

**Tittle:** Enhanced Nitrogen and phosphorus Recovery from wastewater and Integration in the value Chain

**Duration**: 50 months (4.2 years): oct-17 – nov-21

Partners:









## Stakeholders:









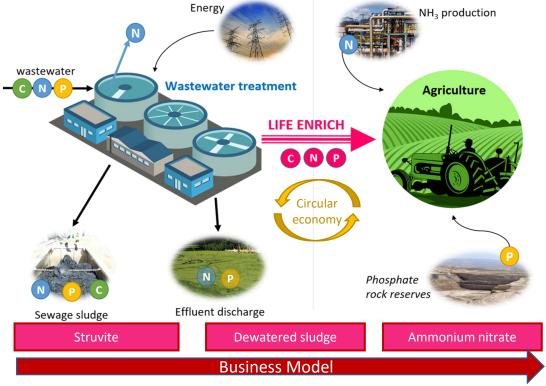


Funding: LIFE Program (60%)

**Budget**: 2,770,781 €



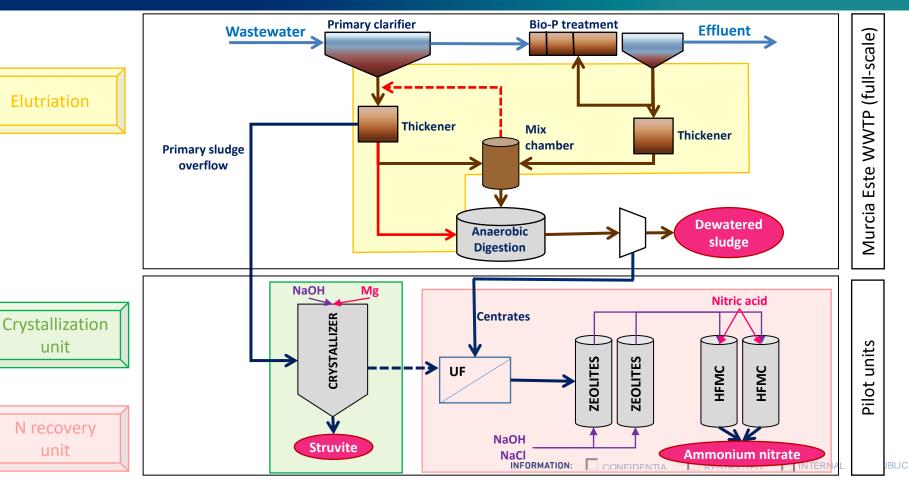
**Objective**: Demonstrate the technical, economic and environmental feasibility of a new value chain based on the recovery of nutrients from WWTPs and its valorisation in agriculture



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unit

unit



## **LIFE ENRICH – Technology & Results**

**Struvite** (from supernatant of primary thickening)





- Continuous production of 5-6 kg/day of struvite (100 mg/L PPO4, nominal capacity: 1 m3/h)
- PPO4 recovery >85%
- PPO4 out<15 mg/L
- On-going chemical optimization (Mg/P ratio, NaOH)
- struvite and ammonium nitrate: free of metals
- struvite: low TOC content (<2%)



Ammonium nitrate (from centrates)





- 40 L/week of ammonium nitrate (600-800 mg/L NNH4; nominal capacity 1 m3/h)
- Ntot 7% in ammonium nitrate (50% from N recovery) → target 20% (on going optimization)
- N recovery ~70%
- Centrates to WWTP inlet >100 mg/L NNH4 out<15 mg/L NNH4</li>







