

Horizon 2020 and the Circular Bio-economy

NoRest Conference, Oct. 25-26, Copenhagen

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European R&I for a circular bioeconomy

- Horizon 2020
- Bioeconomy – still a novel concept
- Circular and bio-based
- Participation and the wider picture



Horizon 2020

2014-2020

79 billion Euro



Structure in Horizon 2020



Excellent Science

- European Research Council - *Frontier Research by the best individual teams*

LEIT Biotech

- Future and Emerging Technologies - *Collaborative research to open new fields of innovation*

- Marie Skłodowska Curie actions - *Opportunities for training and career development*

- Research infrastructures (including infrastructure) - *Ensuring access to world-class facilities*

Budget ca. 32 mrd Euro

Competitive Industries

- Leadership in enabling and industrial technologies (ICT, nanotechnologies, biotechnology, manufacturing, space)

SC2

2. Food Security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy

Budget ca 22 mrd Euro

Better Societies

- **Health**, Demographic Change and Well-Being
- **Food Security**, sustainable agriculture and forestry, **marine and maritime** and inland water research, and the **Bioeconomy**
- Secure, clean and efficient **Energy**
- Smart, green and integrated **Transport**
- **Climate** action, **environment**, resource efficiency and raw materials
- Europe in a changing world – innovative, inclusive and reflective **societies**
- **Secure Societies** – Protecting freedom and security of Europe and its citizens

Budget ca. 38,5 mrd Euro

European Institute of Innovation and Technology (EIT) 2,71 mrd Euro

Widening participation and Spreading Excellence, ca. 800 mill Euro

Science with and for Society, ca. 460 mill Euro

Horizon 2020 – next steps

- The way to the last WP 2018 – 2020

2016 / 2017

- Development of Scoping Paper with priorities
- EC: starting to draft WP
- **October 2017**: adoption of WP

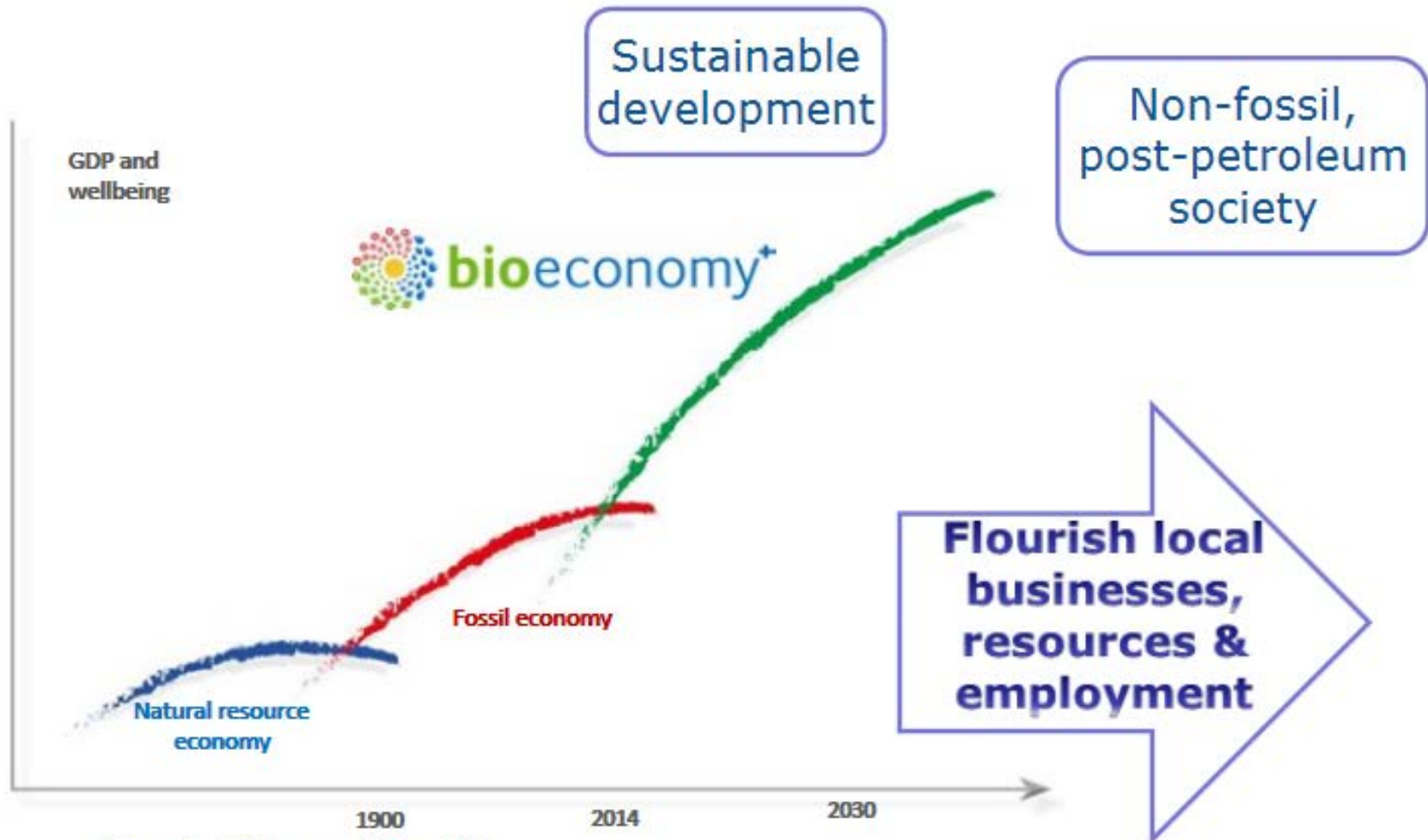


Future calls in Horizon 2020 - drivers

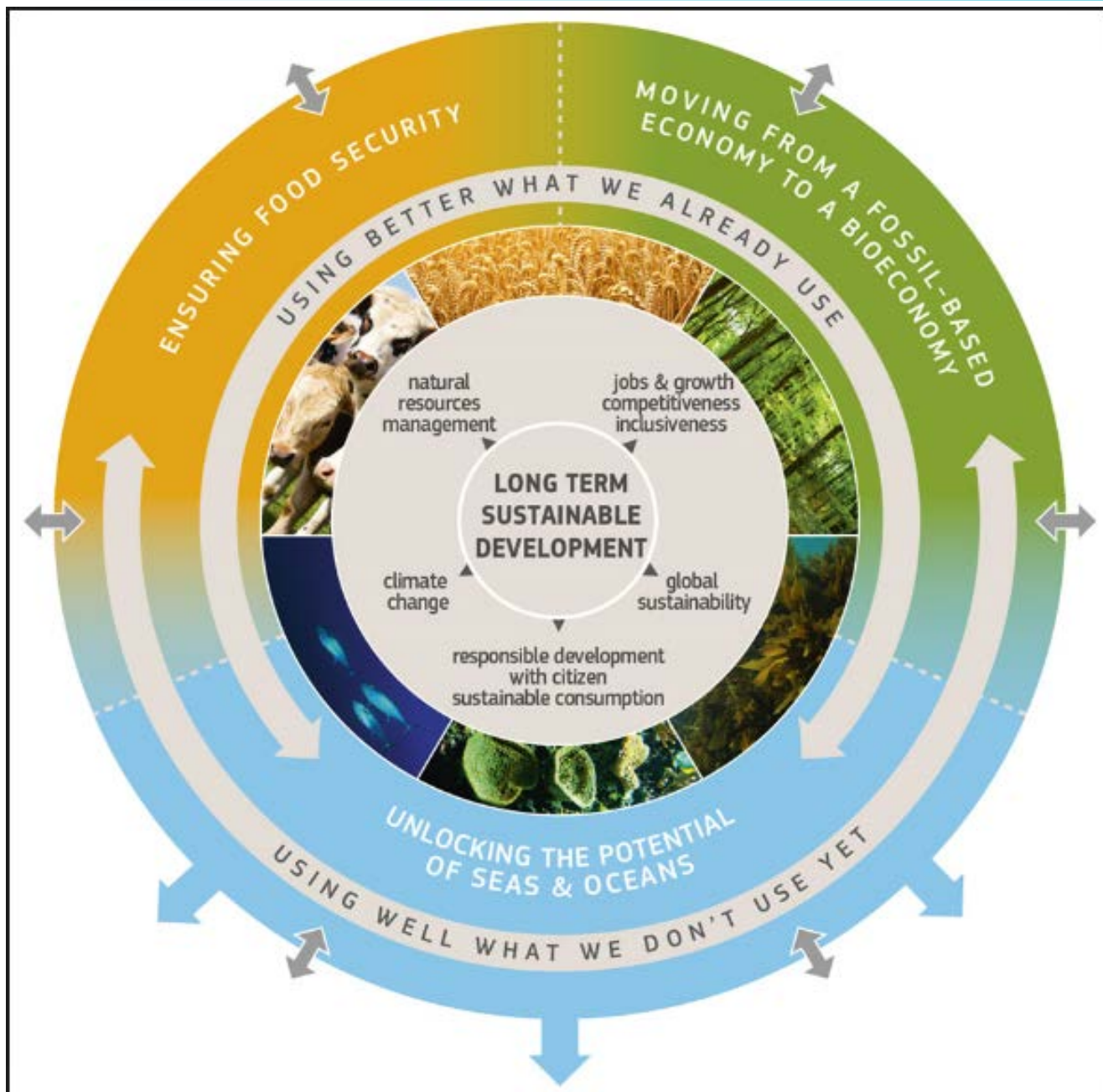


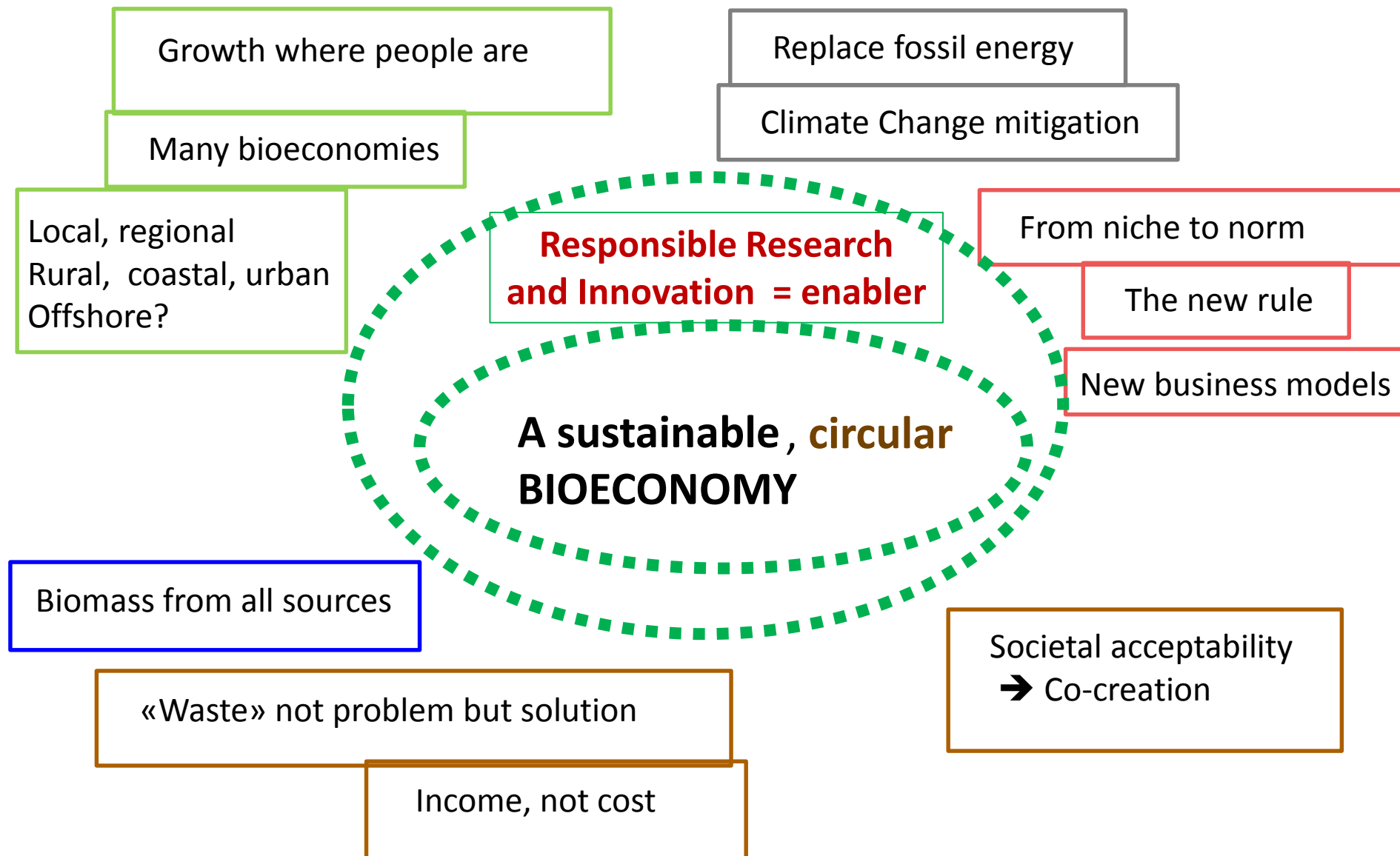
CAP and AGRI RTD-strategy





Source: Finnish Bioeconomy Strategy, 2014





OUTLINE OF A CIRCULAR ECONOMY

PRINCIPLE

1

Preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows
ReSOLVE levers: regenerate, virtualise, exchange

Bioeconomy

PRINCIPLE

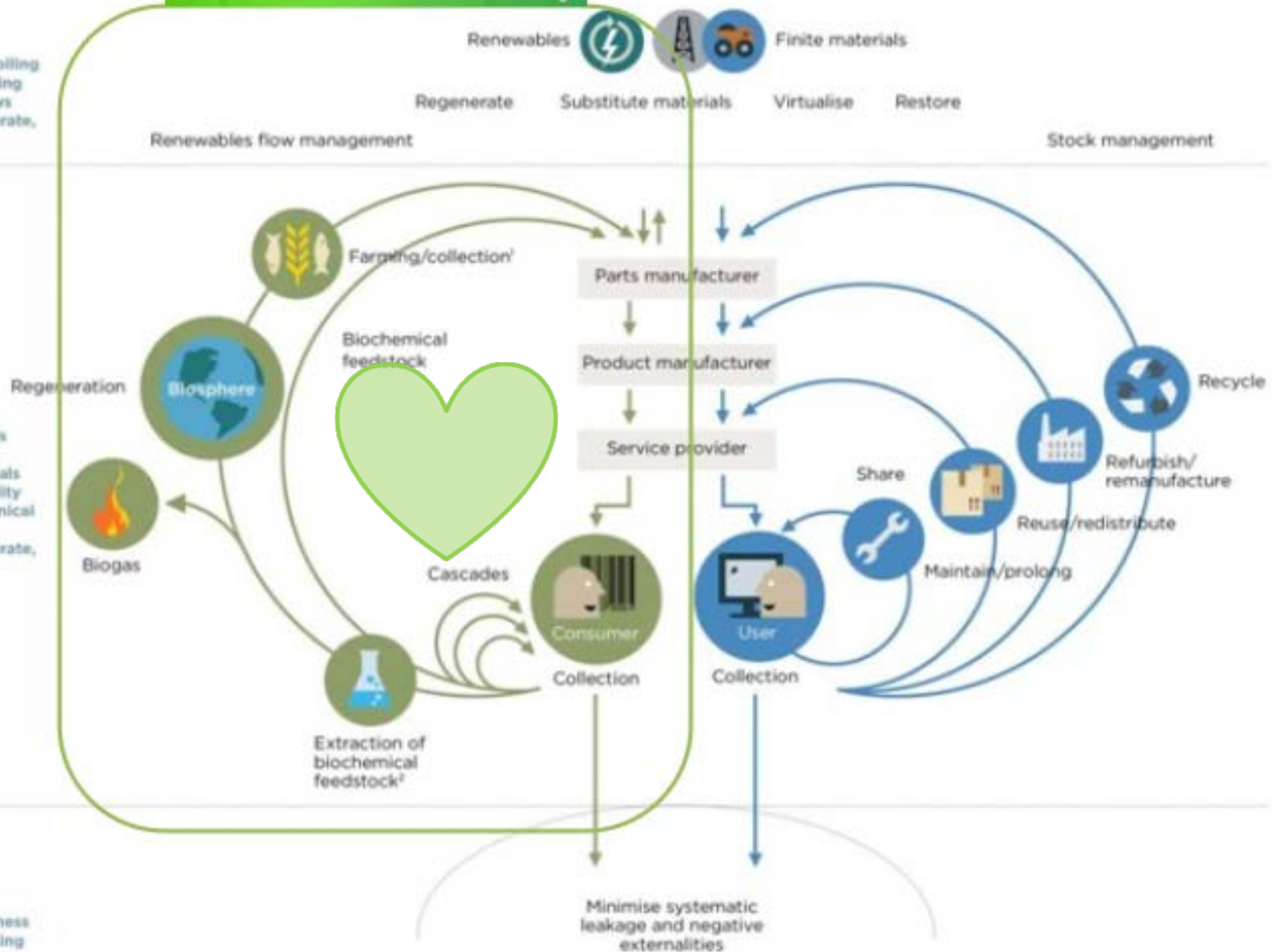
2

Optimise resource yields by circulating products, components and materials in use at the highest utility at all times in both technical and biological cycles
ReSOLVE levers: regenerate, share, optimise, loop

PRINCIPLE

3

Foster system effectiveness by revealing and designing out negative externalities
All ReSOLVE levers



1. Hunting and fishing
2. Can take both post-harvest and post-consumer waste as an input

Source: Ellen MacArthur Foundation, SUN, and McKinsey Center for Business and Environment. Drawing from Braungart & McDonough, Cradle to Cradle (C2C).

Important goals for 2018-2020

- Climate change and resilience on land and sea
- Transitions towards a **circular bioeconomy**
- Health – ecosystems, food, life
- Innovations
- Livelihoods for rural and coastal areas



Circular bioeconomy

- Reduce, Reuse and Recycle
 - Resource efficiency in the whole system
 - Nutrient flow
 - Biorefineries- integration of food and non-food
 - Rural – coastal – urban + ocean protection



Your participation



NCPs
EU-advisors
Colleagues

- **Consultation process**
 - Advisory group, stakeholders, public
- **Application process**
 - WP: Read, read and **reread** your topic
 - Build / find and discuss with your **consortium**
 - Write and **Submit**
 - **Criticize** and improve
- **Project phase**
 - Deliver and recognize

EU Programmes 2014-2020

Search Topics

Updates



Calls



H2020

3rd Health Programme

Asylum, Migration and
Integration Fund

Consumer Programme

COSME

Internal Security Fund - Borders

Internal Security Fund - Police

Justice Programme

Promotion of Agricultural
Products

Research Fund for Coal & Steel

Rights, Equality and Citizenship
Programme

FP7 & CIP Programmes 2007-2013

Calls

4

Results

Keyword Search:

Bio-based products

SEARCH

If you don't find your topic, you can also use the [free text search](#).

Select the Programme

Hold the 'CTRL' key to select several programmes.

H2020

FILTER

Status



Forthcoming



Open



Closed

Sort by



(Planned) opening date



Deadline



Topic title



Topic identifier

Topic: **BBI-2016-R10: Industrial biotransformation for the production of bio-based chemicals**

Closed

Publication date: 19 April 2016

Types of action: BBI-RIA Bio-based Industries Research and Innovation action

DeadlineModel: single-stage

Deadline: 08 September 2016

Opening date: 19 April 2016

17:00:00

Time Zone : (Brussels time)

Topic: **CIRC-05-2016: Unlocking the potential of urban organic waste**

Closed

Publication date: 14 October 2015

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Deadline: 08 March 2016 17:00:00

Opening date: 10 November 2015

Time Zone : (Brussels time)

Topic: **ISIB-05-2014: Renewable oil crops as a source of bio-based products**

Closed

Publication date: 11 December 2013



Experts

H2020 ONLINE MANUAL

Join the database of independent experts for European research and innovation.

The European Commission appoints independent experts to assist with research and innovation assignments including the evaluation of proposals, monitoring of projects, and evaluation of programmes, and design of policy.

New experts

Who can be an expert?

You have a chance of being selected as an expert if you:

- have high-level of expertise in the relevant fields of research and innovation ([see call](#) for details on types of expertise).
- can be available for occasional, short-term assignments

REGISTER AS EXPERT



What do expert assignments involve?

Experts, as peer reviewers, assist in the:

- **evaluation** of proposals
- **monitoring** of actions

In addition, experts assist in the :

- **preparation, implementation or evaluation of programmes** and **design of policies**. This includes the Horizon 2020 Advisory Groups.

Assignments mainly concern research and innovation, falling within the Horizon 2020 programme designed to address the challenges Europe is facing through funding excellent science, technology and innovation.


European countries' cooperation

Joint Programming Initiatives
ERA-Net Cofunds

- JPIs: FACCE, HDHL, OCEANS
 - ERA NET SURPLUS
 - ERA-NET ERA-GAS



+ Forestry ERA-NETs, SUSFOOD2, SusAn, Marine Biotech,...



Thank you for your attention!