



Activity 2.3 : Life Sciences and Biotechnology for Sustainable Non-Food Products and Processes

(Building an European Knowledge-
Based Bio-Economy)

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2. Food, Agriculture and Biotechnology

2.1.

Sustainable production and management of biological resources from land, forest, and aquatic environments

2.2.

“Fork to farm”: Food, health and well being

2.3.

Life sciences and biotechnology for sustainable non-food products and processes

Life sciences and biotechnology for sustainable non-food products and processes

Area 2.3.1:

Improved biomass and plant based renewables



Area 2.3.2:

Bioprocesses

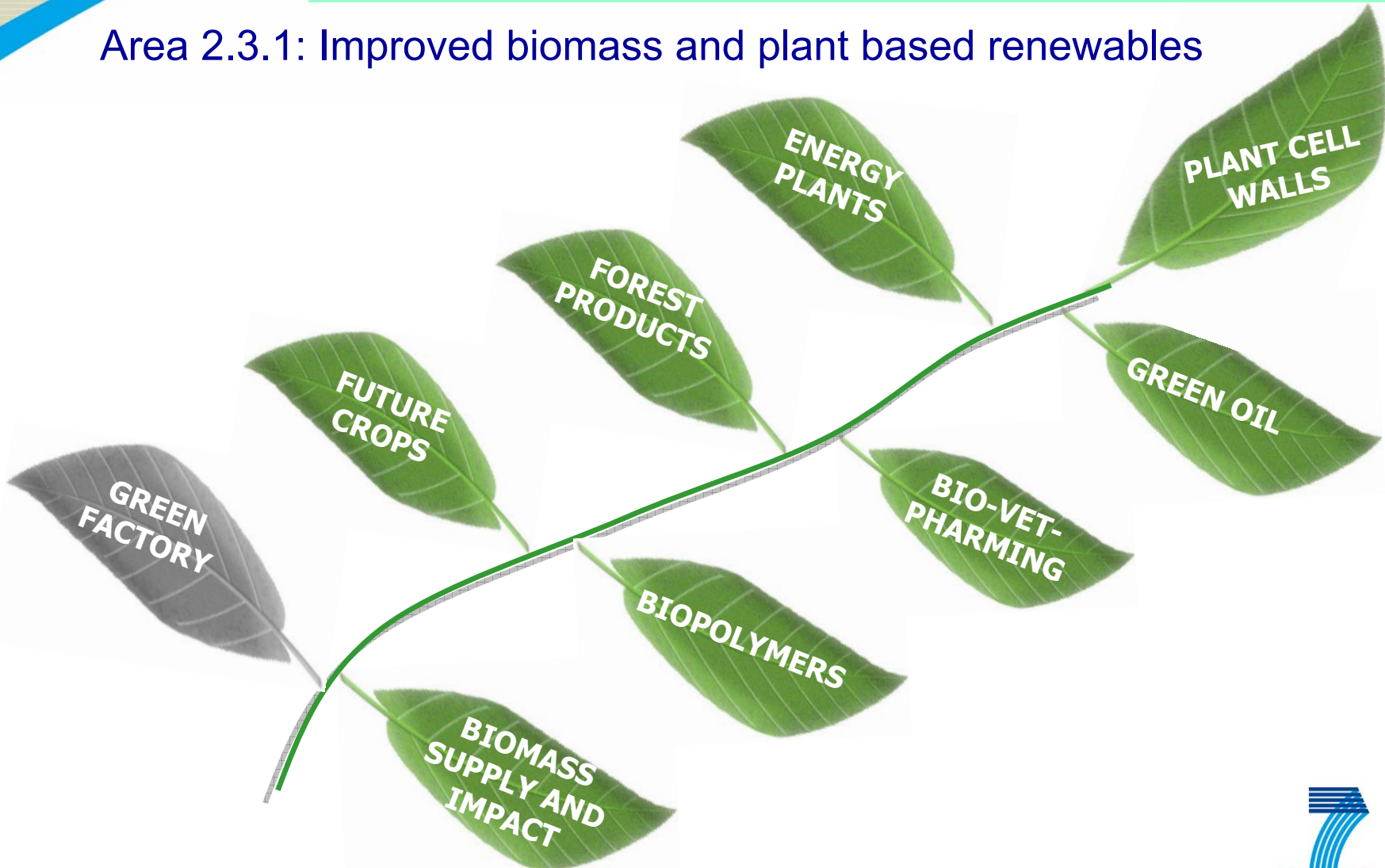


Area 2.3.3:

Environmental biotechnologies; Use of waste and by-products

Life sciences and biotechnology for sustainable non-food products and processes

Area 2.3.1: Improved biomass and plant based renewables



Activity 3

Life sciences and biotechnology for sustainable non-food products and processes

Area 2.3.1 Improved biomass and plant based renewables

Call 1

- **Understanding Plant Cell Walls for optimizing Biomass potential**
- **Novel plants for energy production**
- **Plants providing oils of the future**
- **New forest based products and processes**
- **Plant made recombinant pharmaceuticals for animals**
- **Biological Polymers from plants**
- **Technical, socio-economic, geographic and regulatory aspects of future non-food crop systems in particular related to co-existence and safety of agri-food chains**
- **Identification of optimal terrestrial and aquatic biomass and waste for Bioproducts**

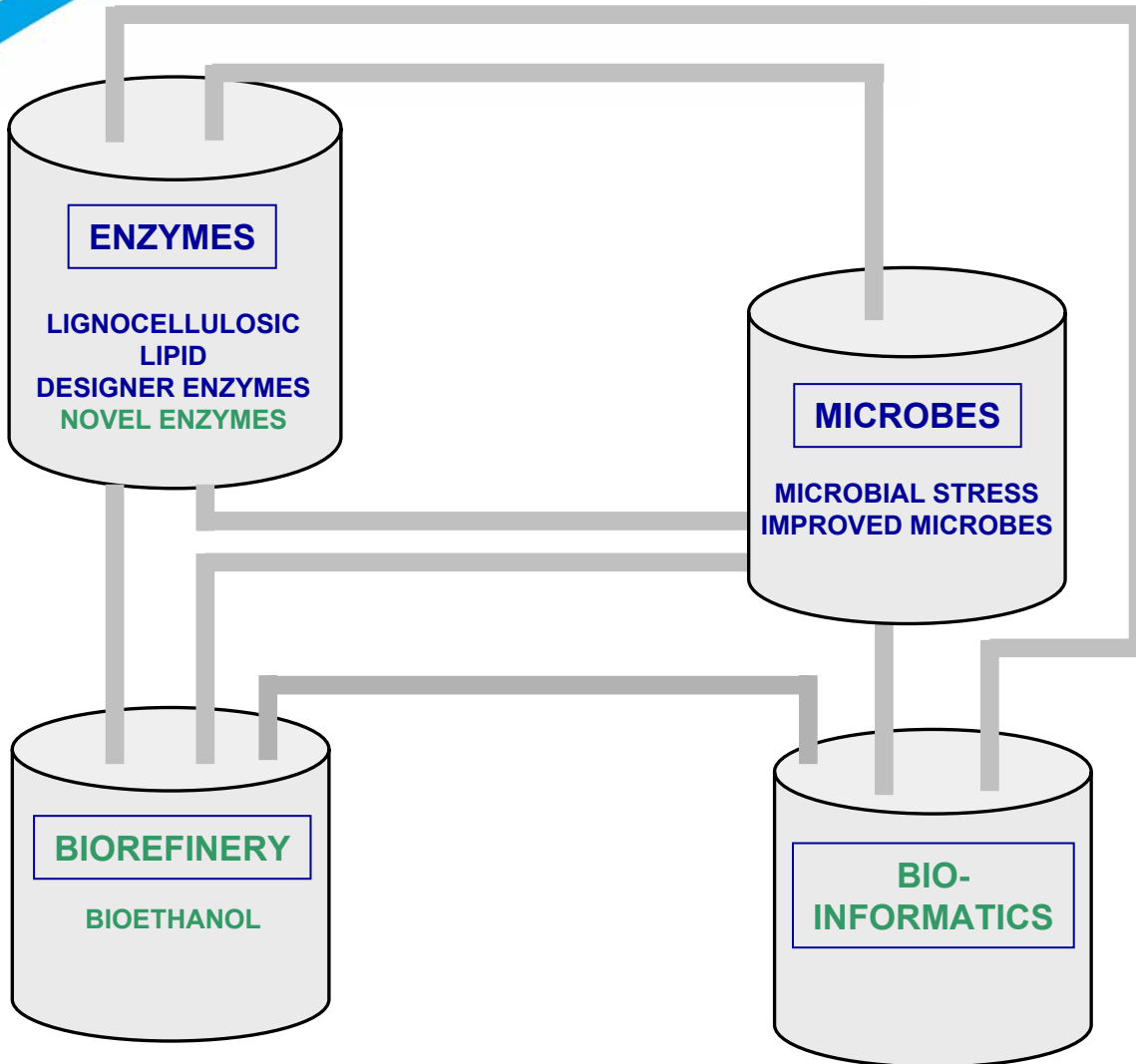
Call 2A

- **The expression and accumulation of valuable industrial compounds in plants**



Life sciences and biotechnology for sustainable non-food products and processes

Area 2.3.2: Bioprocesses



Life sciences and biotechnology for sustainable non-food products and processes

Area 2.3.2 Bioprocesses

Call 1

- Development of cellulases for lignocellulosic biomass pre-treatment
- Development of enzymes for lipid modification and activation
- Improved biocatalysts for bioprocesses
- Study of microbial stress for more robust industrial micro-organisms
- Metabolic engineering and modelling



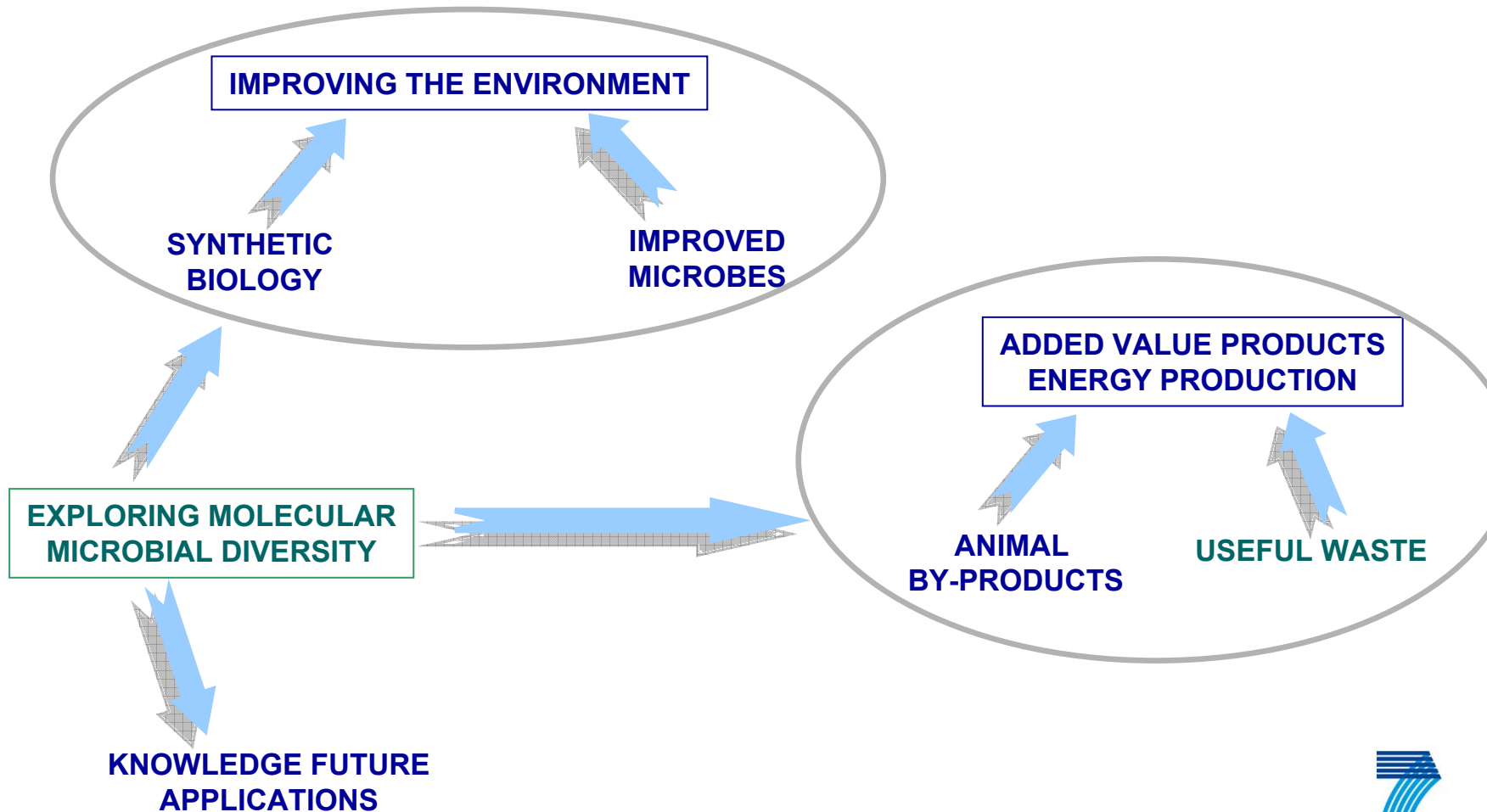
Call 2A

- Novel enzymes and microorganisms for biomass conversion to bioethanol
- The search of novel enzymes and microorganisms for different bioprocesses
- Microbial genomics and bio-informatics
- Biotechnology for the conversion of biomass and waste into value-added products



Life sciences and biotechnology for sustainable non-food products and processes

Area 2.3.3: Environmental biotechnologies: Use of waste and by-product



Life sciences and biotechnology for sustainable non-food products and processes

Area 2.3.3 Environmental biotechnologies; Use of waste and by-products

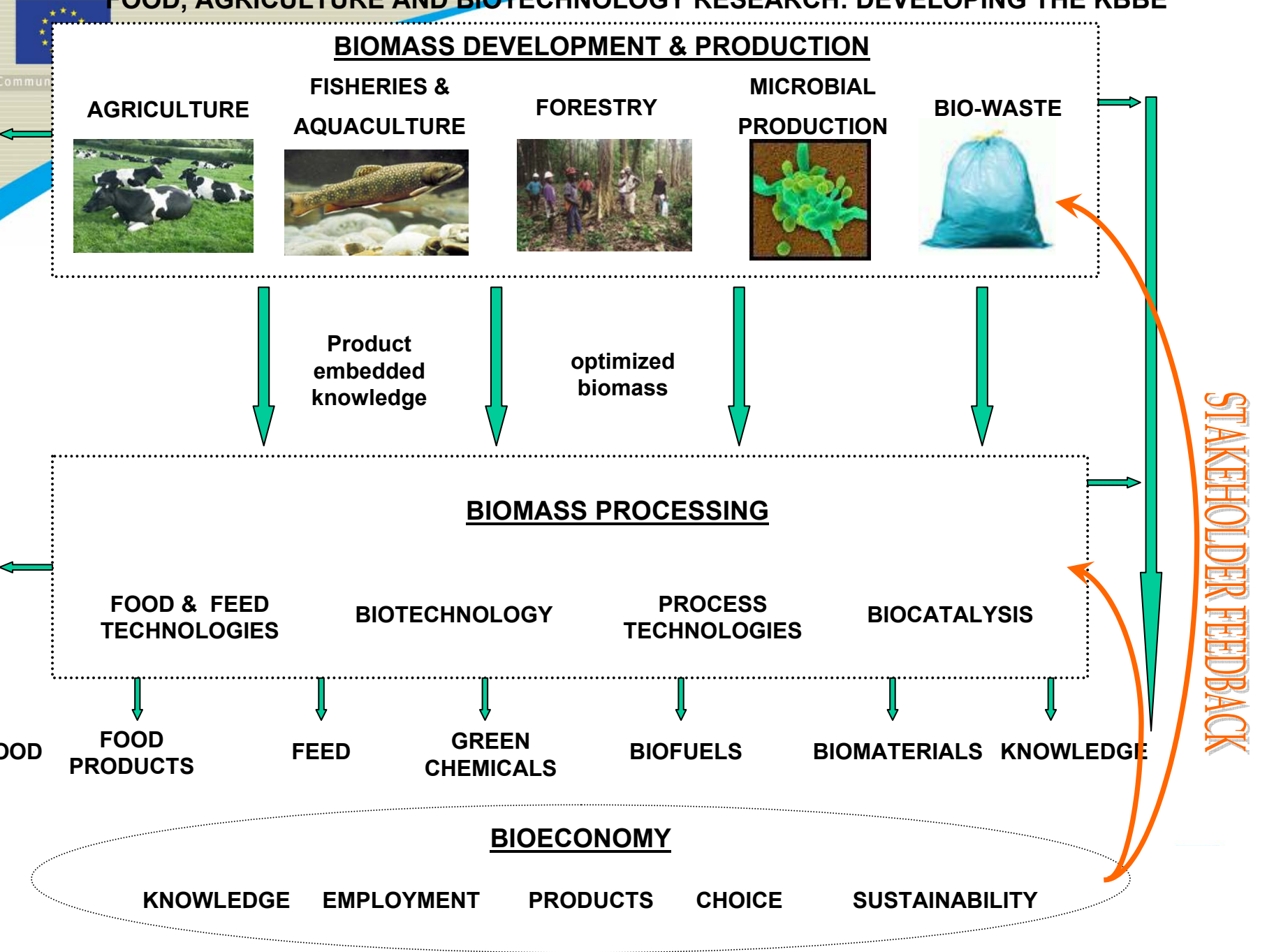
Call 1

- The use of **Synthetic Biology** for the solution of environmental problems
- **Microbial gene expression** under condition of stress
- **Novel methods of treatment of animal by-products** for the production of substances with biologically valuable functional properties

Call 2A

- **Novel biotechnology approaches** for utilizing wastes, including aquaculture wastes, to make high added value products
- **Exploring molecular microbial diversity** in aquatic environment or the soil





Eligibility checks and experts/evaluators

- As always: deadline, completeness, minimum participation
- Now includes “out of scope”
 - Clear cut cases only
- Possible budget limits
 - Selection of experts-evaluators
- Expertise, and experience are paramount
 - Geography, gender and “rotation” also considered
 - Conflicts of interest
- Disqualifying and ‘potential’ conflicts spelled out in expert appointment letter

The evaluation criteria

- Criteria adapted to each funding scheme
 - Specified in the work programme (annex 2)
 - Given in Guide for applicants
- Divided into three main criteria:
 - S&T Quality (relevant to the topic of the call)
 - Concept, objective, work-plan
 - Implementation
 - Individual participants and consortium as a whole
 - Allocation of resources
 - Impact
 - Contribution to expected impacts listed in work programme
 - Plans for dissemination/exploitation

Scoring of proposals

- Criteria scored out of 5 \Rightarrow total = 15
 - Individual threshold = 3; overall threshold = 10
- Importance of final panel
- Can vary from call-to-call



Further information

- EU research: <http://europa.eu.int/comm/research>
- Sixth Framework Programme:
<http://www.cordis.lu/fp6/home.html>
<http://www.cordis.lu/fp6/food.html>
- Seventh Framework Programme:
<http://www.cordis.europa.eu/fp7/home.html>
- Research DG Site:
http://europa.eu.int/comm/research/index_en.html
- RTD info magazine:
<http://europa.eu.int/comm/research/rtdinfo/>
- Information requests, Europe Direct
<http://ec.europa.eu/research/index.cfm?pg=enquiries>

