

DEEP PURPLE

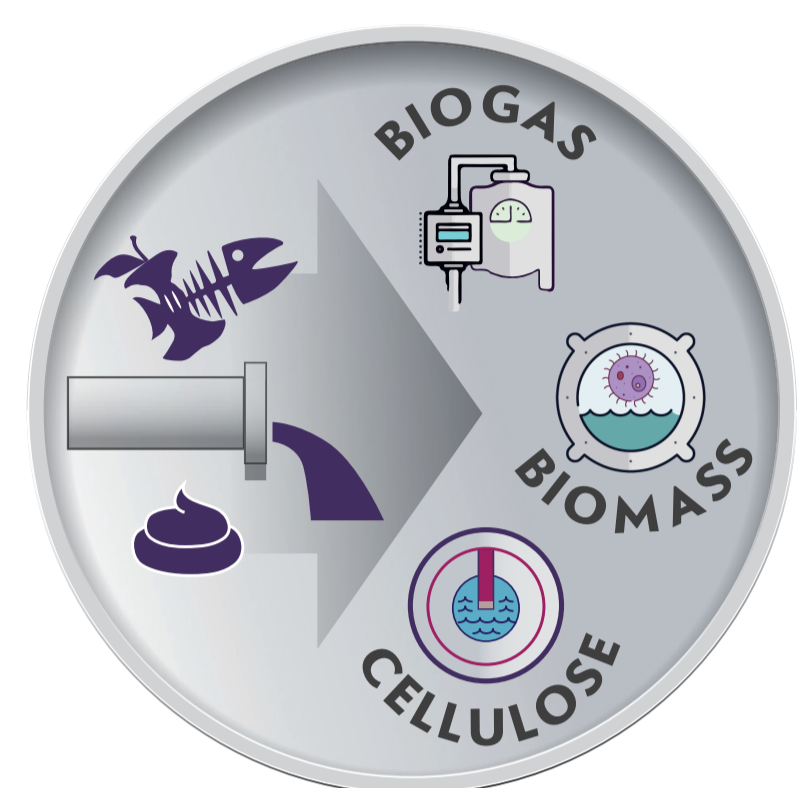
RECOVER ENERGY & VALUABLE RESOURCES
from urban waste streams **IN PHOTOBIOREFINERIES**
with the help of purple phototropic bacteria



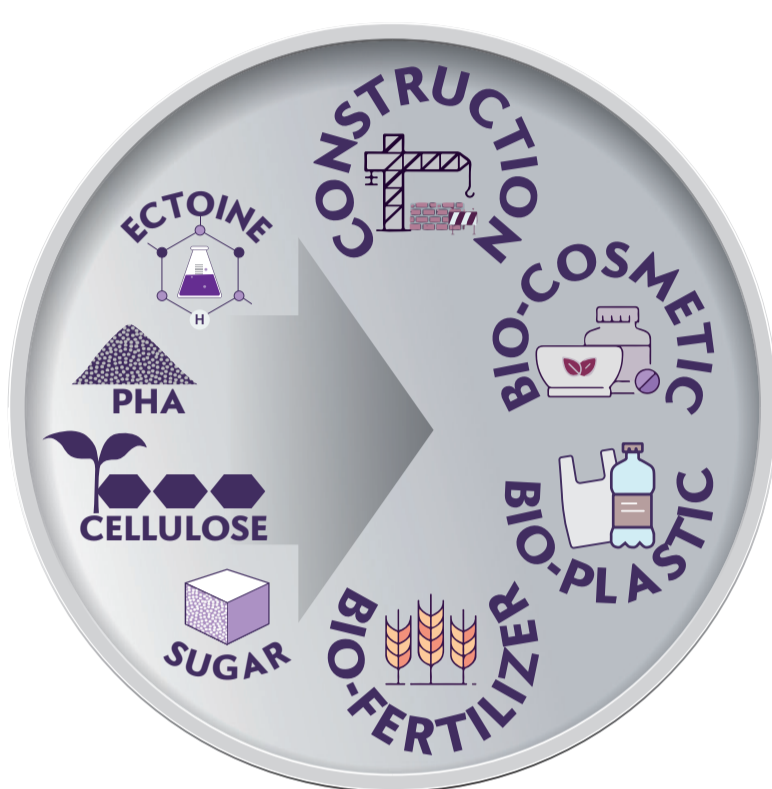
CHALLENGE Currently 75% of the up to 138 million tons of urban biowaste are incinerated and landfilled in the EU with huge ecological and economical costs.

OPPORTUNITY Waste holds a great potential as a source of renewable energy and recycled materials. Wastewater contains valuable components such as cellulose and nutrients that can be used as feedstock for many applications.

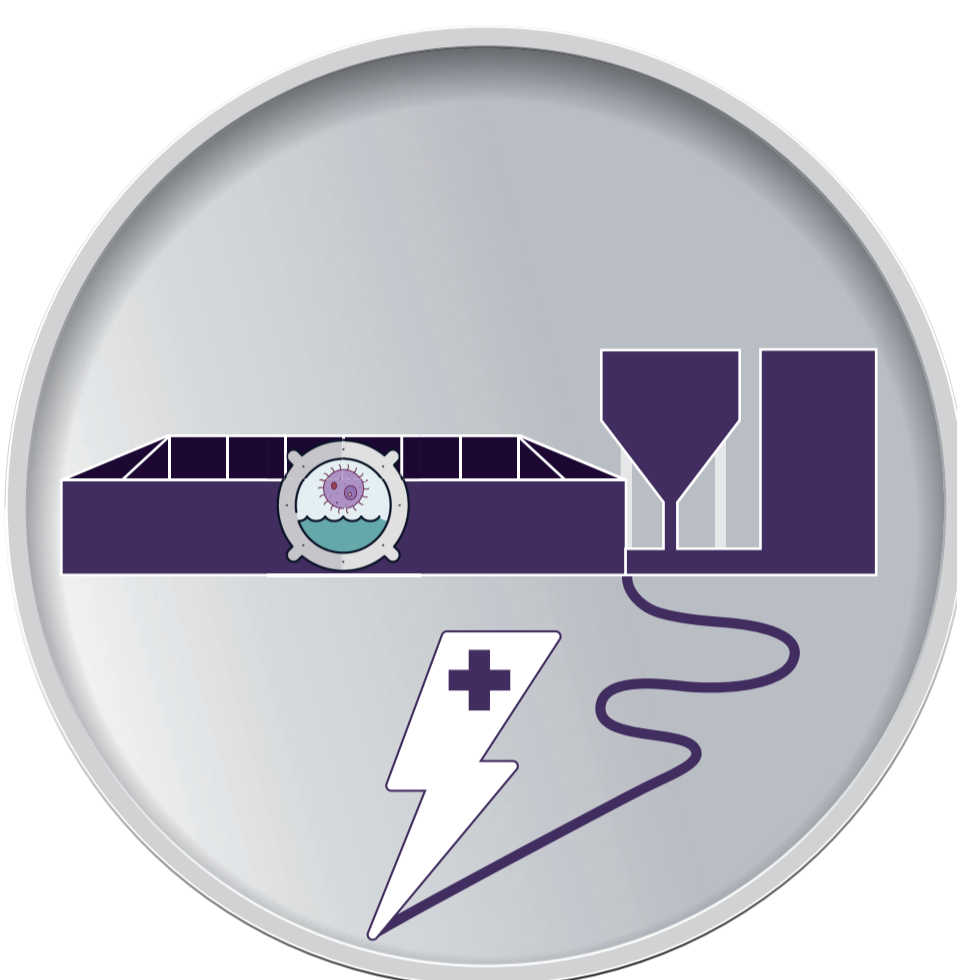
MAIN OBJECTIVES



RECOVER VALUABLE RESOURCES
from sewage sludge, biowaste & wastewater



DEVELOP INNOVATIVE BIO-BASED PRODUCTS
using derived compounds for specific market applications



OPTIMISE efficient processing
for integrated energy positive **PHOTOBIOREFINERIES**



RAISE AWARENESS
for a beneficial use of wastewater and municipal solid waste

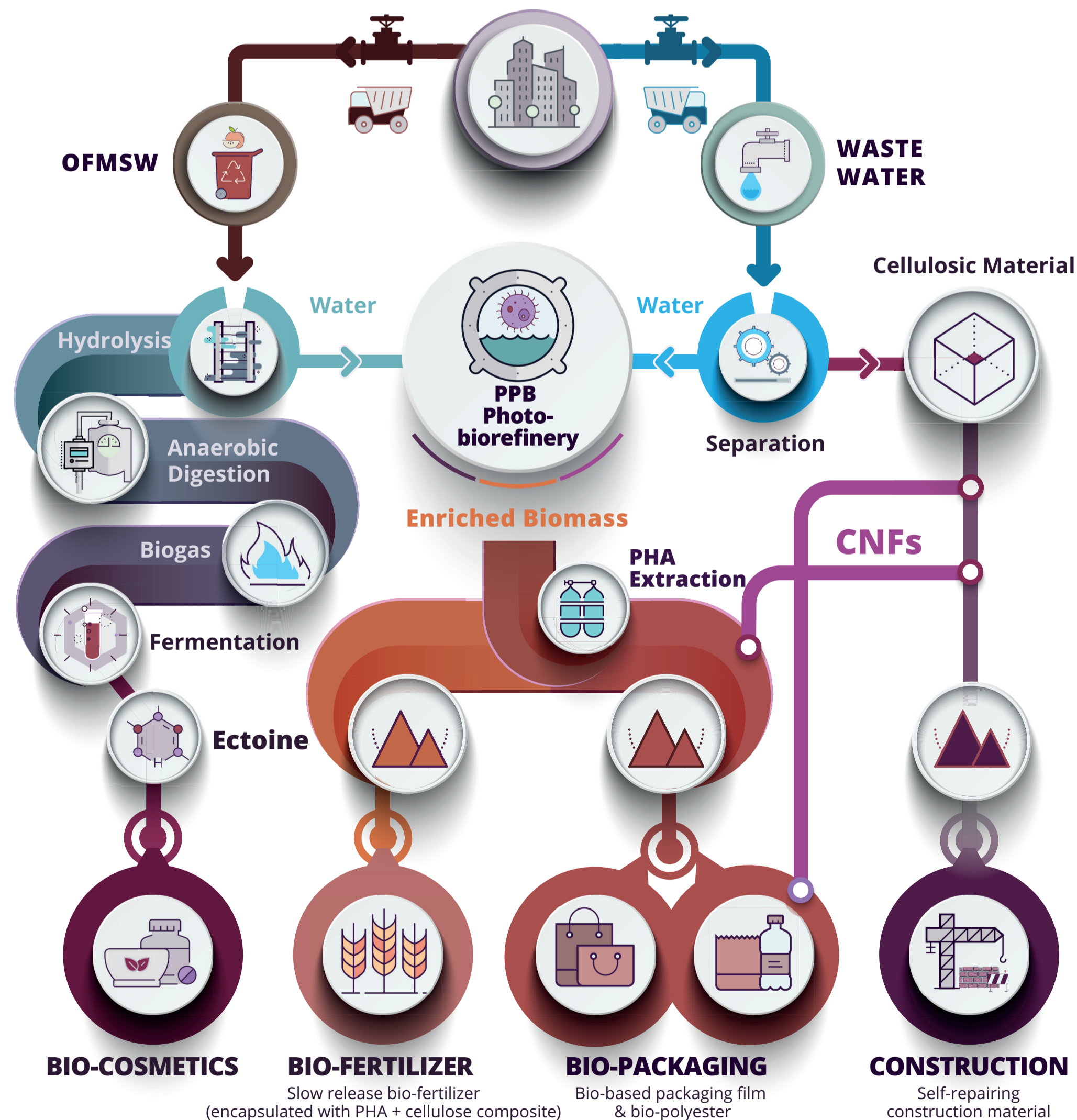


CREATE & ACCELERATE THE MARKET UPTAKE
of bio-based products and applications

TECHNICAL OBJECTIVES

- Valorise the **organic fraction of the municipal solid waste (OFMSW)**, **wastewater (WW)** and **sewage sludge (SS)** into a **sustainable biomass** for marketable bio-based products
- Create biomass **feedstock** for the **bio-based industry**
- **Bio-cosmetics, fertilizers, bio-packaging, self-repairing construction materials**
- Implementation of **multiplatform concept** (biomass, cellulose and biogas)
- Innovative combination of **optimized recovery technologies** & novel solutions
- First **PPB Photobiorefinery** in the EU & the **biggest worldwide**
- Implemented in **2 demo sites** (Spain and Czech Republic)
- Reduction of **60% of landfilled OFMSW**
- **Recovery of 71% WWTP solids**
- Bio-products for **commercialization** (440 t/y)
- Reduction of **20% of GHG emissions** (420 t CO₂-eq per year)

PROCESS



PARTNERS

