



Mazowsze Regional webinar Power4Bio project

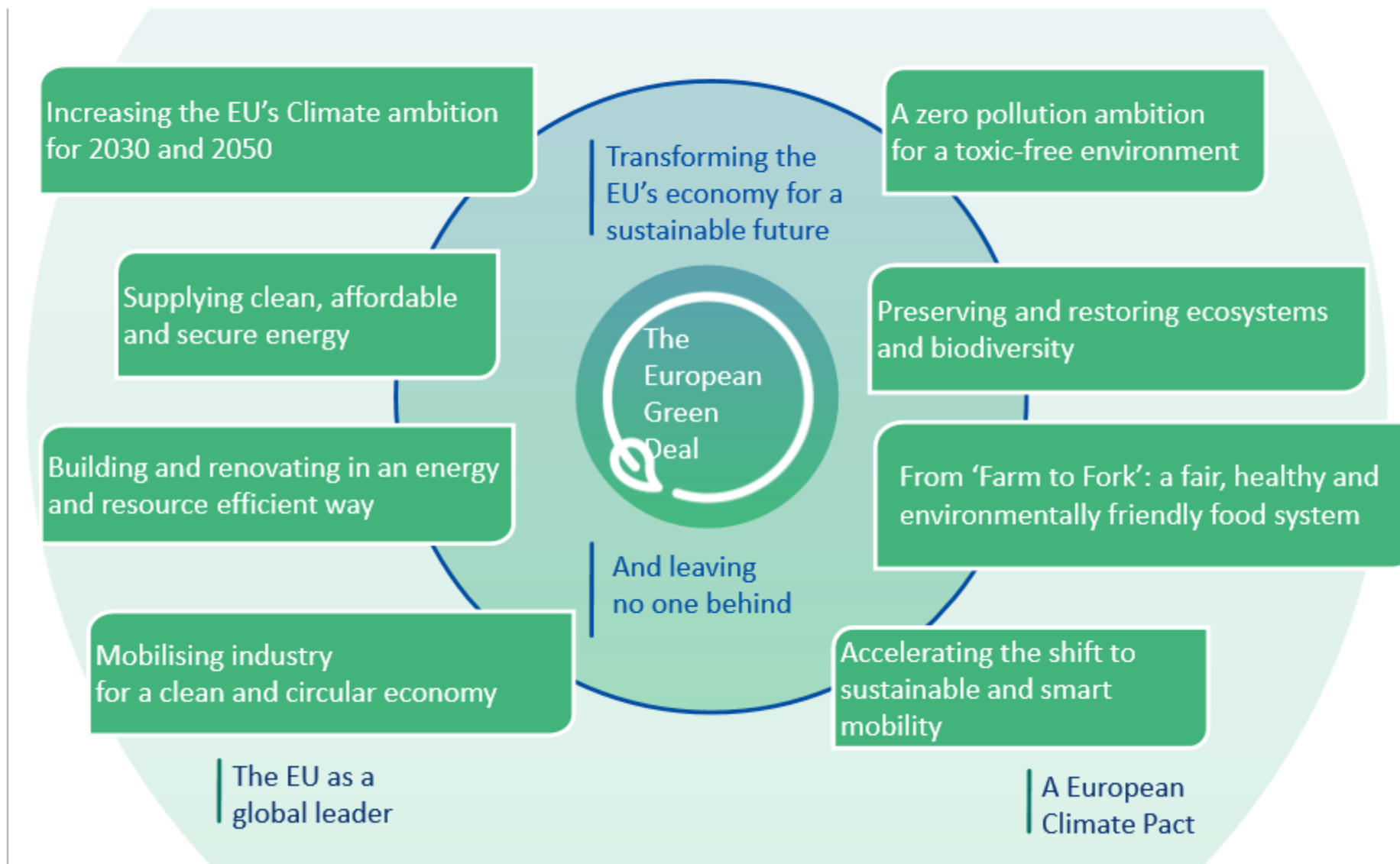
29 March 2021

RTD C1 - Circular Economy and Bio-based Systems
Tomasz Calikowski

Bioeconomy in Europe: context

- It is estimated that the bioeconomy contributes to almost **9% of the EU-27 labour force** and **4.7% of the EU-27 GDP**. As a concrete operationalisation of the bioeconomy, **more than 2,300 bio-based plants** have been mapped by the Joint Research Centre across Europe.
- To fully reap the economic, social and environmental benefits of the bioeconomy, dedicated **bioeconomy strategies, investments and innovation** are required at all levels in the EU. That is why the updated **European Bioeconomy Strategy of 2018** states the need for the development of **national and regional bioeconomy strategies**.
- The European Commission supports the **BIOEAST initiative**, which will facilitate the development of national bioeconomy strategies in Central and Eastern Europe.
- **HORIZON 2020**: Under Horizon 2020, the European Commission already dedicated **€3.85 billion of public funds into bioeconomy projects** over the past seven years, yet further research on innovative bioeconomy areas is needed and will be financed through **Horizon Europe** (2021-2027).
- **THE LINK BETWEEN THE BIOECONOMY AND THE COVID-19 RECOVERY**: The bioeconomy will play an integral role in spurring on the EU recovery from the COVID-19 crisis by **aligning the economy with the biosphere**. The bioeconomy will thus improve resilience and competitiveness, providing long-term systemic solutions, and ensuring a just transition.

The European Green Deal – new economic model for EU



Bioeconomy and the European Green Deal

A **circular and sustainable bioeconomy** has the potential to contribute to all dimensions and objectives of the European Green Deal by:

- Delivering on **Europe's economic prosperity** and ensuring a **fair and just transition**.
- Producing **fossil-free materials** for a **climate-neutral future**.
- Enhancing the **protection of the environment** and ecosystems.

For instance:

- **CLIMATE PACT AND CLIMATE LAW** Carbon sequestration in soil, blue carbon and forests and its storage in harvested wood products, together with material substitution of fossil-based products (plastics, energy, textiles), can generate significant carbon savings and make us fit for -55% by 2030.
- **PROMOTING CLEAN ENERGY** Unavoidable biowaste can be converted into energy including biofuels for sectors in which electrification will remain challenging (aviation, maritime).
- **STRIVING FOR GREENER INDUSTRY** Circular use of biomass promotes resource efficiency and stimulates the production of high added-value products from side and waste streams. Bark residues, e.g. can be used for extraction of protective compounds used for non-toxic treatment of wood-based construction materials

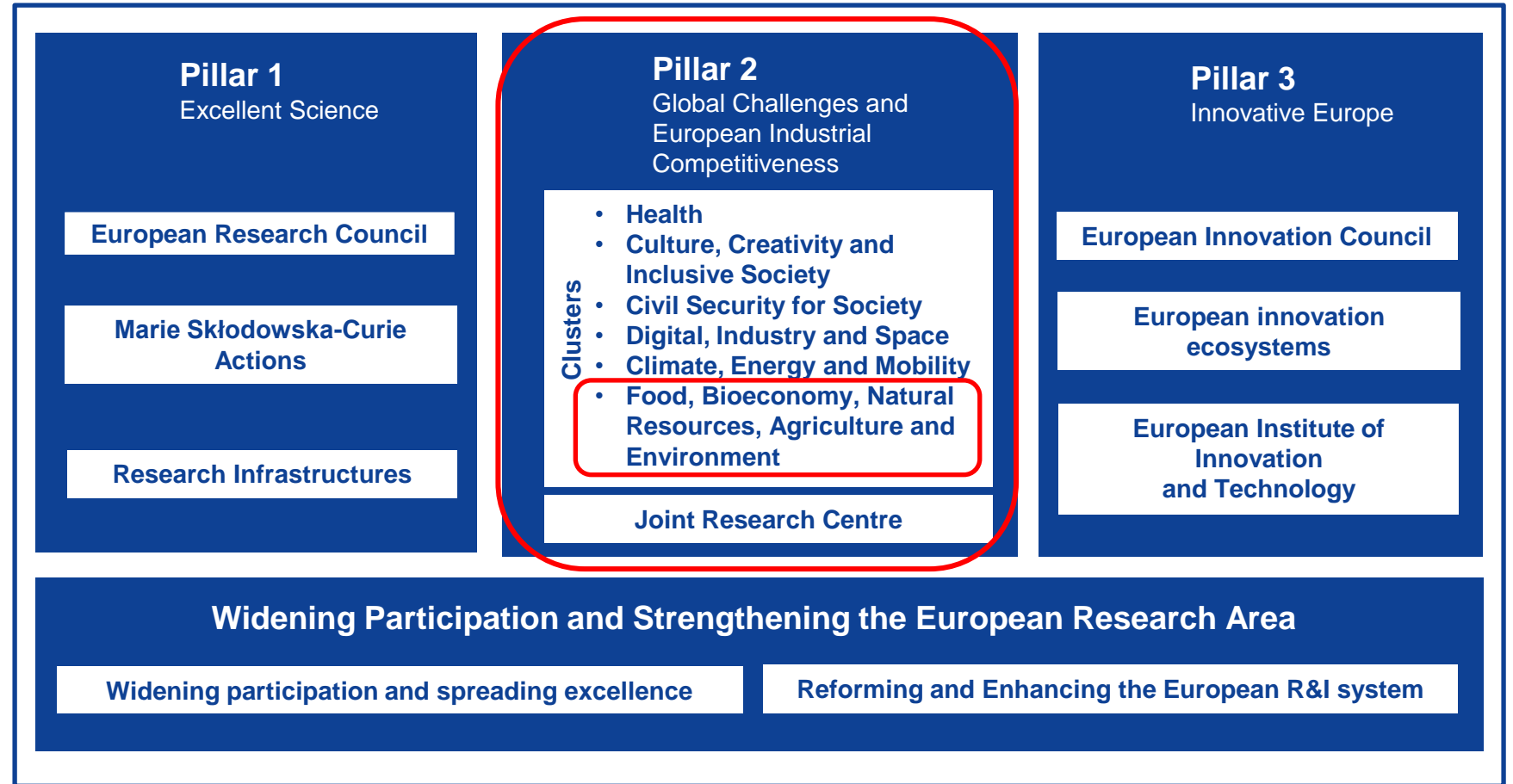
Horizon Europe - Structure

Horizon Europe

THE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021 – 2027)



(2021 – 2027)



Horizon Europe Cluster 6

Food, Bioeconomy, Natural Resources and Environment

with 7 'Destinations'

Destination 1: Biodiversity and Ecosystem Services

Destination 2: Fair, healthy and environmentally-friendly food systems from primary production to consumption

Destination 3: Circular economy and bioeconomy sectors

Destination 4: Clean environment and zero pollution

Destination 5: Land, oceans and water for climate action

Destination 6: Resilient, inclusive, healthy and green rural, coastal and urban communities

Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

Destination 5: Land, oceans and water for climate action

CLIMATE PACT AND CLIMATE LAW

PROMOTING CLEAN ENERGY

INVESTING IN SMARTER, MORE SUSTAINABLE TRANSPORT

Destination 1: Biodiversity and Ecosystem Services

PROTECTING NATURE

Destination 3: Circular economy and bioeconomy sectors

STRIVING FOR GREENER INDUSTRY

Cluster 6 &

Destination 2: Fair, healthy and environmentally-friendly food systems from primary production to consumption



The European Green Deal

FROM FARM TO FORK



ELIMINATING POLLUTION

Destination 4: Clean environment and zero pollution



LEADING THE GREEN CHANGE GLOBALLY



ENSURING A JUST TRANSITION FOR ALL

Destination 6: Resilient, inclusive, healthy and green rural, coastal and urban communities



MAKING HOMES ENERGY EFFICIENT



FINANCING GREEN PROJECTS

Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

All Destinations

Horizon Europe Work Programme 2021-22

Timing:

- 8-28 March Inter-service Consultation (European Commission)
- 29 March – 9 April: final revision
- 21 April: Cluster 6 shadow Programme Committee consultation
- 2nd week of May: indicative adoption (tbc)
- End May: Info Days (central and national)

Bio-based Industry Joint Undertaking (BBI JU)



- Established as one of key actions of EU Bioeconomy Strategy (2012)
- Implemented under Horizon 2020 (2014 – 20)
- A success story: Reducing CO2 emissions – Enhancing sustainability and circularity - Making efficient use of resources – High participation of Small and Medium sized Enterprises (SMEs)
- Budget: €3.7 billion initiative: €975 million by the EU and €2.7 billion by the private sector, represented by Bio-based Industry Consortium; Public funding: ca. 820 million EUR, until 2019
- Seven annual calls completed, 123 projects, involving 924 beneficiaries in 37 countries;
- Call 2020 has been evaluated and results will become public soon
- More information: bbi-europe.eu

Circular Bio-based Europe (CBE) Partnership

The CBE partnerships links to the Bioeconomy Strategy (2018) Action Point 1.1 – *"Mobilise public and private stakeholders, in research, demonstration and deployment of sustainable, inclusive and circular bio-based solutions"*

Links with headline ambition	A European Green Deal
Cluster 6 expected impact (main)	Sustainable and circular management of natural resources; tackling pollution; bioeconomy
Lead DGs	RTD Form and timing Institutional (Art.187), launch in 2021
Partners	Industry (covering the bio-based industries sector as a whole), regional authorities, academia. The membership will build on the Bio-based industries Consortium (BIC).
Vision / main objective and achievements by 2030	Produce major contributions to the climate targets in 2030 and to pave the way for climate neutrality by 2050, and increased sustainability and circularity of production and consumption systems, in line with the European Green Deal. This will be achieved by developing and expanding the sustainable sourcing and conversion of biomass into bio-based products focusing on multiscale biorefinery processing, and by applying circular economy approaches such as utilisation of biological waste from agriculture, industry and municipal sectors. The deployment of bio-based innovation at regional scale for revival of rural and economically depressed regions.
Relation to partnerships under Horizon 2020	Successor of BBI JU
Results from previous evaluations/assessments	<ul style="list-style-type: none"> 🟢 Strong SME participation, broad geographic relevance, high economic impact 🔴 Better exploit potentials at macro regional level, synergy with other EU initiatives
Coherence with other Partnerships (priorities)	<ul style="list-style-type: none"> ▪ Carbon Neutral and Circular Industry, Rescuing Biodiversity, Water4All
Synergies with other programmes / initiatives	<ul style="list-style-type: none"> ▪ InvestEU, Regional Development Fund, Agricultural Fund, LIFE, European Maritime and Fisheries Fund, Circular Bioeconomy Fund

Thank you



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