# BIOREFINE CLUSTER EUROPE
## BUILDING SYNERGIES BETWEEN HORIZON2020, EIP AGRI AND INTERREG

ERIK MEERS (GHENT UNIVERSITY)

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Resource Recovery for a Sustainable Economy

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# Origin of the BioRefine Cluster Europe

- Cluster = free collaboration between member projects
- Founded from INTERREG-NWE project Biorefine (2011-2015)

Stems from the following observation :

- Numerous consortia dealing with similar topics (fragmentation)
- Extending the life span of deliverables after a project ends
- Ensuring relevant  and substantial impact on stakeholders
- **Technology development to business implementation**

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# Cluster Objectives

Strengthen interaction between projects involved

Enhance research, policy & business development

Foster stakeholders outreach (triple helix)

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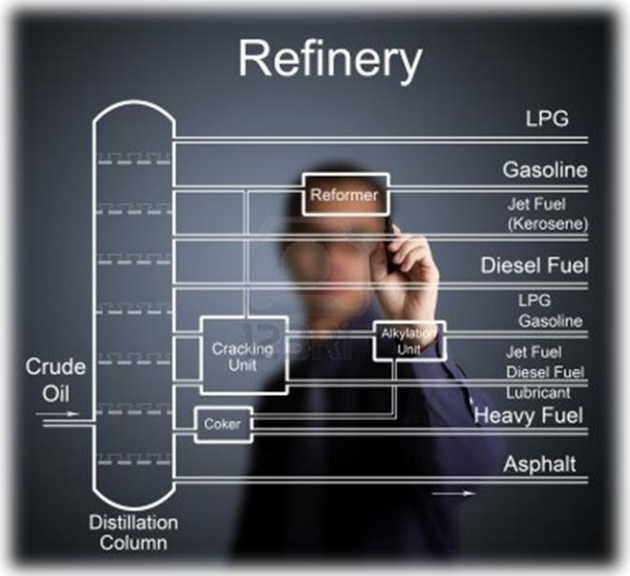
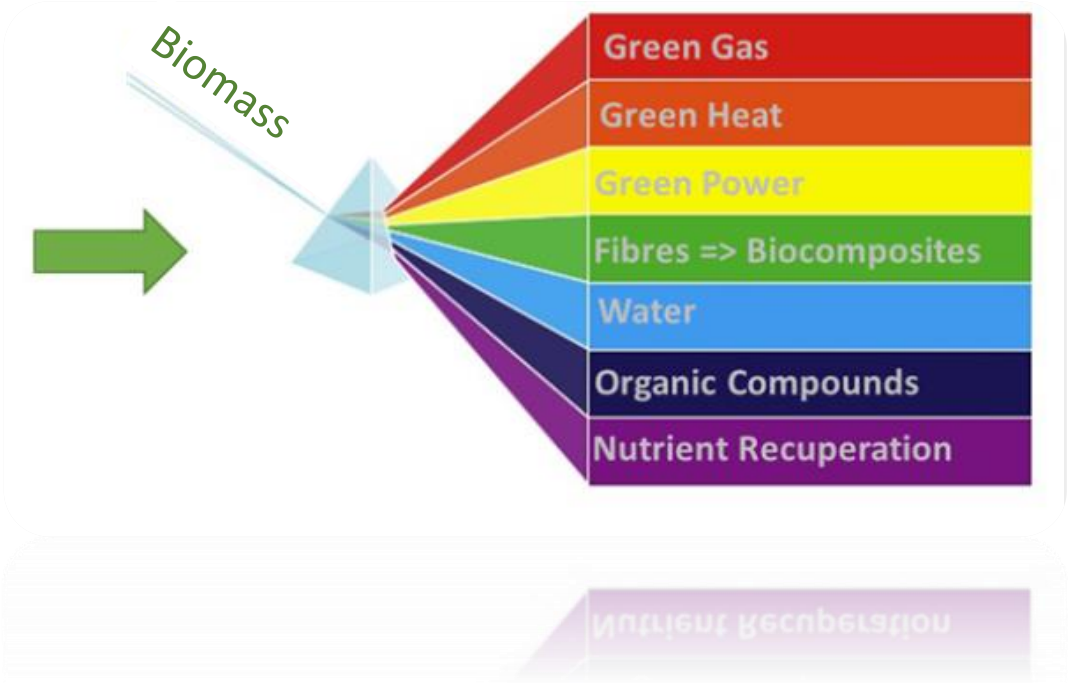
# Scope of the BioRefine Cluster Europe




***[BIOREFINERY]:*** *Production of energy carriers and new derivatives from renewable biobased resources*

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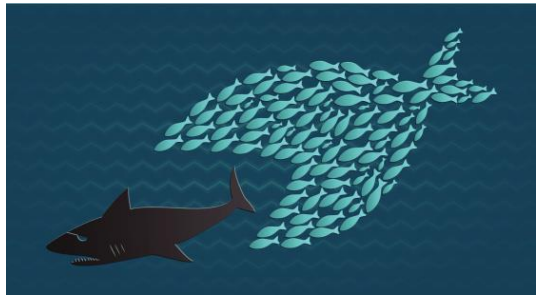

| BioRefine Cluster Europe | |
|---|---|
| Projects | > 30 |
| Countries | ~ all EU* |
| Entities | > 200 |
| Experts | > 650 |
| Budget | ~100 mio EUR |

** + associated partnership strategies in Canada, China, India, South-Korea (and developments in S-America)*

+ AgriForValor
+ BioBIGGG
+ Nutri2Cycle
+ ReNu2Farm
+ ALG-AD
+ Grassification
+ NEW-C-LAND
+ EIP FG Nutrient Recycling

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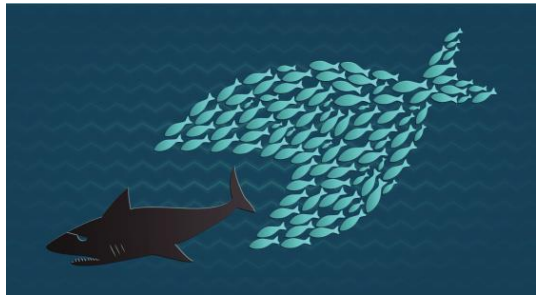

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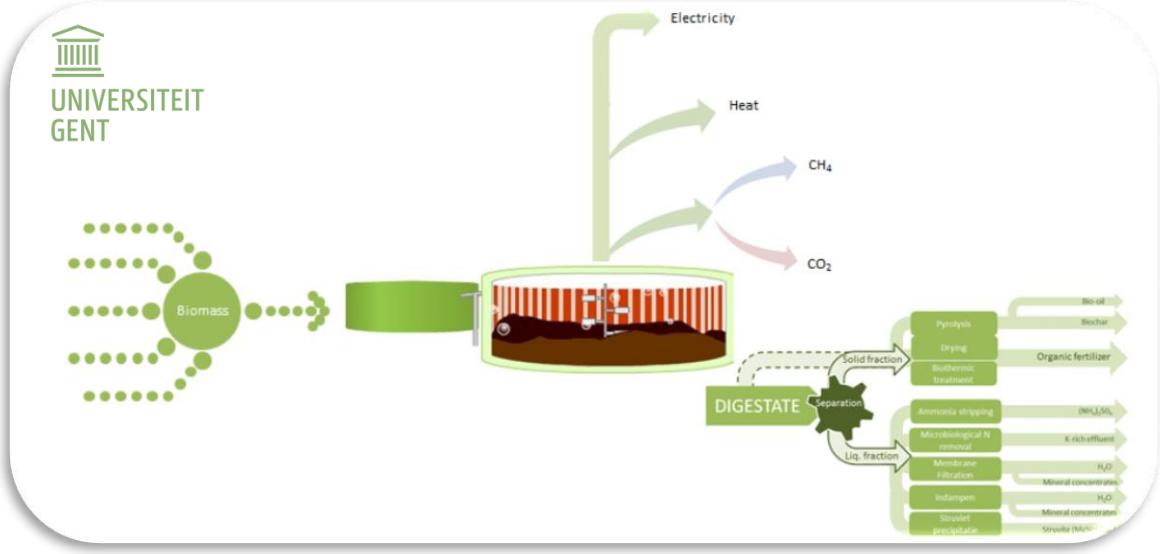
# Important activity within agricultural R&D, R&I
# Agro-refinery – recovering secondary resources from agrobased residues



**Nutrient Recycling**

**Renewable Energy**

**Water**

**Novel Animal Feeds**

# Example of member projects (1/3) : Recovery of Nutrients from biogas digestate

| Name | Capacity and main feedstock | Products |
|---|---|---|
| Groot Zevert Vergisting, Netherlands | 100,000 t<br>pig slurry | Biogas, ammonium sulphate, (N/) K-concentrates, calcium phosphate, organic soil improvers |
| AM Power, Belgium | 180,000 t<br>manure, food waste | Biogas, N, K-concentrates<br>organic fertilizer |
| Acqua e Sole, Italy | 120,000 t<br>sewage sludge | Biogas, ammonium sulphate<br>organic fertilizers |
| Oakland, UK | 50,000 t<br>poultry litter | Liquefied biogas, liquid $CO_2$,<br>ammonium sulphate, organic fertilizer |
| Benas (GNS), Germany | 80,000 t<br>corn silage, poultry litter | Biogas, Ammonium sulphate<br>calcium carbonate, organic fertilizer, cellulosic fibres |

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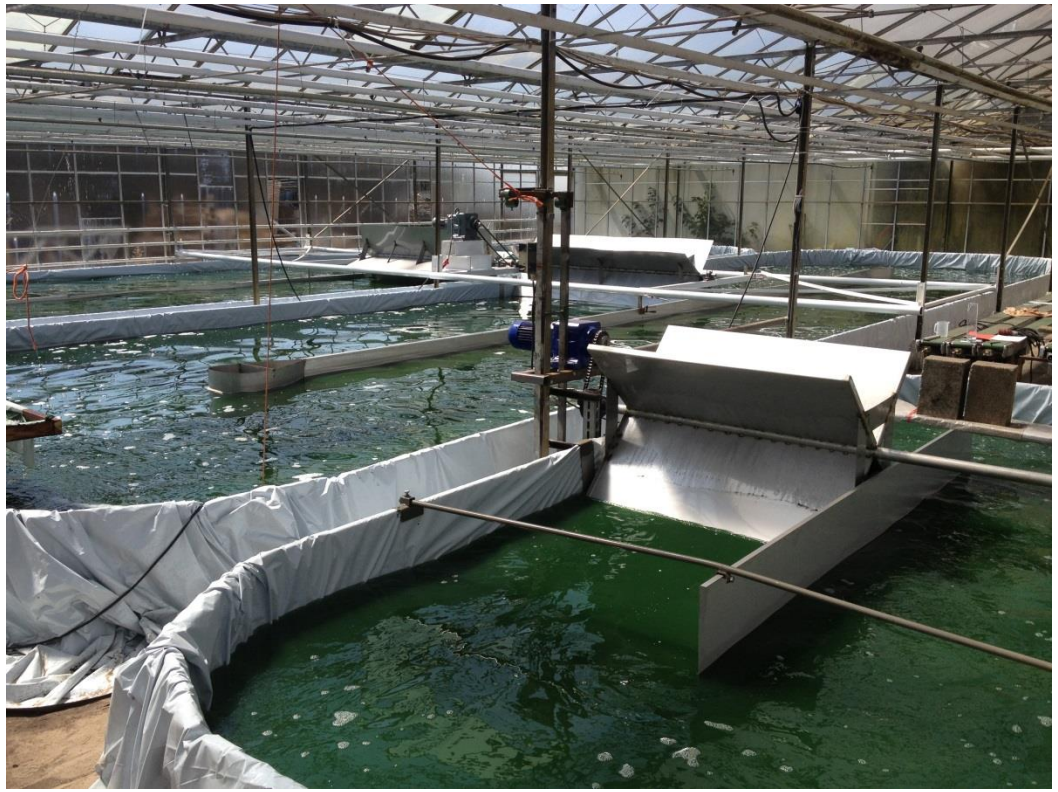
# Example of member projects (2/3) :
# Duckweed on agricultural effluents for production of animal feed proteins

# Example of member projects (3/3) :
# Growing Spirulina algae for production of blue colorant (fycocyanin)



*Vlaamse partners*

CENTEX BEL

pcg

KU LEUVEN

inagro

UNIVERSITEIT GENT

Interreg Vlaanderen-Nederland

Provincie Oost-Vlaanderen
Voor ieder van ons

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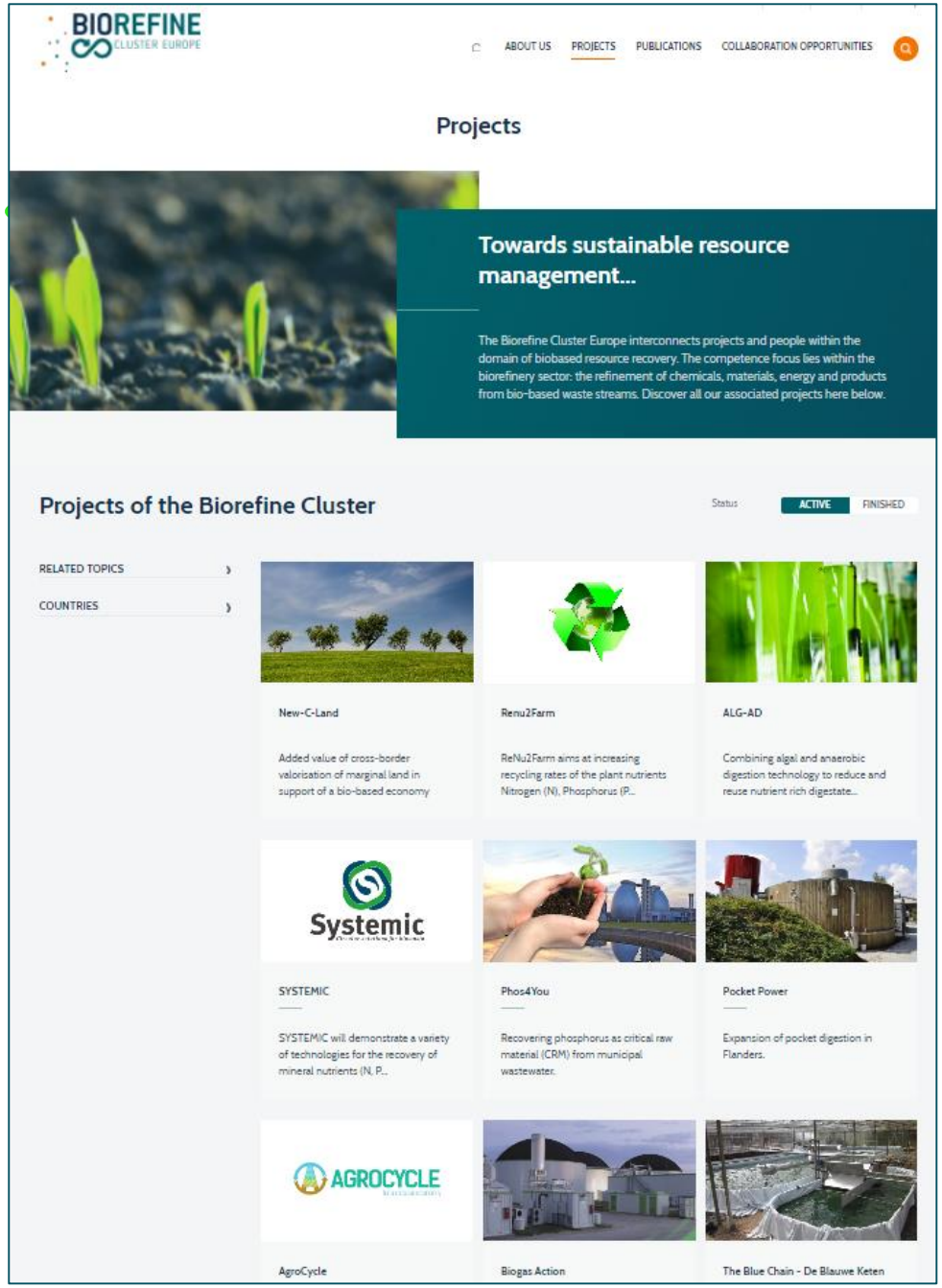
# BCE-JOINT STRENGHTS

- Maximized project impact
- Additional ‘convincing power’
- Enhanced exposure
  - Website
  - BioRefine Bulletin
  - Joint events
  - + media toolbox under development
- Powerful stakeholder events
- Exchange of data and results
- Expert mobility between entities involved
- Stronger network and project development
- Accelerated market implementation




# www.biorefine.eu

**= central portal with :**

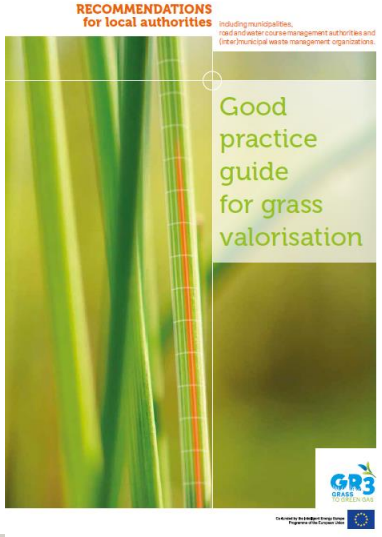
- project description (+ link to project sites)
- E-library with outputs of active & past projects
- News & Events

# Committed to OUTREACH

14th International Conference on
Renewable Resources
and Biorefineries

30-31 May & 1 June 2018
Het Pand, Ghent - Belgium

Biofabriek van de Toekomst




manu RE source
International conference
on manure management
and valorization
NOVEMBER 27-28-(29) 2017
Eindhoven, The Netherlands
www.manuresource2017.org

EBA
Conference of the European Biogas Association
2018
ANTWERP

## Upcoming challenge (BCE 2018) : Community development

Finished November 2017

eip-agri
AGRICULTURE & INNOVATION
Focus Group
Nutrient Recycling

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Nutrient Recycling Community

Setting up (& maintaining) topical community groups within the Cluster (across & beyond projects), for example continuation of the EIP-AGRI Focus group on Nutrient Recycling

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COMMON DISSEMINATION BOOSTER
The Essential Hands-on Service for R&I Projects

e.g. one of first tasks: Setting up a Common Dissemination Booster (CDB), kicking off Q3-2018

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*Possible **lessons** and **recommendations** you would draw on how to improve synergies between various instruments and approaches, for Horizon 2020/FP9/CAP/other policies and for the implementation of the strategic approach to EU agricultural R&I.*

⇒ BioRefine Cluster Europe = a bottom-up initiative

⇒ At the moment Cluster self-funded (by lack of structural funds to apply for)

⇒ In EU no funds for overarching support for bottom up cluster activities that run across and between projects; e.g. via dedicated call system CSA for clusters for meta-communication & community management across projects ?

⇒ Recommendation towards c'ed support for EIP Focus Groups : e.g. travel & accomodation reimbursement for 1 workshop / year; expert involvement by self-funding

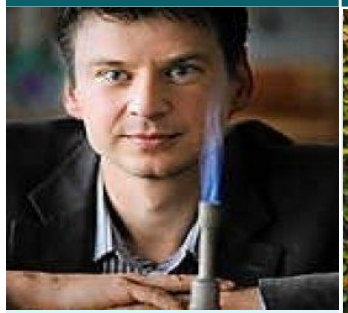
# CONTACT

## WWW.BIOREFINE.EU

@Bioref_Cluster

## Management BCE / EoW

| Group Leader | General Management | Finance Officer | Research Coordination | Communication & Community | Business Developer |
|---|---|---|---|---|---|
| Erik Meers | Evi Michels | Eva Clymans | Ivona Sigurnjak | Angela S. Arnau *from May, 2018* | to be selected *~ summer 2018* |
| erik.meers@ugent.be | evi.michels@ugent.be | eva.clymans@ugent.be | Ivona.sigurnjak@ugent.be | | |



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