



Beta

Biodiversitat, Ecologia,
Tecnologia Ambiental i Alimentària



United Nations
Educational, Scientific and
Cultural Organization



BETA Technological Centre

Universitat de Vic – Universitat Central de
Catalunya

Edifici Can Baumann

Ctra de Roda 70, Vic (Barcelona)

www.betatechcenter.com



https://twitter.com/BETA_TechCenter



<https://www.linkedin.com/company/betatc>



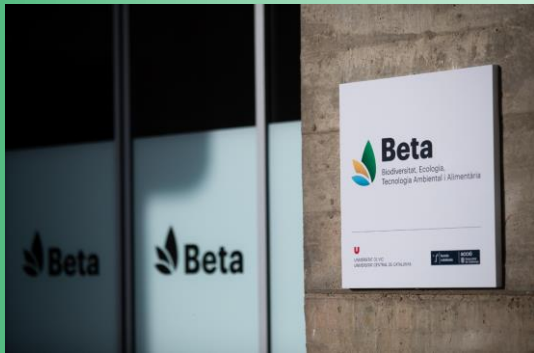
UNIVERSITAT DE VIC
UNIVERSITAT CENTRAL
DE CATALUNYA



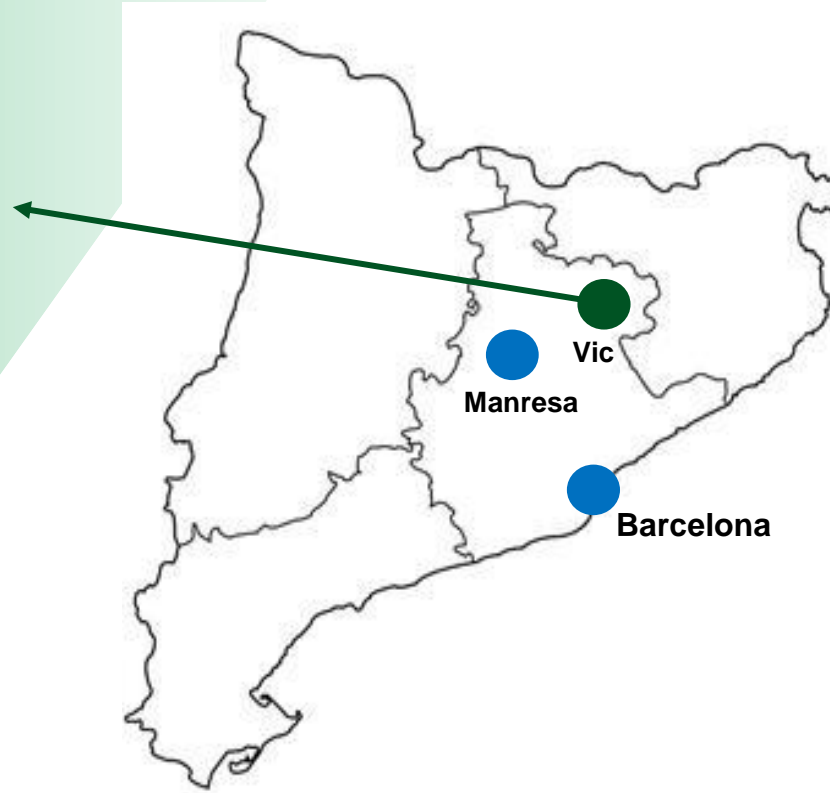
UNIVERSITAT DE VIC
UNIVERSITAT CENTRAL
DE CATALUNYA



Beta
Biodiversitat, Ecologia,
Tecnologia Ambiental i Alimentària

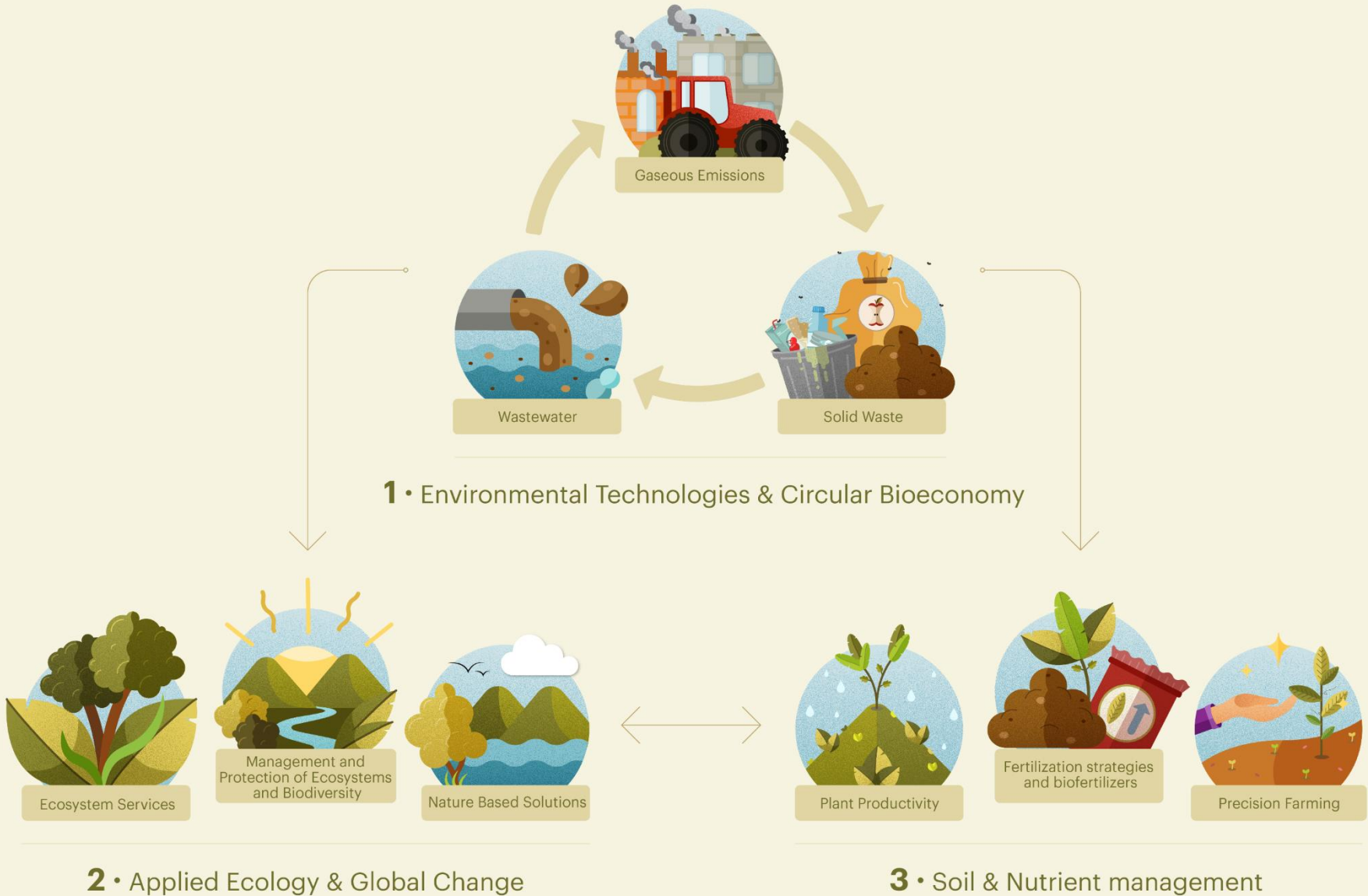


Edifici Can Baumann, UVic-UCC
Ctra de Roda 70, Vic (Barcelona)



UNIVERSITAT DE VIC
UNIVERSITAT CENTRAL
DE CATALUNYA





4 • Sustainability Accounting & Optimization



Sustainability Assessments
(LCA, LCC, SLCA)



Eco-Labeling

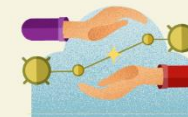


Corporate Sustainability

5 • Governance for Sustainability



Promotion of evidence-based
policies



Strategic Alliances



Transfer and Capitalization
of results



Environmental Technologies & Circular Bioeconomy

BETA TC has an extensive knowledge in technologies that pursue the goal of treating and recovering solid, liquid and gaseous waste, both from industrial or urban sources.

Examples of energetic valorization:

- ▶ **Biodrying:** is a novel technology to valorize organic waste highly moisture into a biofuel (LHV > 2500 kcal/kg), which can be used in conventional biomass boilers.
- ▶ **Energetic valorization of cheese whey and manure:** Optimal co-digestion of manure and cheese whey at full-scale systems is a promising technological-based practice to achieve energetic selfsufficient dairy farms





Sustainability Accounting and Optimization



We work to quantify the **environmental, economic and social dimension of sustainability**. Thus, we develop and apply tools and methodologies to assess the sustainability of complex systems; which final results **assist the decision-making process** of industries, governments and public agencies towards building more sustainable future.

The activity of the Sustainability Accounting and Optimization research line is focused in **agricultural and food systems, waste management systems and a wide range of environmental technologies**.

We address these areas through a **life-cycle thinking and circular economy** perspective.

We develop and apply tools and methodologies to assess the environmental, economic and social sustainability of complex systems.



UNIVERSITAT DE VIC
UNIVERSITAT CENTRAL
DE CATALUNYA



Beta

Biodiversitat, Ecologia,
Tecnologia Ambiental i Alimentària

International Projects

PARTICIPATION IN HORIZON 2020 PROJECTS

- **RAWMINA:** Integrated innovative pilot system for Critical Raw Materials recovery from mines wastes in a circular economy context.
- **VIVALDI:** innoVative blo-based chains for CO2 VALorisation as aDded-value organic acids.
- **VIOBOND:** Sustainable binder: Upscaling new lignin-phenol-formaldehyde resin production with wood-based biorefinery lignin.
- **CIRCULAR BIOCARBON:** Turning carbon of complex organic urban waste streams into value-added products.
- **SEA2LAND:** Producing advanced bio-based fertilizers from fisheries wastes (<https://sea2landproject.eu/>).
- **ACCELWATER:** Accelerating Water Circularity in Food and Beverage Industrial Areas around Europe (<https://www.accelwater.eu/>).


SEA2LAND


AccelWater


FERTIMANURE


VEHICLE


RE|FLOW
EUROPEAN TRAINING NETWORK


INTCATCH 2020


SMART-Plant





PARTICIPATION IN HORIZON 2020 PROJECTS

- **FERTIMANURE:** Innovative nutrient recovery from secondary sources – Production of high-added value FERTIlisers from animal MANURE (www.fertimanure.eu)
- **VEHICLE:** Valorise Extensive quantities of Hemlcellulosic and Cellulosic sugars from Lignocellulosic biomass into high-value End products (<https://vehicle-project.com/>)
- **REFLOW:** Phosphorus recovery for fertilizers from dairy processing waste (<https://etn-reflow.eu/>)
- **INTCATCH:** Development and application of Novel, Integrated Tools for monitoring and managing Catchments (<https://intcatch.eu/>)
- **SMART-Plant:** Scale-up of low-carbon footprint material recovery techniques in existing wastewater treatment plants (<https://www.smart-plant.eu/>)

SEALAND



FERTIMANURE



EUROPEAN TRAINING NETWORK



SMART-Plant



OTHER EUROPEAN PROJECTS IN PROGRESS:

- **TRANSITION:** InnovaTive Resilient fArmiNg Systems in MedITerranean envIrONments. PRIMA Initiative
- **FERTILWASTES:** Valorization of by-products of waste treatment systems into value-added products for agriculture. Interreg Poctefa
- **LIFE DEMINE:** Decreasing the environmental impact caused by abandoned mines on water bodies (<https://mon.uvic.cat/life-demine/>)
- **DECOST:** Decentralised Composting in Small Towns (<http://www.enicbcmed.eu/projects/decost>)
- **GREEN GROWTH:** The Interreg Med Green Growth Community (<https://interregmedgreengrowth.eu/>)
- **DESTIMED PLUS:** Developing ecotourism in mediterranean protected areas (<https://destimed-plus.interreg-med.eu/>)
- **GREENBUILDING:** Minimising Energy Consumption for Green Buildings respecting present uses and public needs (<http://www.enicbcmed.eu/projects/greenbuilding>)
- **MED4WASTE:** Mediterranean Dialogue for Waste Management Governance. Programa ENI CBC Med.





UNIVERSITAT DE VIC
UNIVERSITAT CENTRAL
DE CATALUNYA

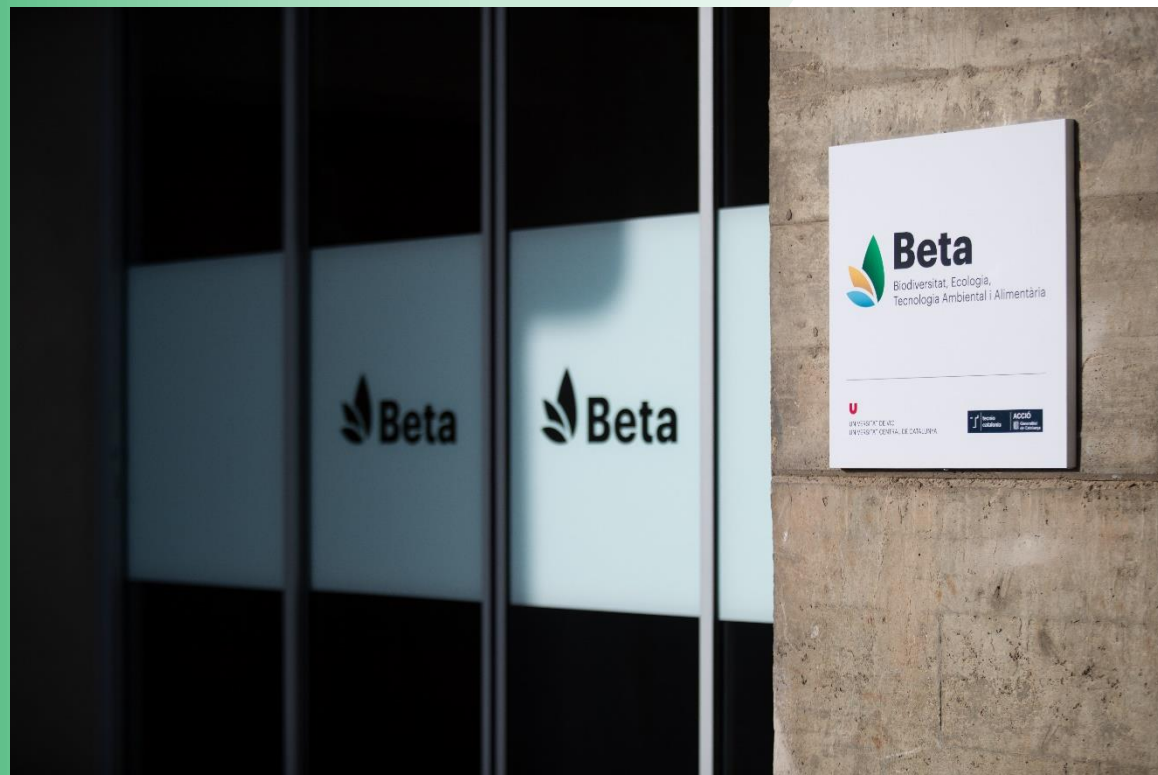


United Nations
Educational, Scientific and
Cultural Organization



Beta

Biodiversitat, Ecologia,
Tecnologia Ambiental i Alimentària



Thank you!

Contact:

Sergio Ponsá – sergio.ponsa@uvic.cat

Albert Palou – albert.palou@uvic.cat