

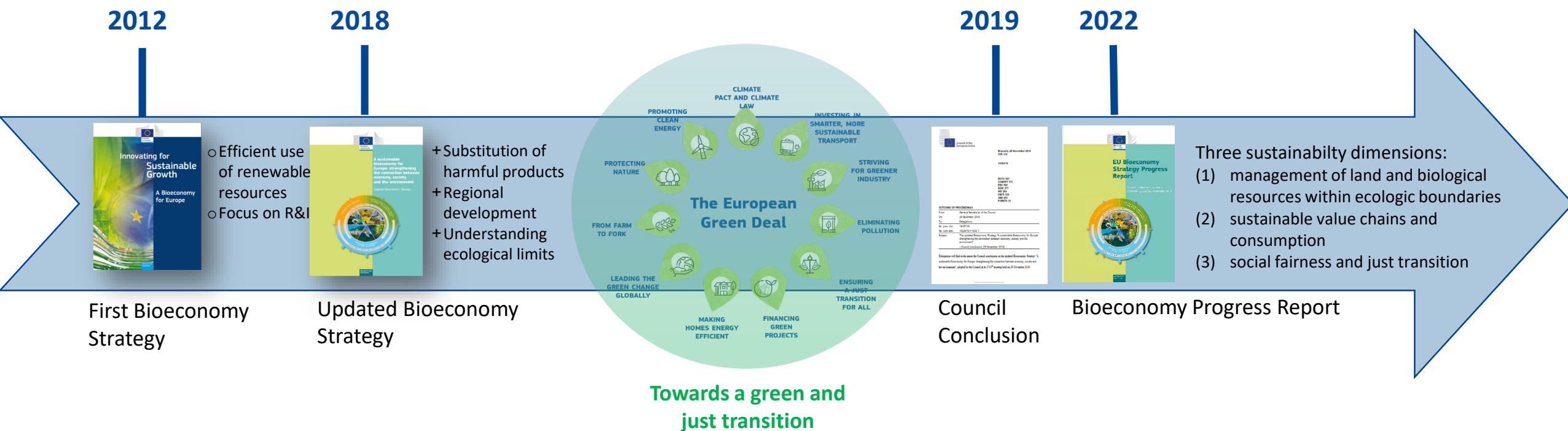


# EU Bioeconomy Strategy Progress Report

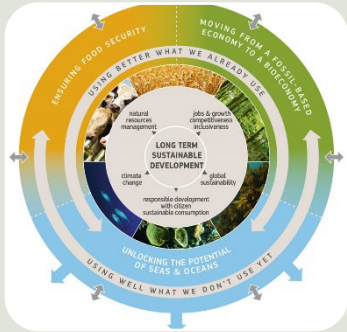
European Bioeconomy policy: stocktaking and future developments

*2022-10-20. CDG Starch*

# A decade of bioeconomy policy



# Objectives of the Progress Report



1 Report on the progress of the implementation of the 2018 EU Bioeconomy Strategy, as well as the general progress of the bioeconomy in Europe.

Lead

RTD

Co-owning DGs

AGRI

MARE

ENV

Associated

JRC

GROW

CLIMA



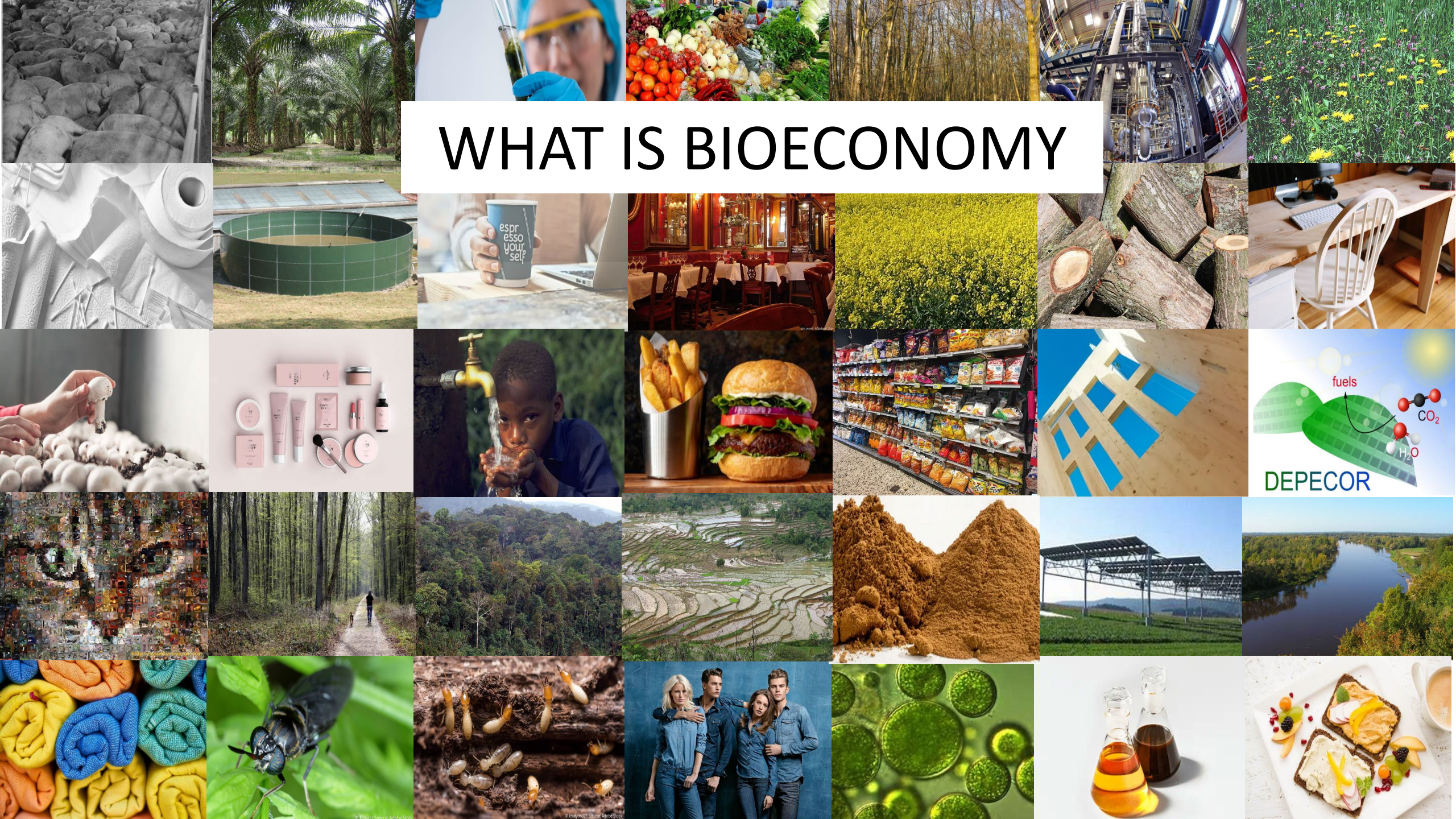
2 Frame the bioeconomy within the new policy context, e.g. the European Green Deal.

# EU Bioeconomy Progress Report

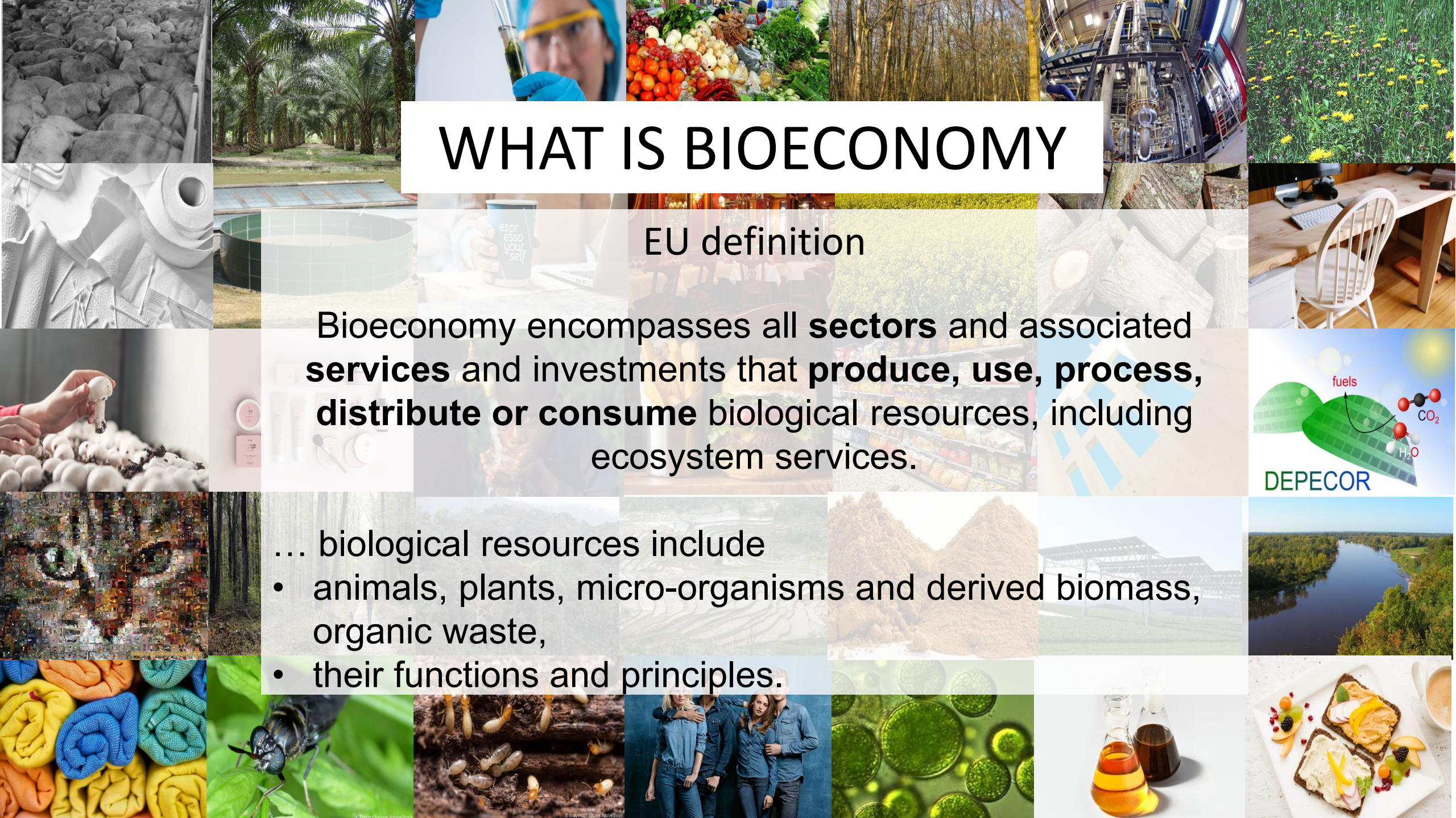
- Executive Summary
- 1. Introduction
- 2. What is bioeconomy?
- 3. General trends in the development of the bioeconomy in Europe
- 4. EU Bioeconomy Strategy objectives in the context of the European Green Deal
- 5. Progress of bioeconomy activities under the EU Bioeconomy Strategy Action Plan
- 6. Unlocking the opportunities of the bioeconomy



# WHAT IS BIOECONOMY







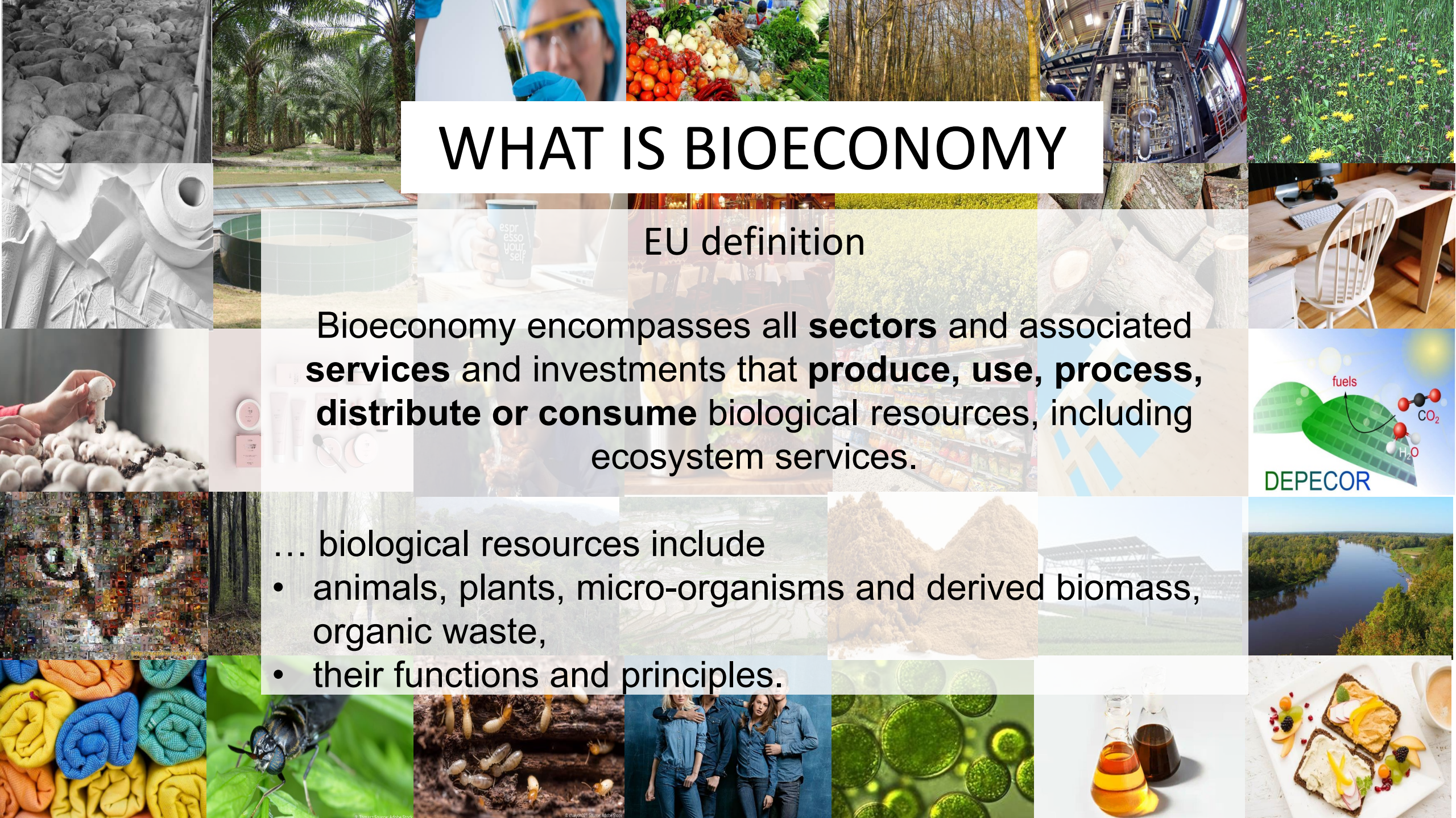
# WHAT IS BIOECONOMY

## EU definition

Bioeconomy encompasses all **sectors** and associated **services** and investments that **produce, use, process, distribute or consume** biological resources, including ecosystem services.

... biological resources include

- animals, plants, micro-organisms and derived biomass, organic waste,
- their functions and principles.



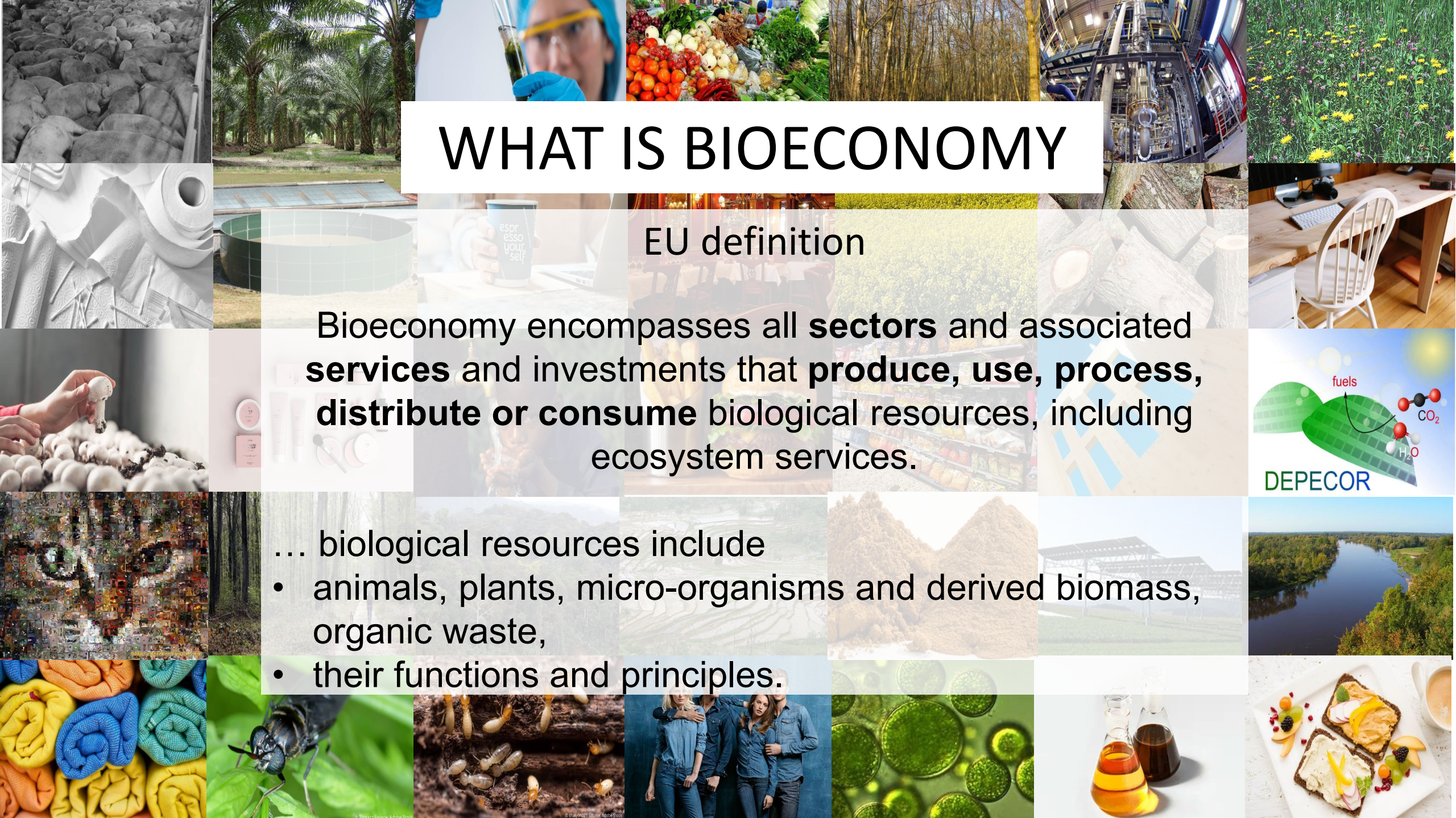
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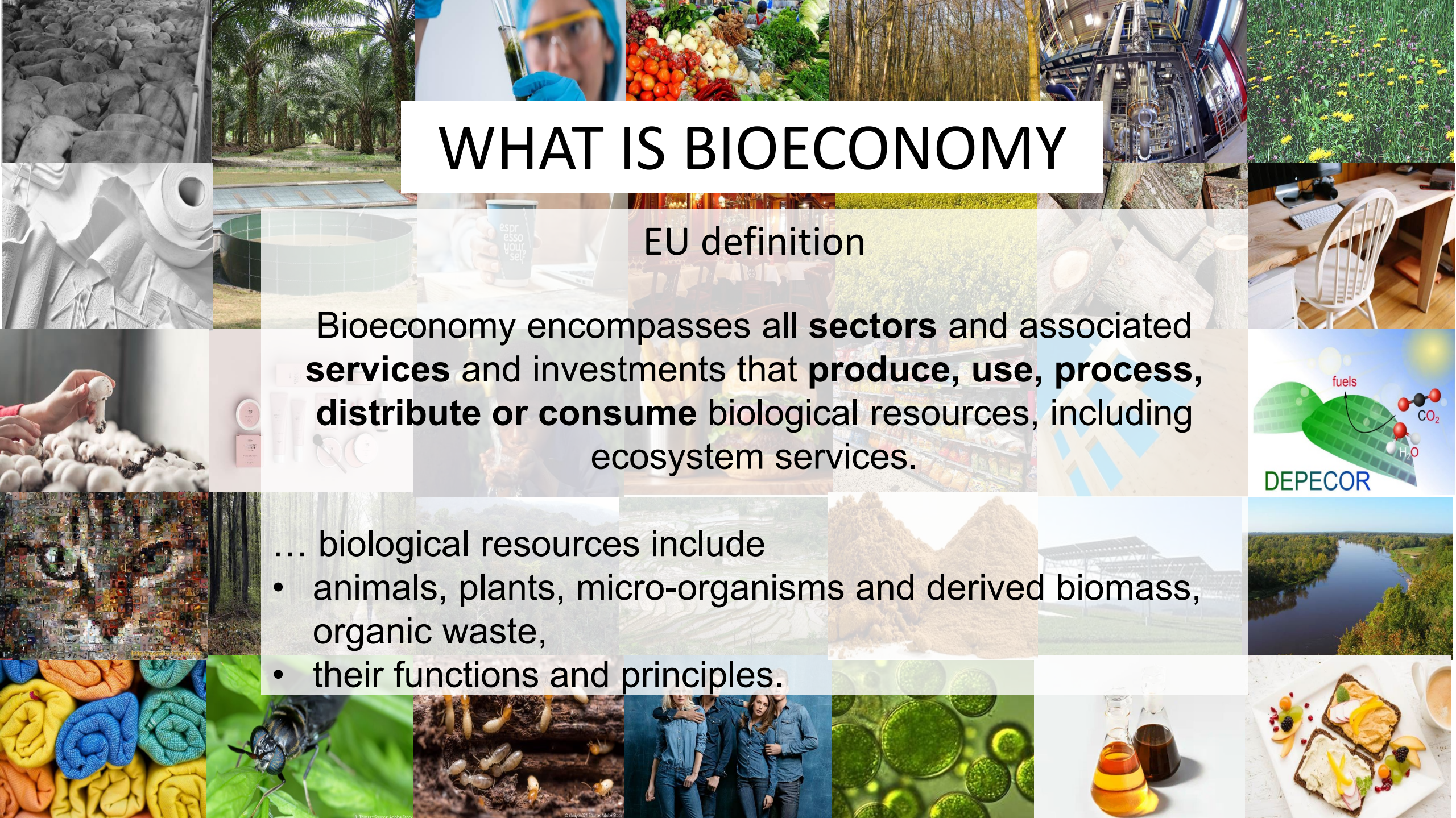
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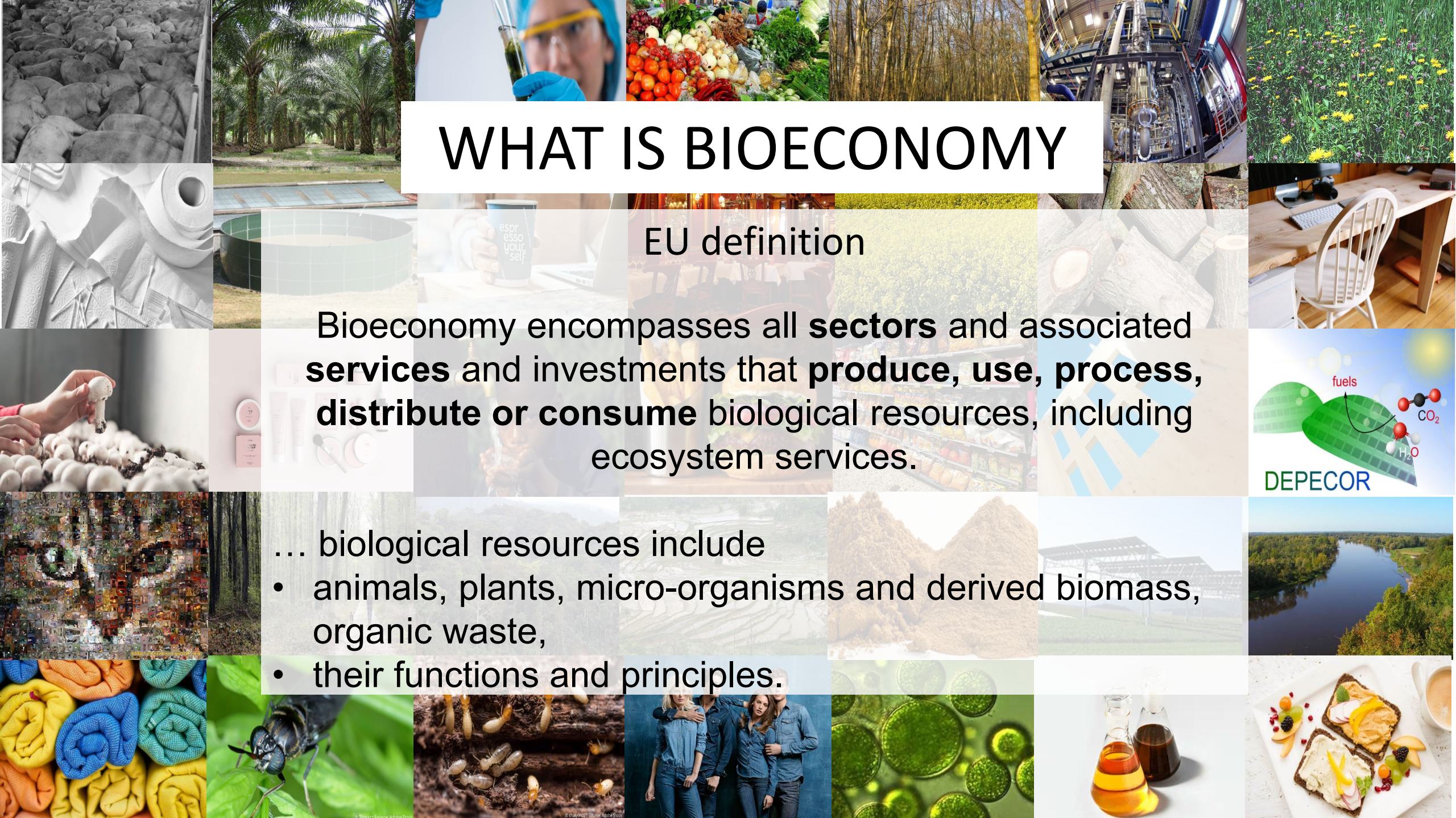
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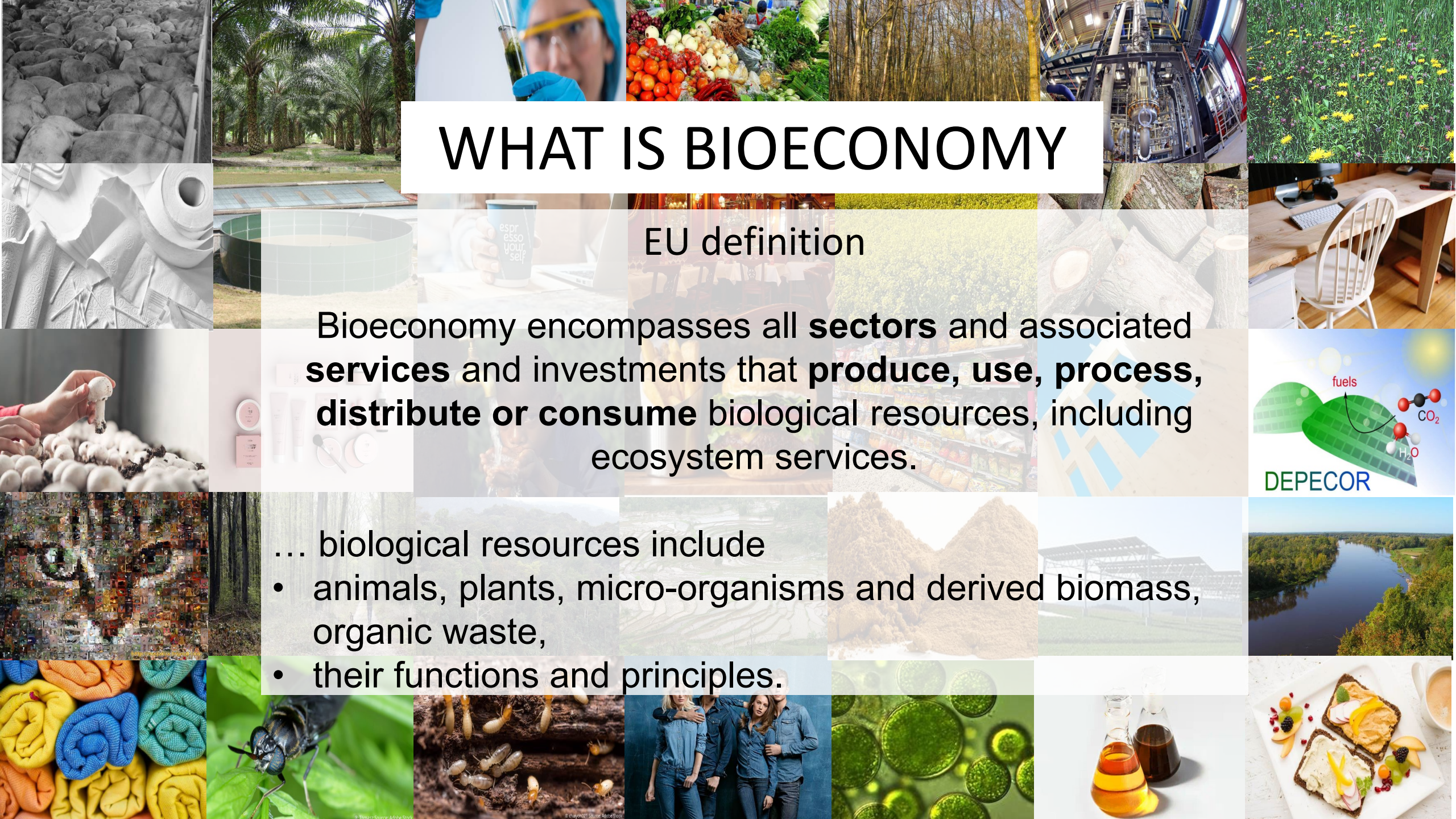
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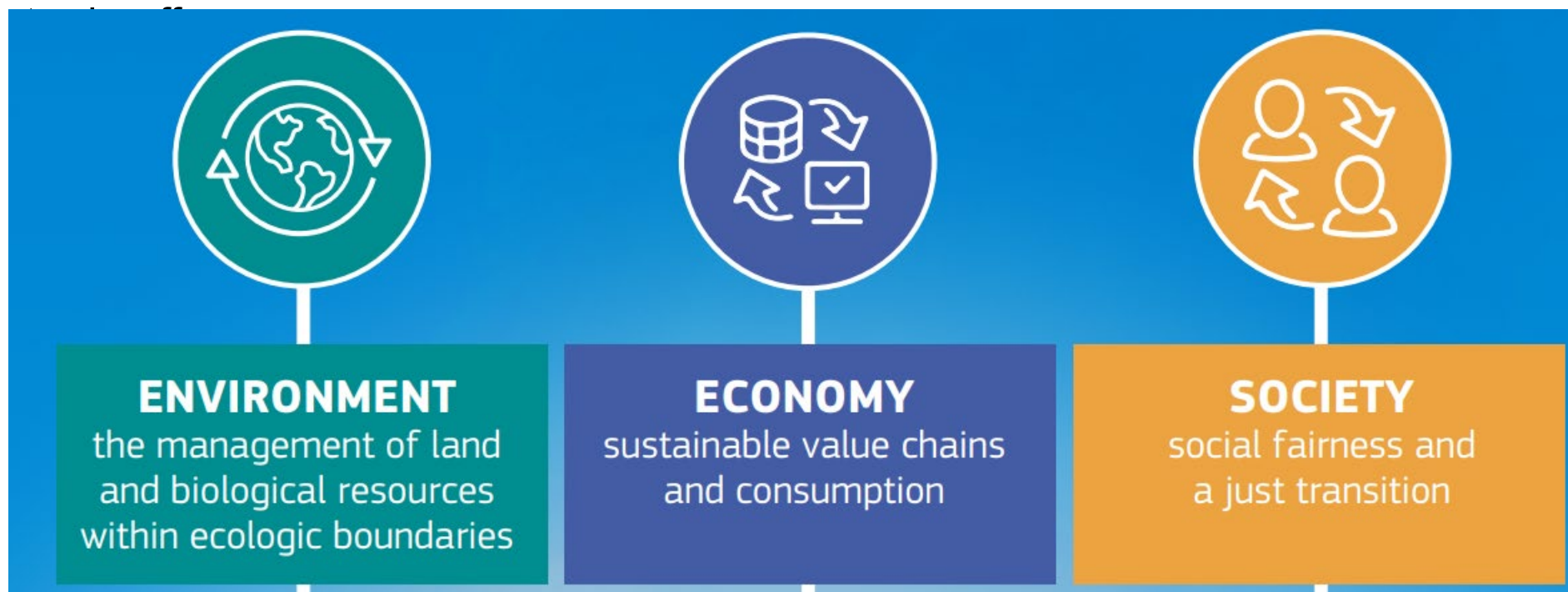
# What is bioeconomy policy?

... it is a natural enabler and result of the European Green Deal transformation.

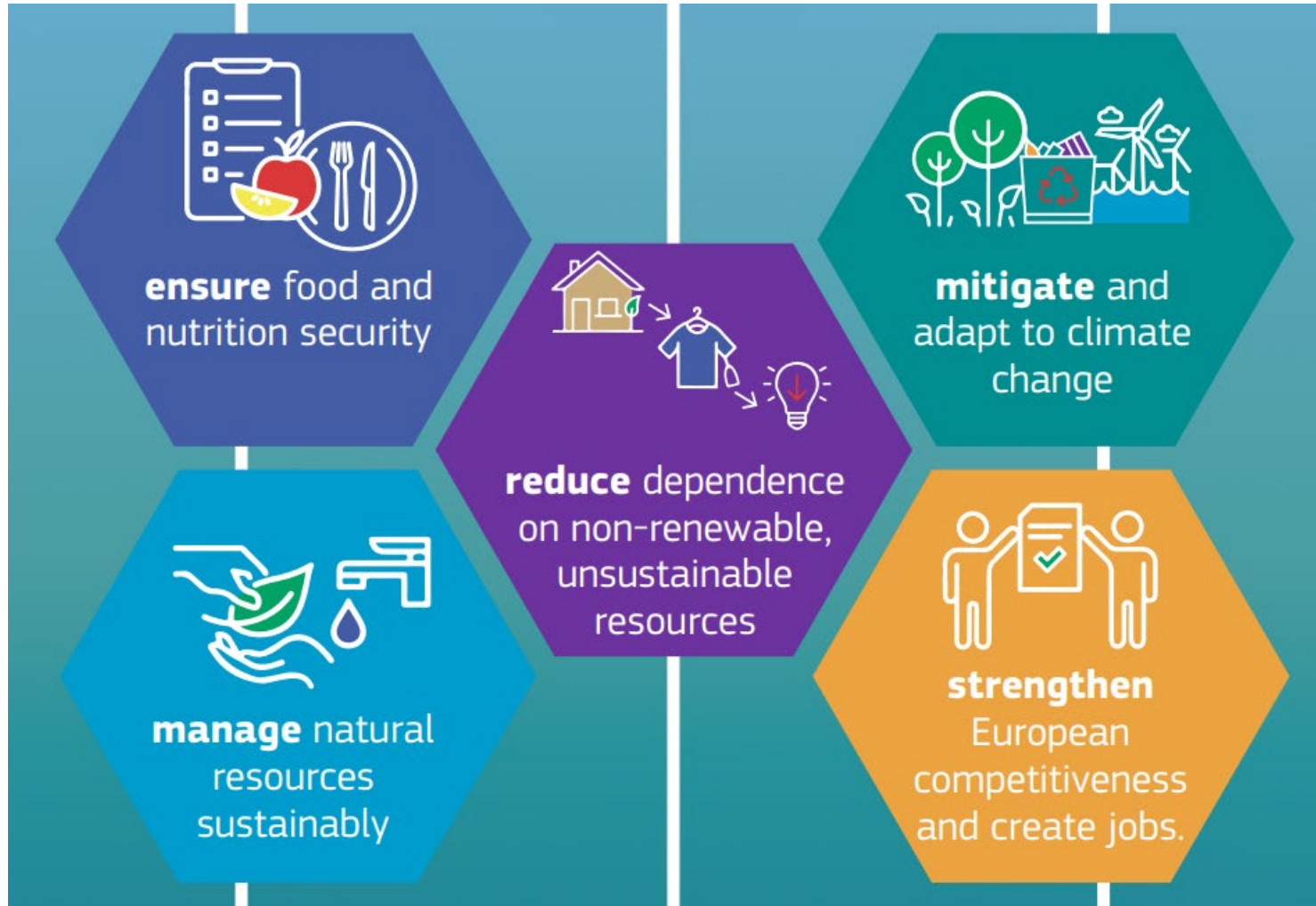
## EU bioeconomy policy

Bioeconomy policies take a cross-sectoral perspective to improve policy coherence and identify and resolve

Bioeconomy policies contribute to build a bioeconomy addressing all three dimensions of sustainability:

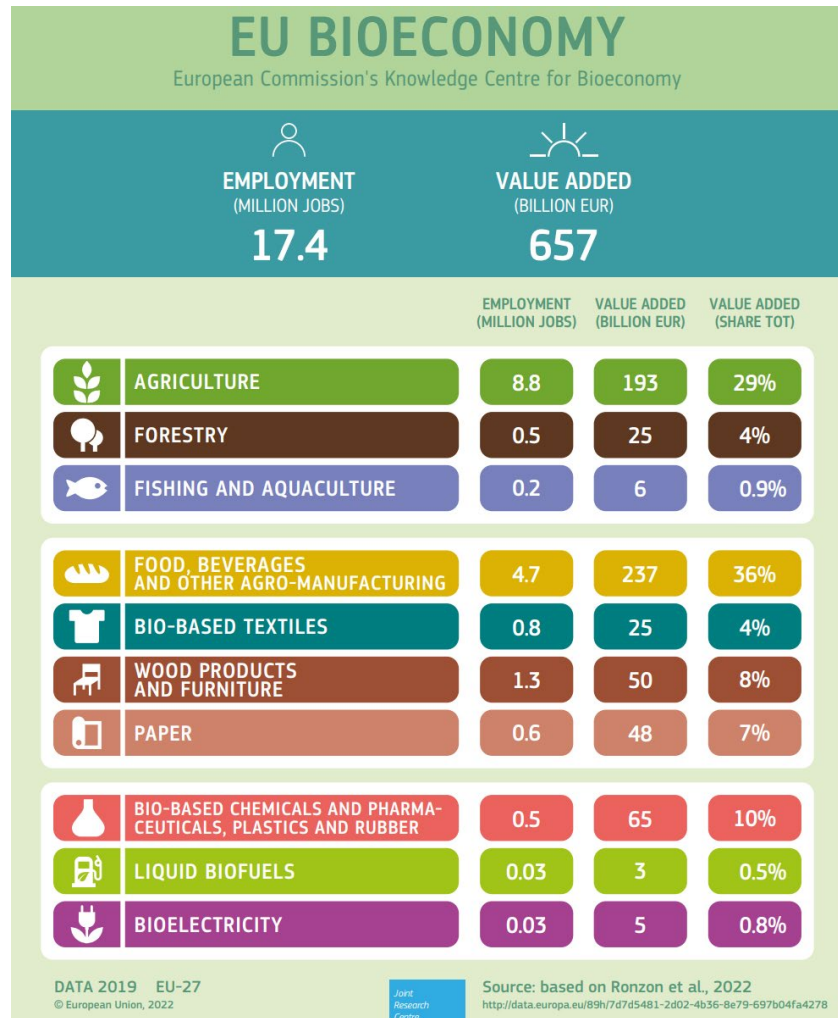


# Objectives of the EU bioeconomy policy





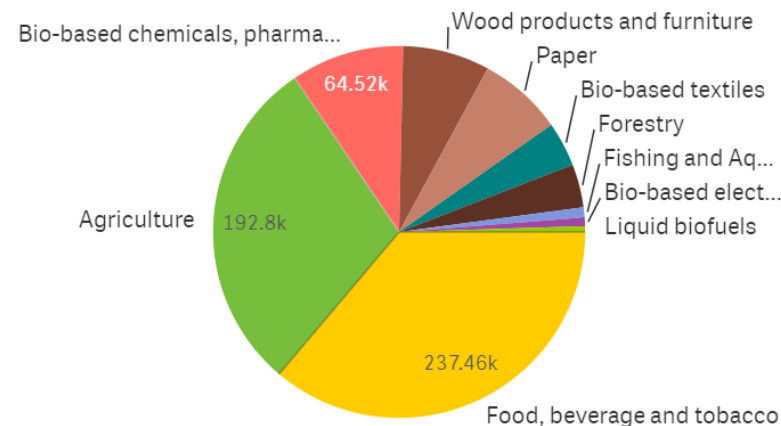
# Important innovations in food and other bio-based industries show the potential of the bioeconomy



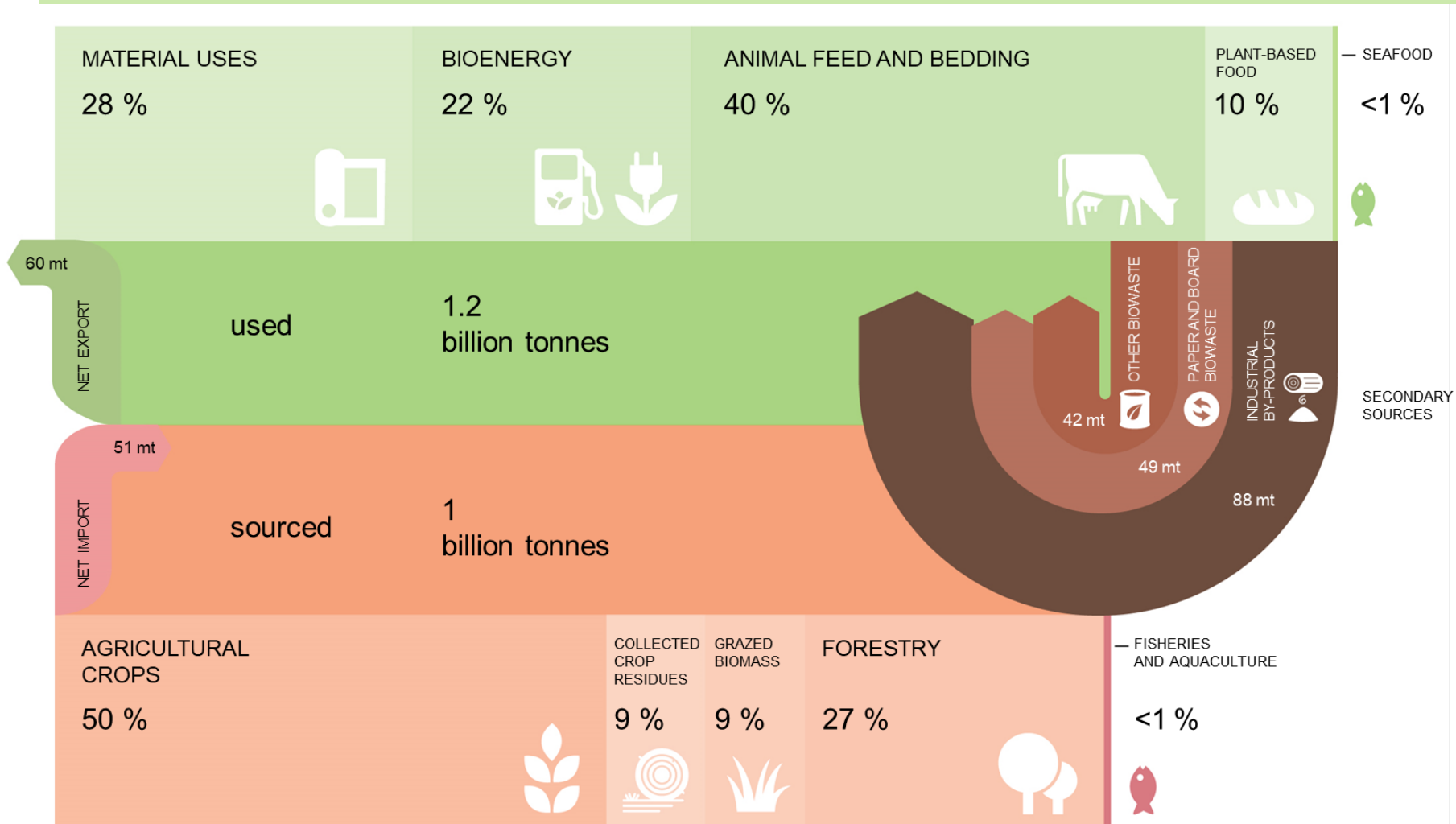
## Bioeconomy as key sectors of the EU's economy

- **~8.3%** of the EU's workforce
- **4.7%** of GDP
- High job creation potential in emerging bioeconomy sectors
- Potential for deployment of comprehensive bio-based solutions in rural, coastal and urban areas

**Value added by sector in EU27 (2019)**  
(million €)



# The main use of biomass is for food and feed; woody biomass is increasingly used.



Source: European Commission, Knowledge Centre on Bioeconomy, 2022

2017 data dry matter



# 2018 EU Bioeconomy Action Plan

14 actions in *three priority action areas*

Strengthen and scale up the bio-based sectors,  
unlock investments and markets

CBE-JU

ECBF

Blue bioeconomy  
forum

Deploy local bioeconomies rapidly across the  
whole of Europe

European Bioeconomy  
Policy Forum

BIOEAST

Understand the ecological boundaries of the  
bioeconomy

Knowledge Centre  
Bioeconomy

Bioeconomy Monitoring  
System

Horizon 2020 + Horizon Europe WP

1

STRENGTHEN AND SCALE-UP THE BIO-BASED SECTORS,  
UNLOCK INVESTMENTS AND MARKETS



Mobilise stakeholders in development and  
deployment of sustainable bio-based solutions



Launch the EUR 100 million Circular Bioeconomy  
Thematic Investment Platform



Analyse enablers and bottlenecks for the deployment  
of bio-based innovations



Promote and develop standards, labels and market uptake  
of bio-based products



Facilitate the development of new sustainable biorefineries



Develop new biodegradable products,  
including bio-based plastic substitutes

2

DEPLOY LOCAL BIOECONOMIES RAPIDLY ACROSS EUROPE



Launch a Strategic Deployment Agenda for sustainable food and  
farming systems, forestry and bio-based products



Launch pilot actions for the development of bioeconomies  
in rural, coastal and urban areas



Support regions and Member States to develop Bioeconomy Strategies



Promote education, training and skills across the bioeconomy

3

UNDERSTAND THE ECOLOGICAL BOUNDARIES  
OF THE BIOECONOMY



Enhance knowledge on biodiversity and ecosystems



Monitor progress towards a sustainable bioeconomy



Promote good practices to operate the bioeconomy  
within safe ecological limits



Enhance the benefits of biodiversity in primary production

# Boosting research & innovation in food and bio-based industrial sectors

- Bio-based Industries Joint Undertaking + Circular Bio-based Europe Joint Undertaking
- European Circular Bioeconomy Fund
- Food System Partnership
- Horizon 2020 and Horizon Europe Work Programmes
- Use of EU funding mechanisms:
  - Bioeconomy included in State-Aid exclusion list

1. Leveraging private investment...



2. Creation innovation ecosystem

3. Focus on sustainable solutions

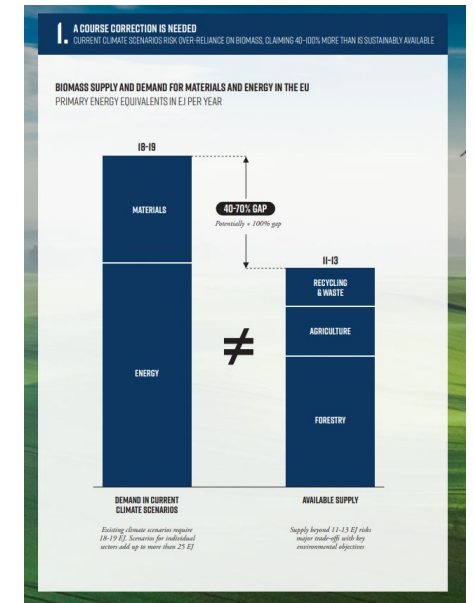
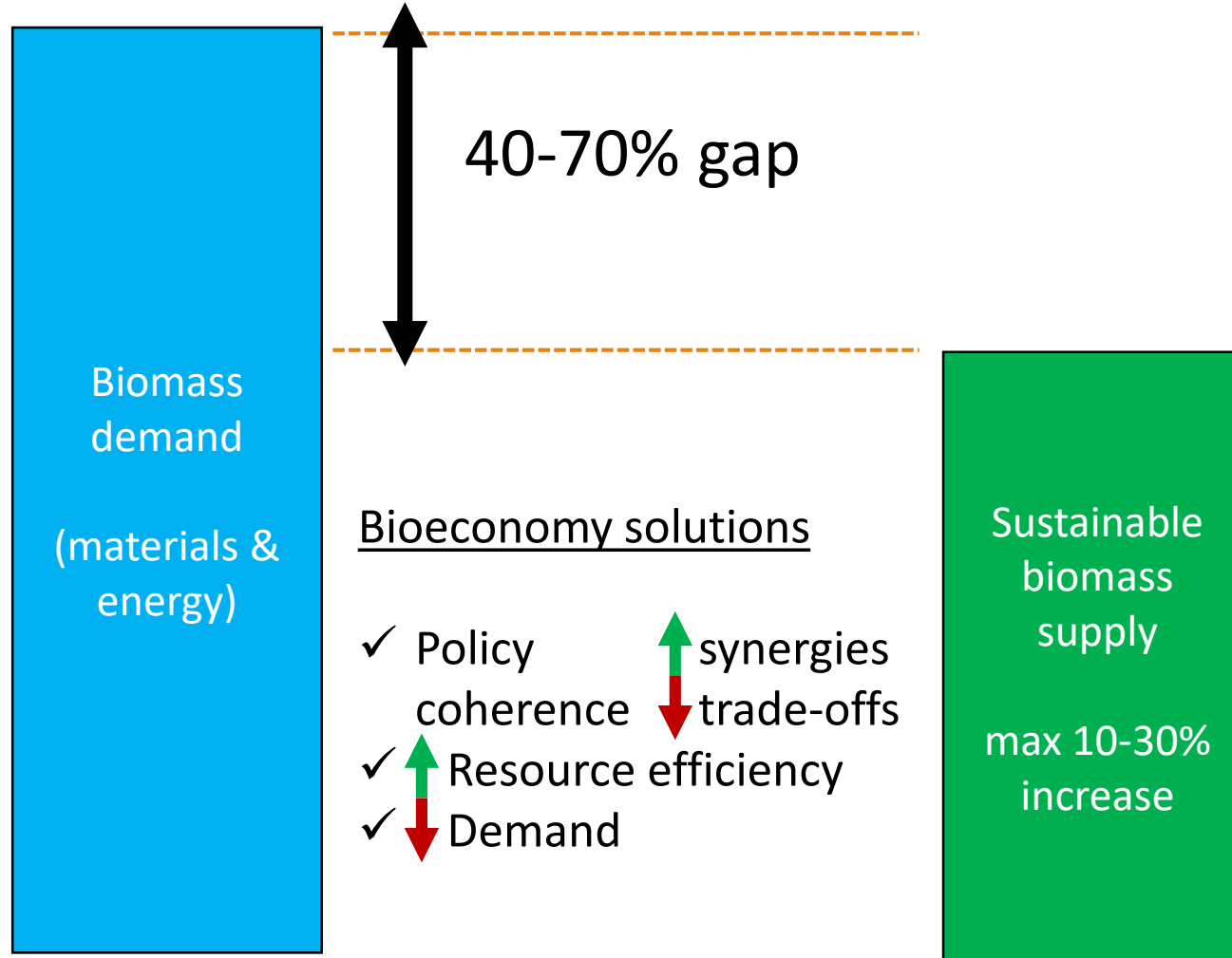
- **Feedstock:** sustainable biomass supply that does not compete with food production, new supply chains
- **Biorefineries:** optimise efficient processing through R&D: demonstration and flagships biorefineries
- **Markets:** markets for bio-based products, policy frameworks to ease their market uptake



# Overall implementation of the EU Bioeconomy Action Plan is well on track

- Strong progress on developing bio-based solutions through R&I and increasing public and private investments
- Improved cooperation with MS
- Better understanding of ecological limits, but remaining gaps

# Supply, transformation and use of biomass



Material Economics. “EU Biomass Use in a Net-Zero Economy. A Course Correction for EU Biomass,” 2021.

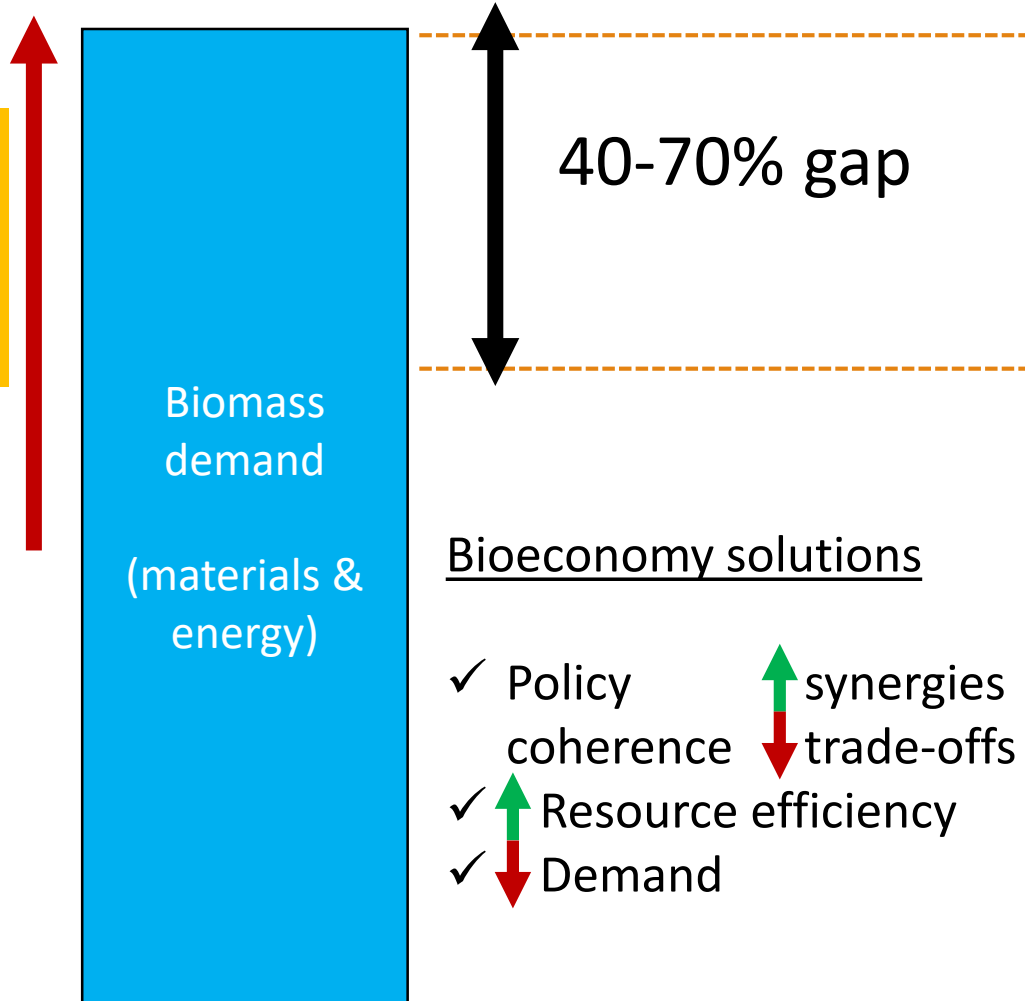
<https://materialeconomics.com/latest-updates/eu-biomass-use>.



# Supply, transformation and use of biomass

## Policy context:

Risk of  
increased  
pressure from  
demand

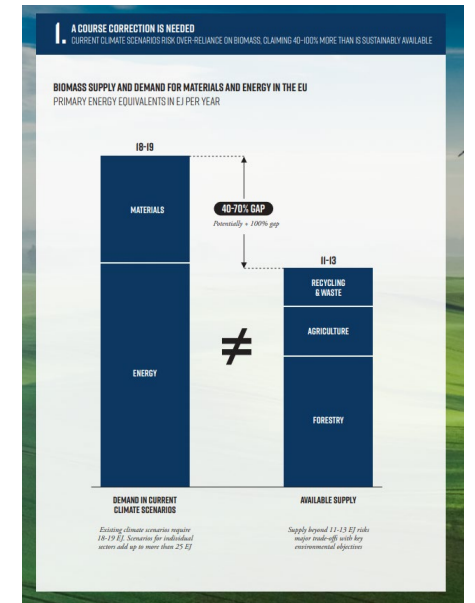


### Bioeconomy solutions

- ✓ Policy coherence
  - ✓ Resource efficiency
  - ✓ Demand
- ↑ synergies  
↓ trade-offs

### Sustainable biomass supply

max 10-30%  
increase



Material Economics. "EU Biomass Use in a Net-Zero Economy. A Course Correction for EU Biomass," 2021.

<https://materialeconomics.com/latest-updates/eu-biomass-use>.

# Additional focus needed



## **Biosphere stewardship strategy**

Focus on resolving multiple pressures on land and sea

Integrated bioeconomy land use assessment

Territorial biomass strategies

Conceptual framework to resolve trade-offs



## **Consumption-based framework**

Focus on the overall consumption of biological resources

Monitoring consumption footprint

Demand driven shift to sustainable consumption choices


Sustainable and inclusive business models



# EU Bioeconomy Conference

The Bioeconomy - Enabling the European Green Deal in Challenging Times'

- 6-7<sup>th</sup> October, Brussels (hybrid)
- Over 1600 registered participants
- 9 thematic sessions + HL Openings and Closing
- Present the findings of the EU Bioeconomy Strategy Progress Report
- 5 side-events: incl. Building the bioeconomy with nature-based materials and solutions within the New European Bauhaus



“A truly circular and sustainable bioeconomy policy is a critical tool to support the objectives of the green transition. We need to make sure that we reach our objectives in a fair and balanced way. That is the future we need for bioeconomy. I trust that you help us shape it!” – Executive Vice-President Timmermans



# EU BIOECONOMY CONFERENCE

Enabling the European Green Deal  
in challenging times



EU BIOECONOMY  
CONFERENCE



#EUBioeconomy



# EU BIOECONOMY CONFERENCE

BIOECONOMY

Enabling the European Green Deal  
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6-7 October  
2022



The Bioeconomy –  
Enabling the European Green Deal in Challenging Times'

## Bioeconomy from niche to norm

- Session 1 High-level opening: Setting the scene
- Session 2 **The EU Bioeconomy Strategy in action – delivering for Europe**
- Session 3 Bioeconomy for a green and resilient EU industry
- Session 4 Access to finance and bioeconomy breakthrough innovations
- Session 5 Bioeconomy Innovation Ecosystems for rural development
- Session 6 Bioeconomisation of regions
- Session 7 Youth engagement in the bioeconomy: preparing the next generation through education and skills
- Session 8- International Dimension of the bioeconomy
- Social: Bioeconomy Young Ambassadors Award Ceremony
- Session 9 High-level opening

## Bioeconomy to reconcile people, planet and prosperity

- Session 10 Pathways towards a climate-neutral and biodiversity rich world
- Session 11 The bioeconomy in the context of Europe's food and energy security
- Conference closing: Unlocking the potential of the bioeconomy





# EU Bioeconomy youth Ambassadors



“Empower our generation, give us an opportunity to change the world before its too late – act now, act right and be part of a solution not a problem!”

The Youth Ambassadors

# Thank you

2018 EU Bioeconomy Strategy [https://research-and-innovation.ec.europa.eu/research-area/environment/bioeconomy/bioeconomy-strategy\\_en](https://research-and-innovation.ec.europa.eu/research-area/environment/bioeconomy/bioeconomy-strategy_en)

EU Bioeconomy Young Ambassadors [https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/meet-our-bioeconomy-youth-ambassadors-2022-08-04\\_en](https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/meet-our-bioeconomy-youth-ambassadors-2022-08-04_en)

EU Bioeconomy Progress Report 2022: [https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/adoption-bioeconomy-strategy-progress-report-2022-06-09\\_en](https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/adoption-bioeconomy-strategy-progress-report-2022-06-09_en)

EU Bioeconomy Conference 6-7/10/2022 <https://eu-bioeconomy-conference-2022.b2match.io/>



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