

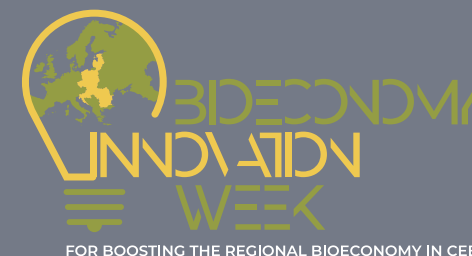


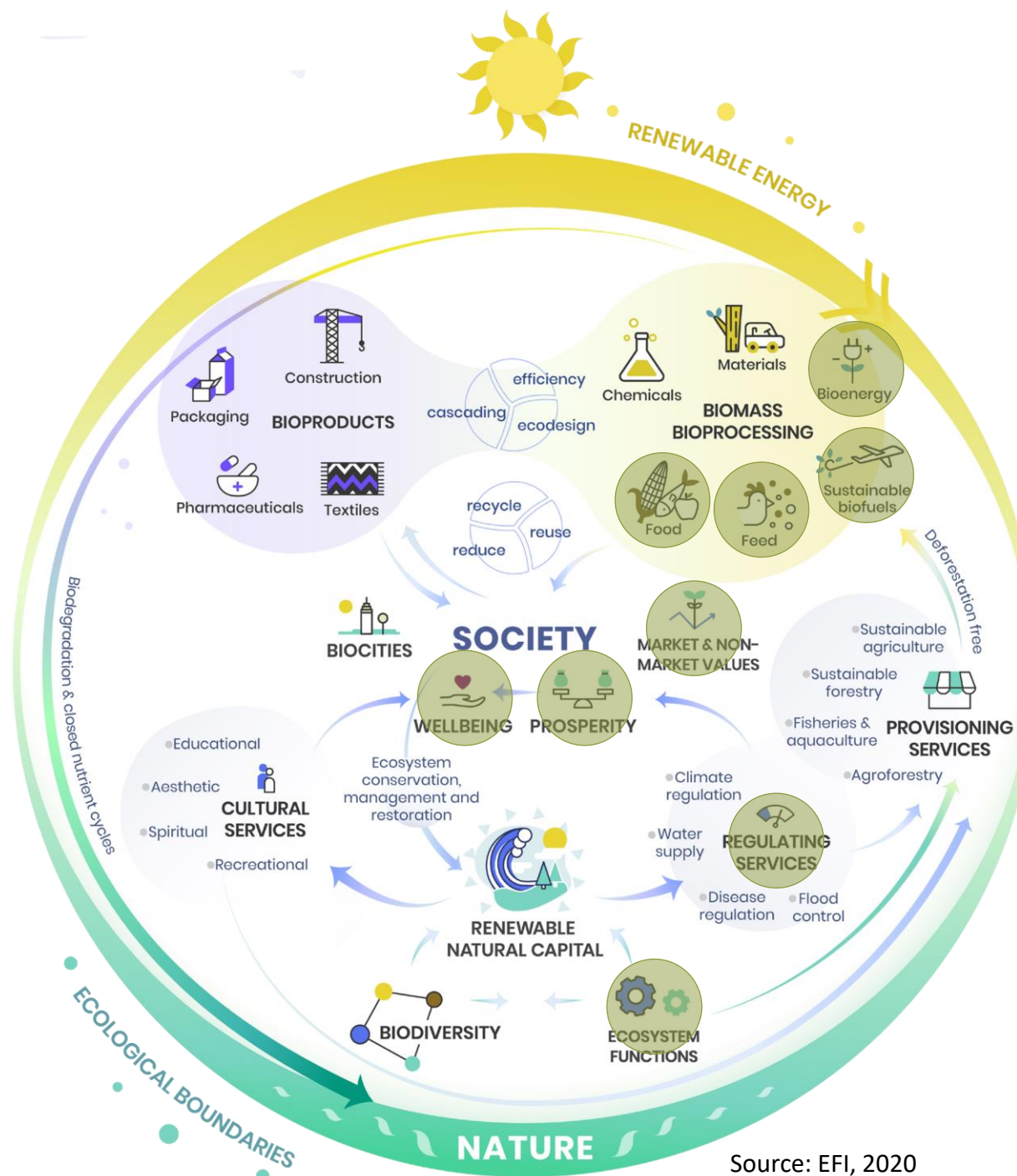
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The role of AKI within Circular Bioeconomy

Bioeconomy Innovation Week, Online, 03.03.2021.

Pál Goda – AKI | Institute of Agricultural Economics

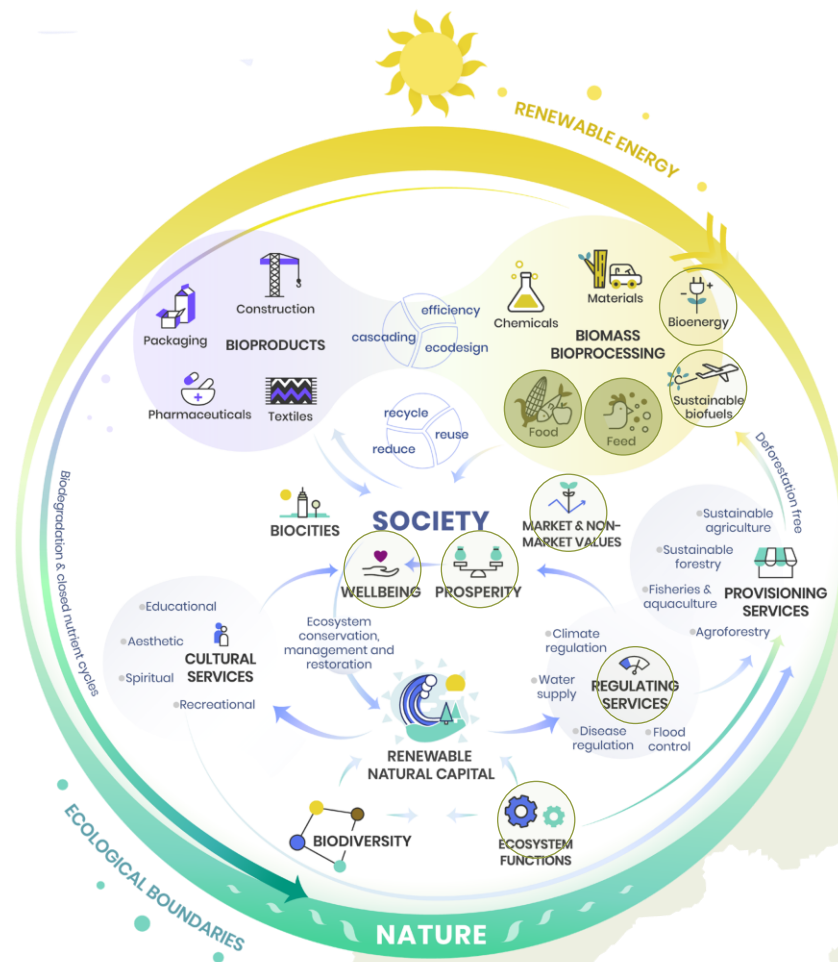




Source: EFI, 2020



Food and Feed



Source: EFI, 2020

How we contribute

- regional biomass potential, supply and demand assessment
- carrying out on-farm surveys and interviews
- database development and mapping

How we do it

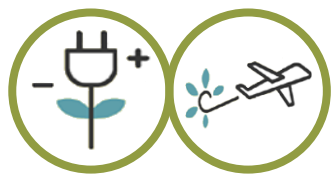
- additional use of accessible biomass feedstocks
- projections of production volumes and structures

Our tool(s)

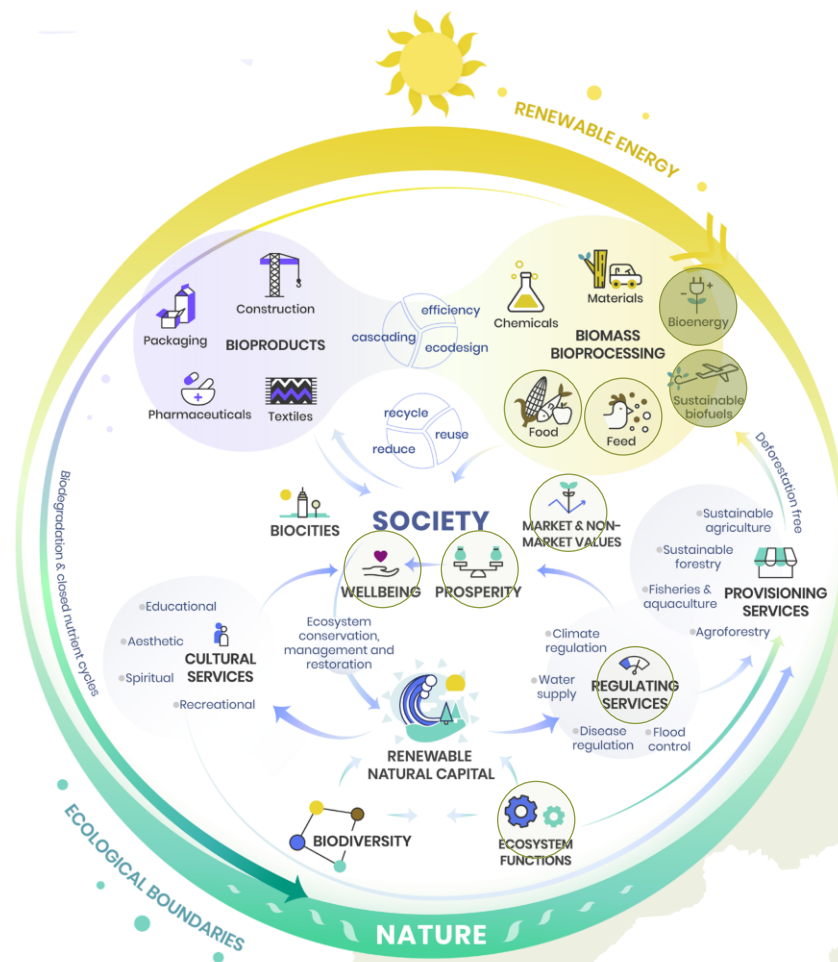
- AKI-SIM model
- in-house developed surveys
- geographical information systems

Result used by

- H2020 BIKE Project
- MVM Group



Bioenergy and Sustainable biofuel



Source: EFI, 2020

How we contribute

- regional biomass potential, supply and demand assessment
- carrying out on-farm surveys and interviews
- database development and mapping

How we do it

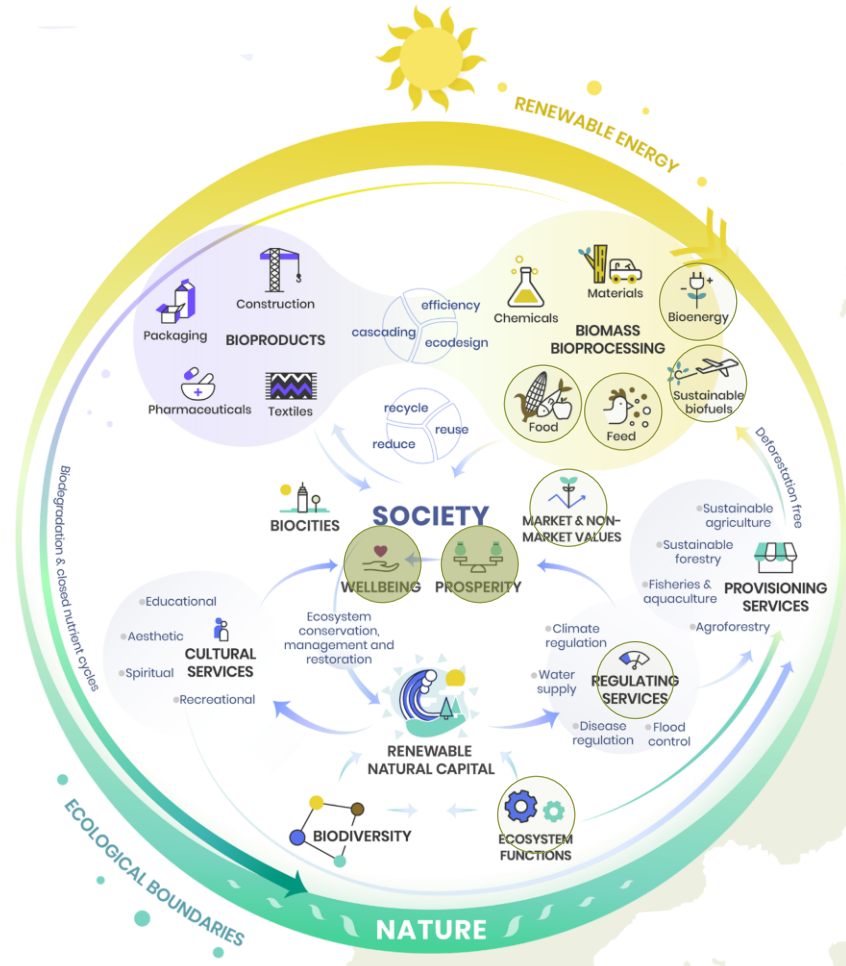
- locating new biomass-based power plants
- mapping of raw materials for biogas production

Our tool(s)

- AKI-SIM model
- in-house developed surveys
- geographical information systems

Result used by

- Hungarian Energy and Public Utility Regulatory Authority (HEA)
- MVM Group
- H2020 BIKE Project



How we contribute

- carrying out on-farm surveys and interviews
- assessment of the economic and social impacts of investments in the bioeconomy

How we do it

- best practice collection
- strengthening the linkages between the farming and society
- enhancing digital transformation for sustainable farming

Our tool(s)

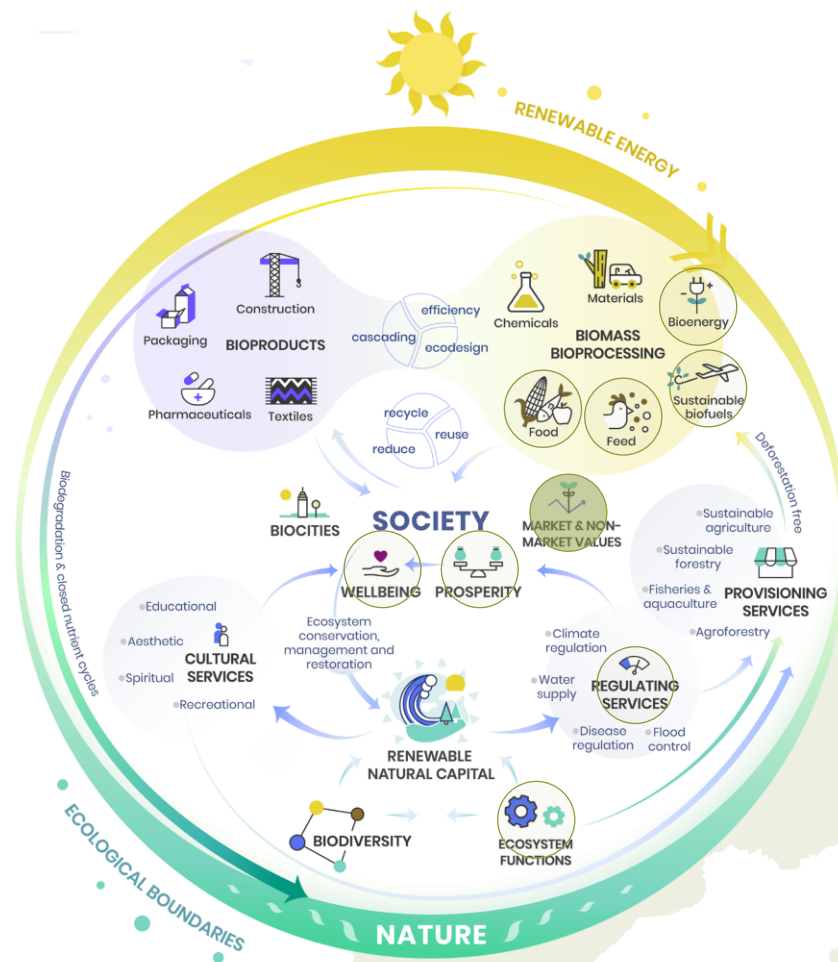
- AKI-SIM model
- in-house developed surveys

Result used by

- H2020 BIKE project
- H2020 FARMWELL project
- H2020 SmartAgriHubs project



Market and non market values



Source: EFI, 2020

How we contribute

- carrying out on-farm surveys and interviews
- developing business models for biomass production

How we do it

- proposing incentives for biomass production
- strengthening the linkages between farming and society
- best practices to support bio-based business
- development of feedstock and biofuels certification modules
- assessment of the operational capacities for sustainable biofuels
- development of new contractual frameworks in agricultural value chains
- estimation of agricultural production costs and incomes
- market analysis and scenario building

Our tool(s)

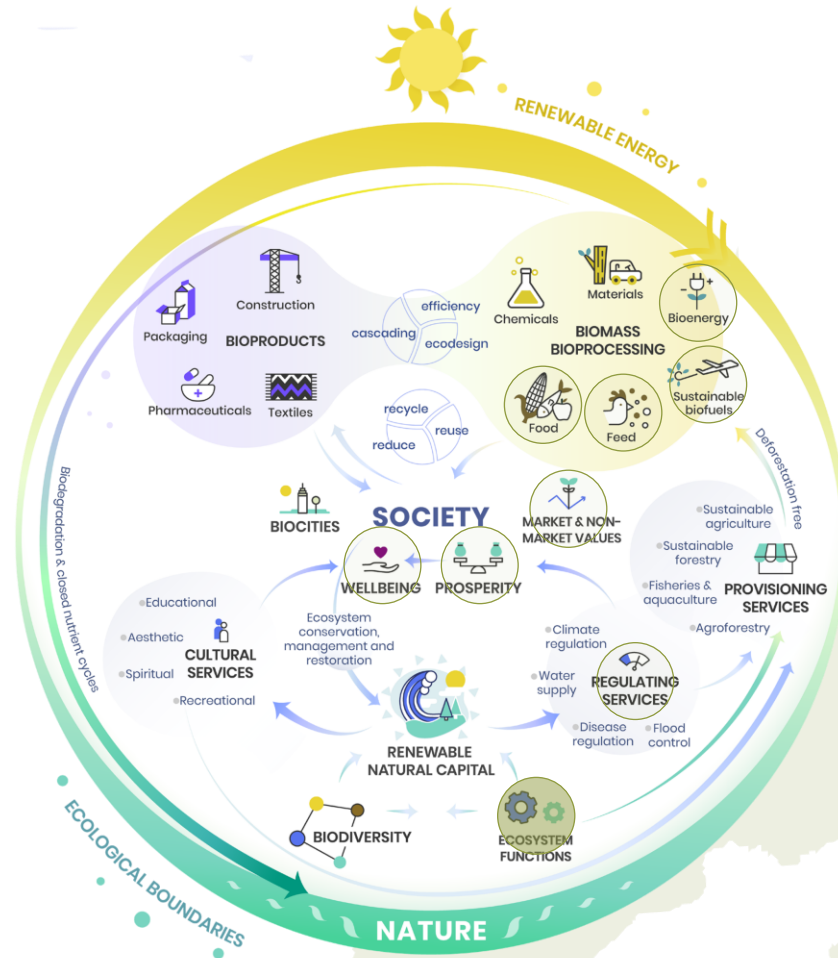
- Farm Accountancy Data Network (FADN)
- Market Price Information System (MPIS)

Result used by:

- H2020 POWER4BIO Project
- H2020 BIKE project
- H2020 EFFECT project



Ecosystem functions



Source: EFI, 2020

How we contribute

- assessment of the environmental sustainability of biomass production

How we do it

- assessment of ecosystem services
- assessment of low Indirect Land Use Change (ILUC) risk biofuels
- contribution to emission mitigation in livestock production through improved feeding practices
- carbon footprint calculations

Our tool(s)

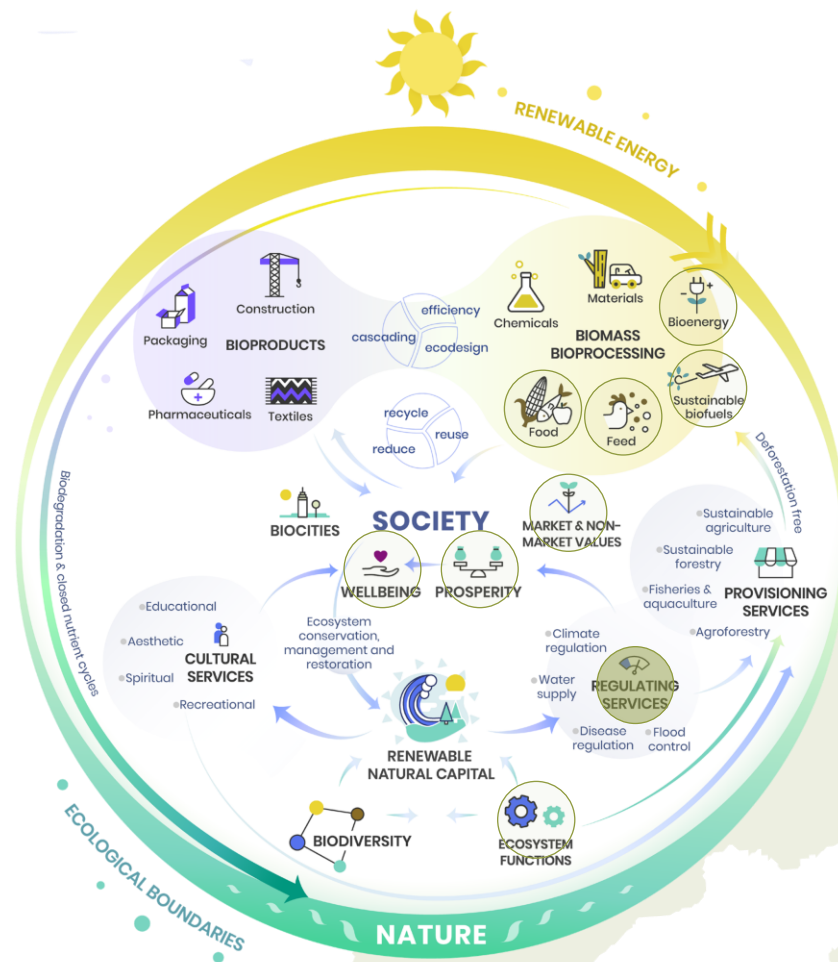
- in-house developed simulation models

Result used by

- NÖSZTÉP project
- H2020 BIKE project
- Clean Air Programme



Regulating services



Source: EFI, 2020

How we contribute

- supporting bioeconomy policy design, implementation and evaluation

How we do it

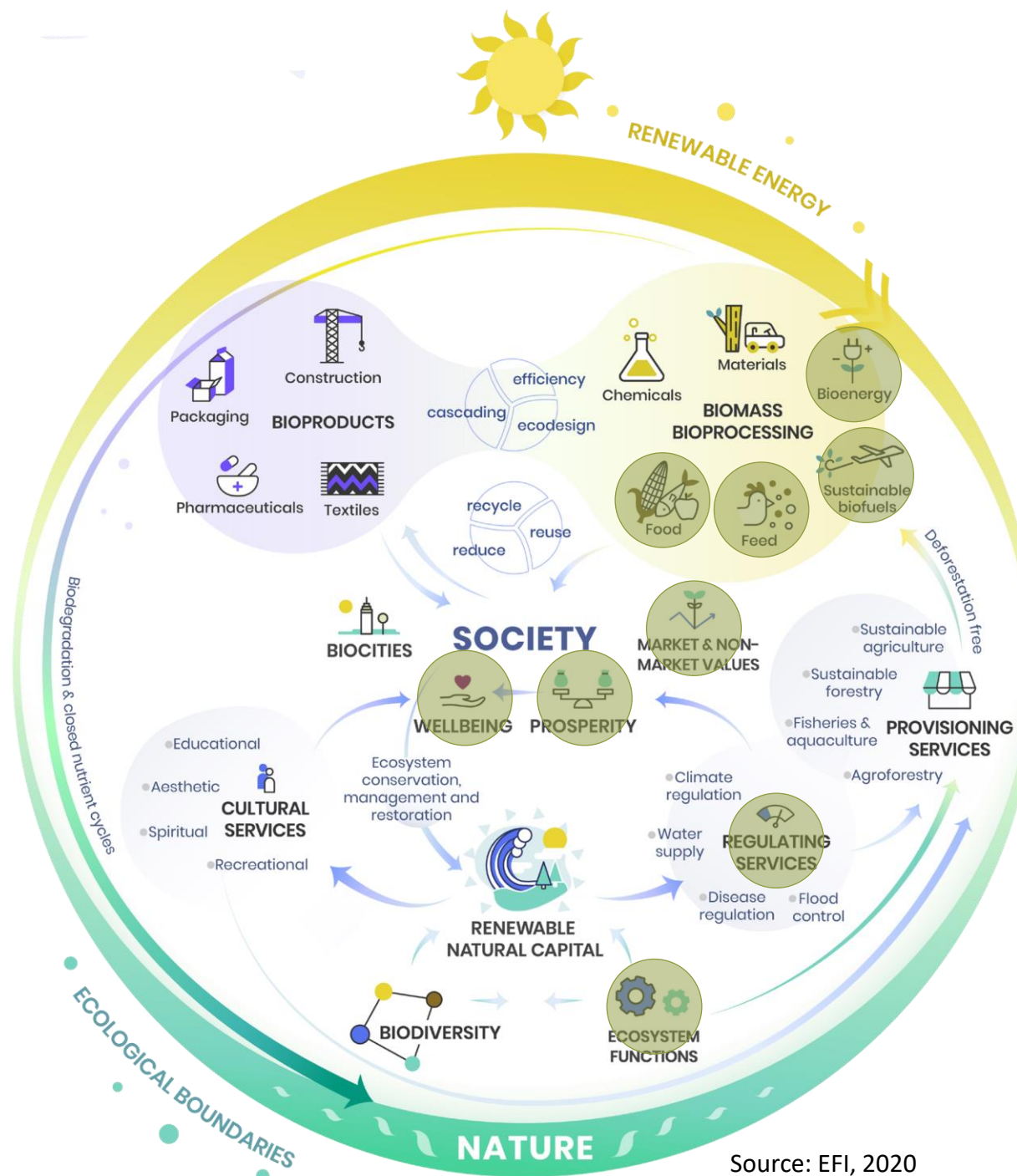
- methodology for developing regional bioeconomy strategies
- Virtual Toolbox to contribute to national bioeconomy strategies
- EU bioeconomy policy and legal framework assessment
- creation of science-society-policy interfaces which engage in developing policy recommendations
- projections of production volumes and structures

Our tool(s)

- AKI-SIM model
- CAPRI model

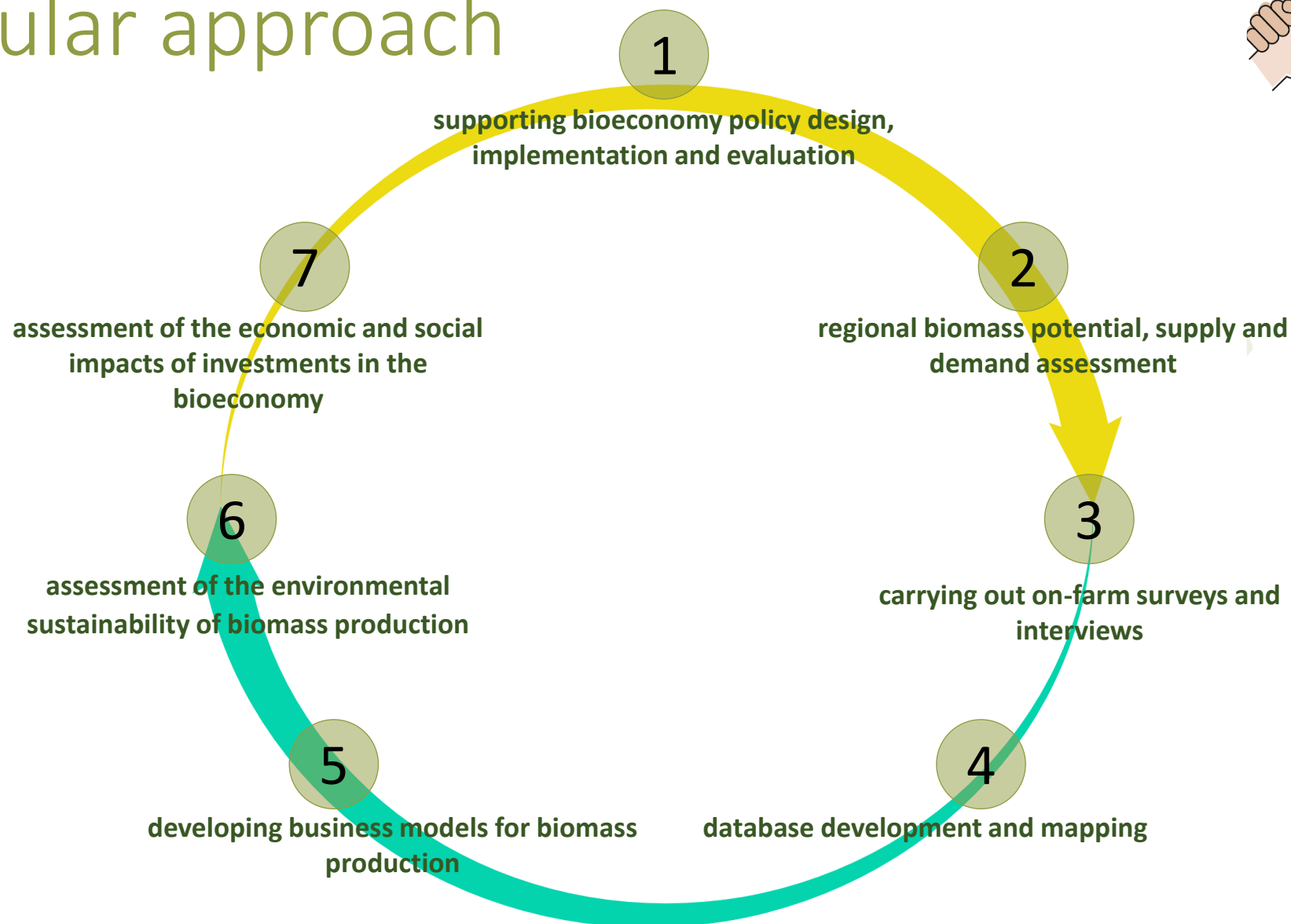
Result used by:

- H2020 POWER4BIO Project
- H2020 BIOEASTsUP Project
- H2020 BIKE project
- H2020 SHERPA project



Source: EFI, 2020

AKI circular approach



Thank you for your attention!



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