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Resilient Mediterranean with a holistic approach to sustainable agriculture:

Addressing challenges of water, soil, energy and biodiversity

A closed loop of olive mill and cork processing waste valorization towards sustainable agriculture in the Mediterranean



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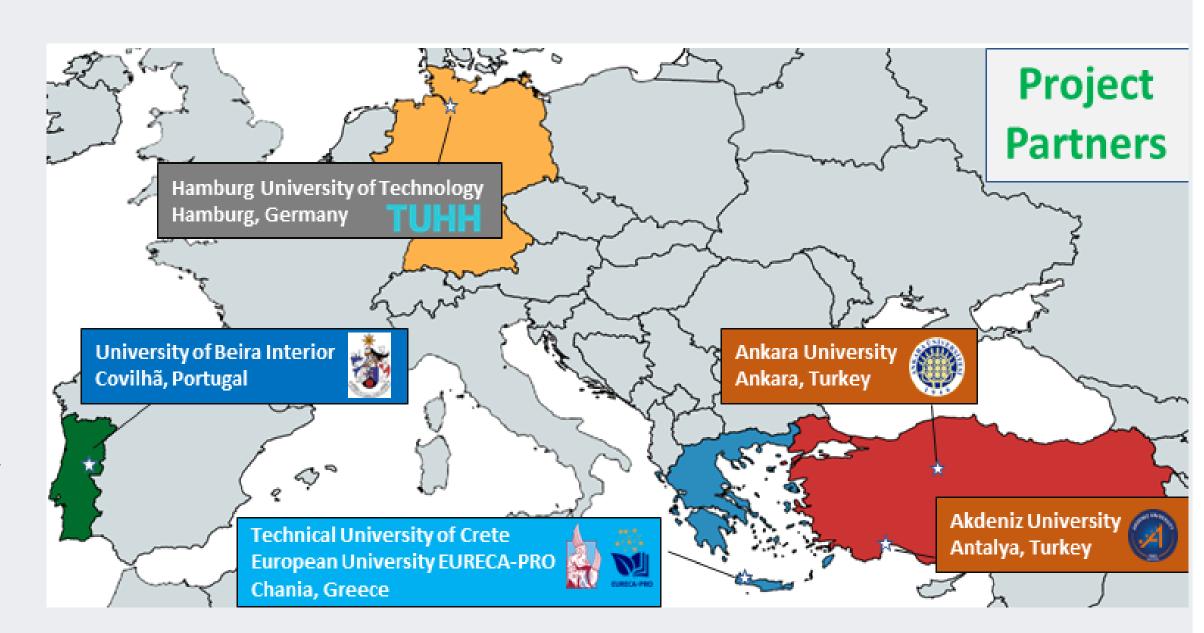
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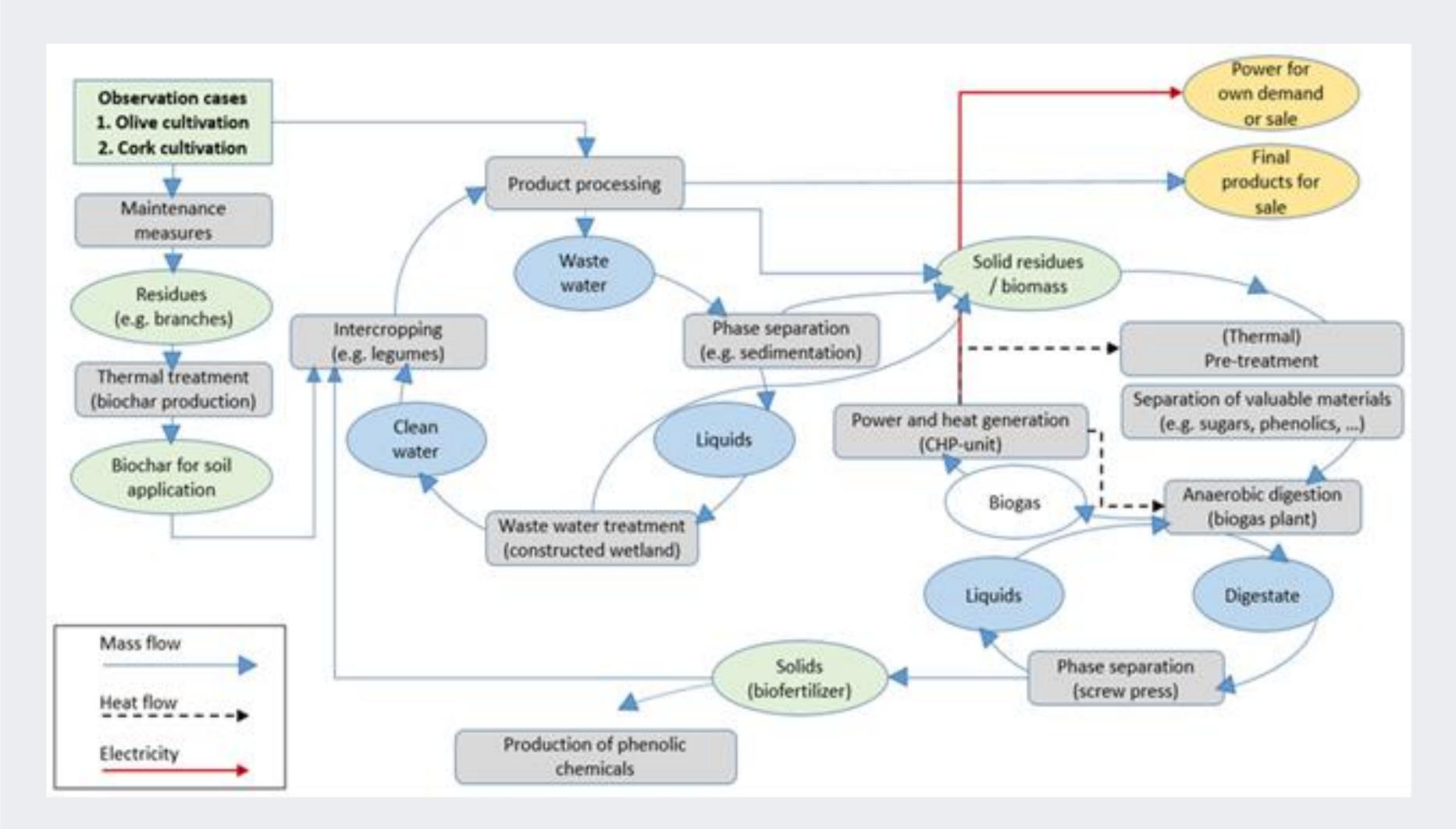
The problem

The adoption of unsustainable cropping practices (excessive tillage, monoculture), as well as the increasing impact of intense heat waves and prolonged droughts due to climate change have amplified concerns about soil erosion, soil organic matter depletion, groundwater contamination, water resource degradation and loss of biodiversity.



The approach

The ReMe-diation project brings a holistic approach to problems with soil, water, energy and biodiversity in the Mediterranean area. The project presents a circular solution to the management of wastewater, solid waste and residues of olives and cork trees cultivation.



The concept and activities of the ReMe-diation project

The project investigates several aspects including:

- 1) establishing an intercropping system in an olive grove by introducing local leguminous crops;
- 2) implementing a nature-based solution, i.e., constructed wetlands, for the treatment of wastewater from the cork and olive oil industry in Portugal and Greece;
- 3) producing biochar from agricultural residues;
- 4) producing biogas from organic residues and biomass; and
- 5) recovering high value-added products.







