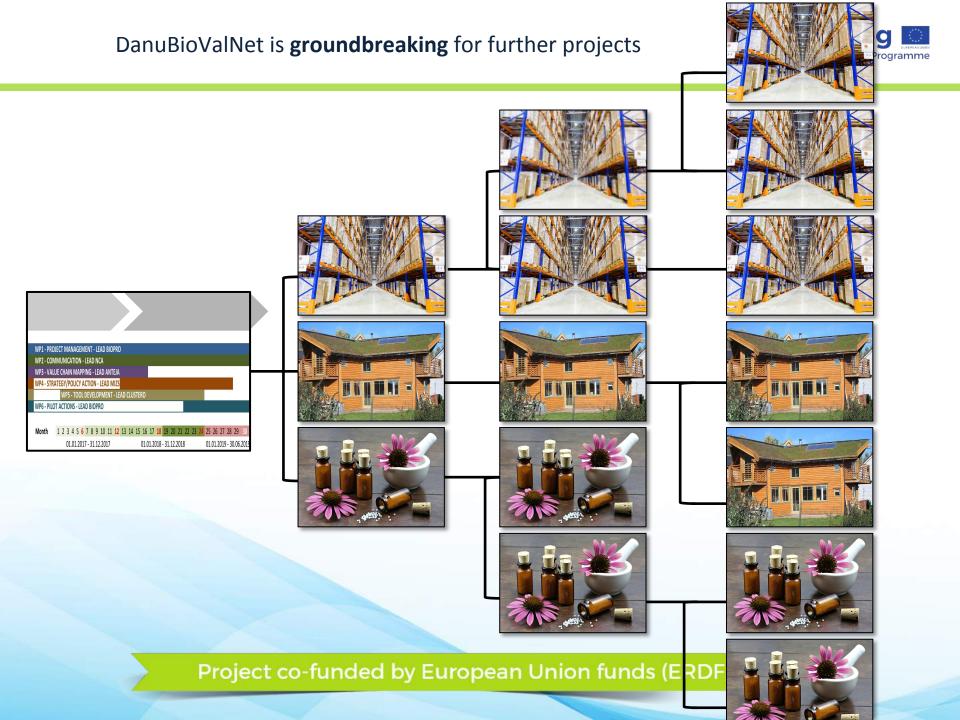


Further projects based on DanuBioValNet's activities will strengthen and secure dissemination of the bio-based industry; Funding schemes (Cosme, Horizon2020/FP9, regional development funds,...)

DanuBioValNet is **groundbreaking** for further projects







We believe in a shared value development









Because innovative product scenarios in Bioeconomy offer the chance to develop **new business models** on a regional, state-wide, country-wide and **pan-European level**

But there are also big threads!!!









Exaggerated intensification of monoculture crop growing



Destroying biodiversity by massive wild harvesting



DanuBioValNet



THANK YOU FOR YOUR ATTENTION

