RUSTICA PROJECT IN A NUTSHELL

Rationale RUSTICA

Main relevant environmental problems identified in crop productions:

- **Nutrient pollution in soils due to surplus application of N/ha and P/ha.**
- **Soil degradation.**
- **Food waste:** 70 million tonnes of dry matter of field crop residues.

We need to:

☐ Invest in recovery of nutrients from food waste.

☐ Replace mineral fertilizer with bio-based alternative.

What is RUSTICA project?

RUSTICA will:

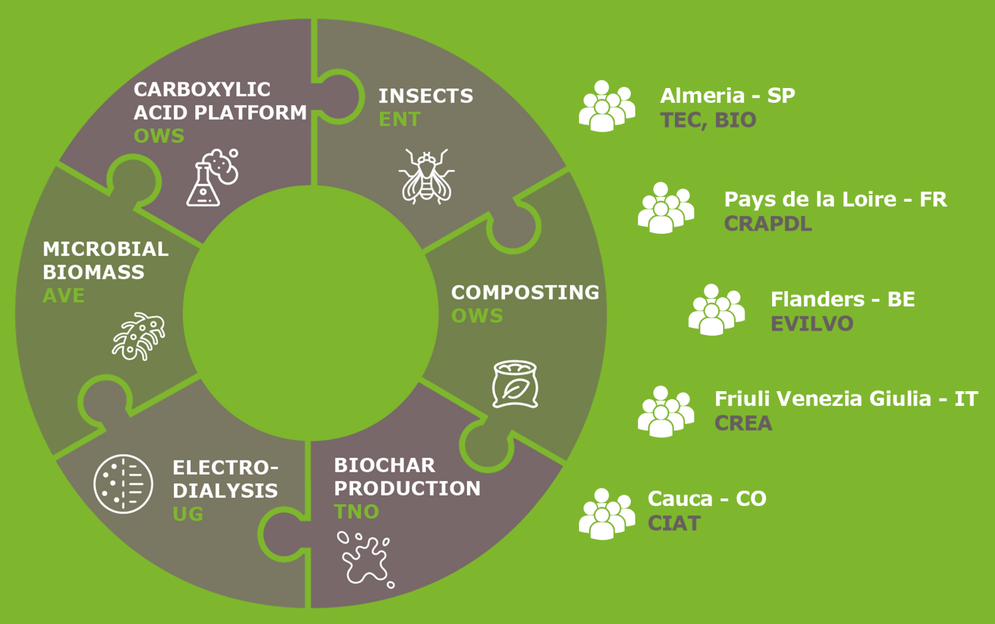
- Foster the **technical validation, demonstration** and **implementation** of bio-based fertiliser and soil improvement production techniques.
- Focus on waste from the fruit and vegetable agro-food system.
- **Close nutrient cycles** on a regional level.
- Develop of **economically viable and environmentally sustainable alternatives** to mineral fertilisers with the same or improved agronomic value.

RUSTICA locations and consortium

RUSTICA work plan

1 Technological development

- Optimise and demonstrate technologies for nutrient recovery from F&V residues as bio-fertilizer.
- Demonstrate the integration of technologies to reach a combined nutrient recovery of more than 90%.
- Demonstrate the production of fertilizer blends adapted to local demand.



2 EU level multi-actor approachz

- Regional workshops.
- EU and global workshops.

3 Market development

- Market analysis.
- Techno-economic analysis.
- Legal analysis.
- Environmental and social LCA.

RUSTICA expected outcomes

- Replace non-renewable mineral fertilisers, hence reducing external dependence and risks related to depletion.
- Balance nutrient concentrations between or within regions, thus increasing resource efficiency.
- Reduce the environmental impacts linked to the dispersion of nutrients present in waste flows, to the emissions of greenhouse gases, or to the production of fossil-based fertilisers.
- Develop new business models creating value from agri-food, fisheries, aquaculture or forestry by-products.
- Support the implementation of Sustainable Development Goals.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 101000527

RUSTICA

Demonstration of circular bio-based fertilisers and implementation of optimized fertiliser strategies and value chains in rural communities