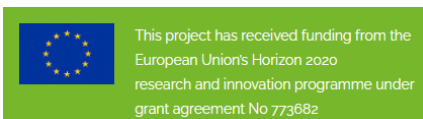
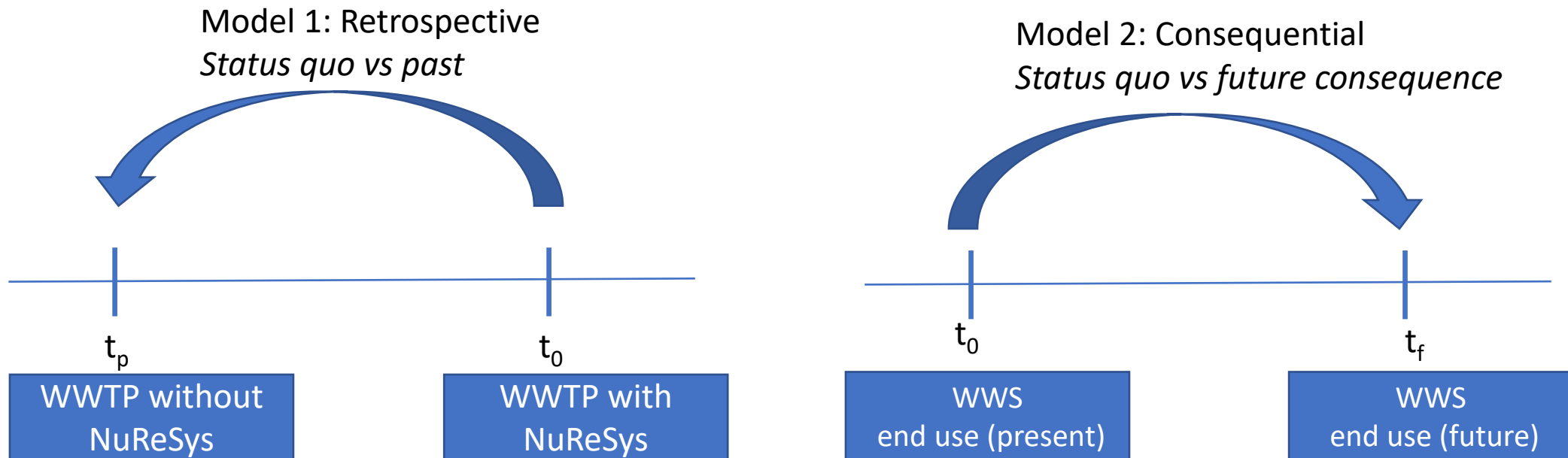


LCA of struvite recovery and a comparative assessment of wastewater sludge end-use



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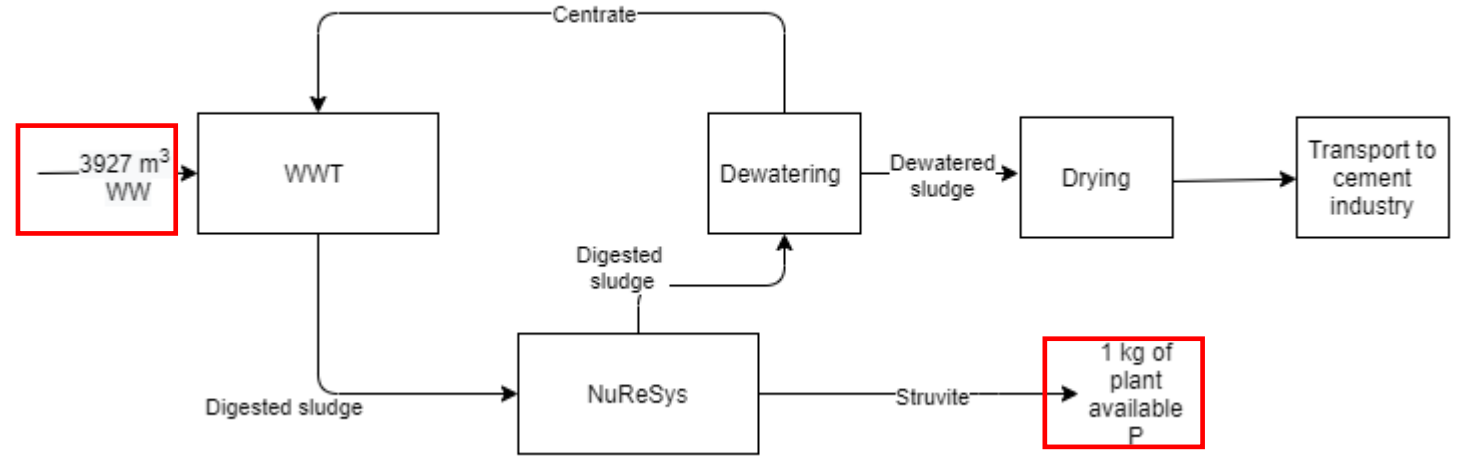
Model 1

Solving the perspective conundrum (waste versus product status of WWS):

- Apply system expansion
- Using a hybrid FU
- Attributional approach

- Include multiple co-functions in the FU definition

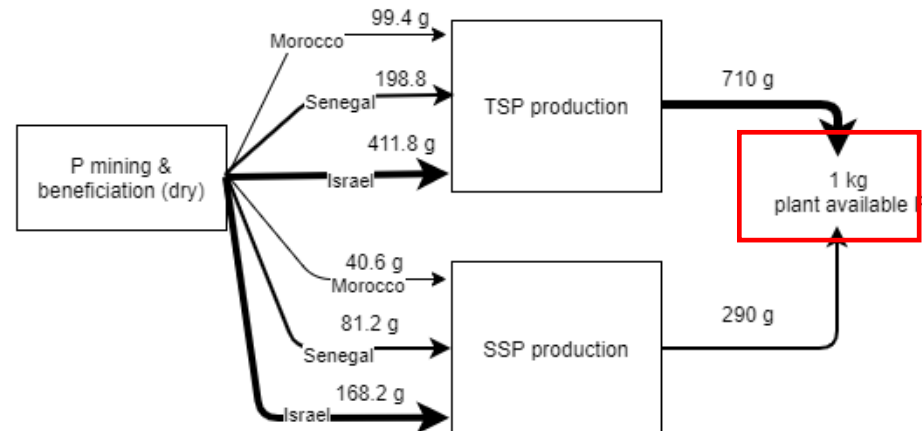
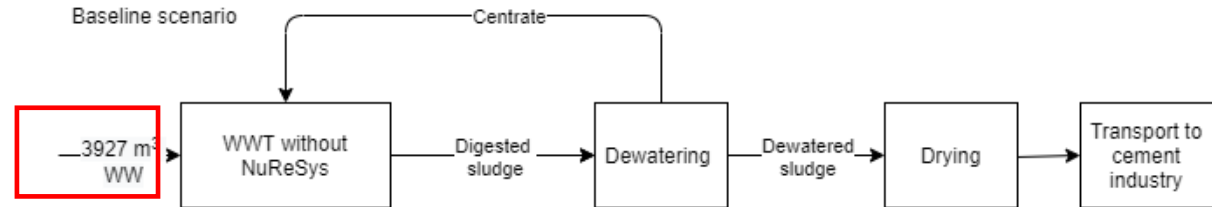
(i) post NuReSys



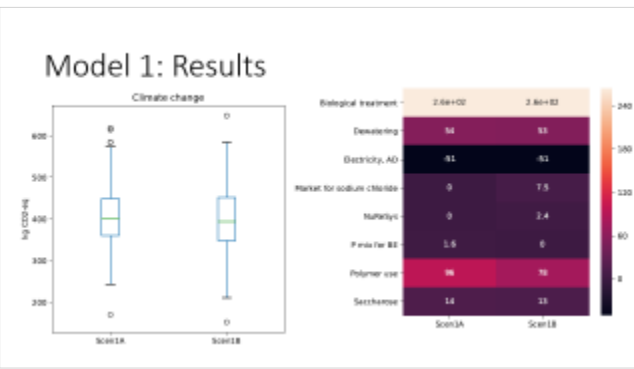
(ii) pre-NuReSys

We use a hybrid/ CE-inspired FU. '3927' m3 of ww refers to the quantity of ww required to recover 1 kg of plant available P as struvite

Baseline scenario

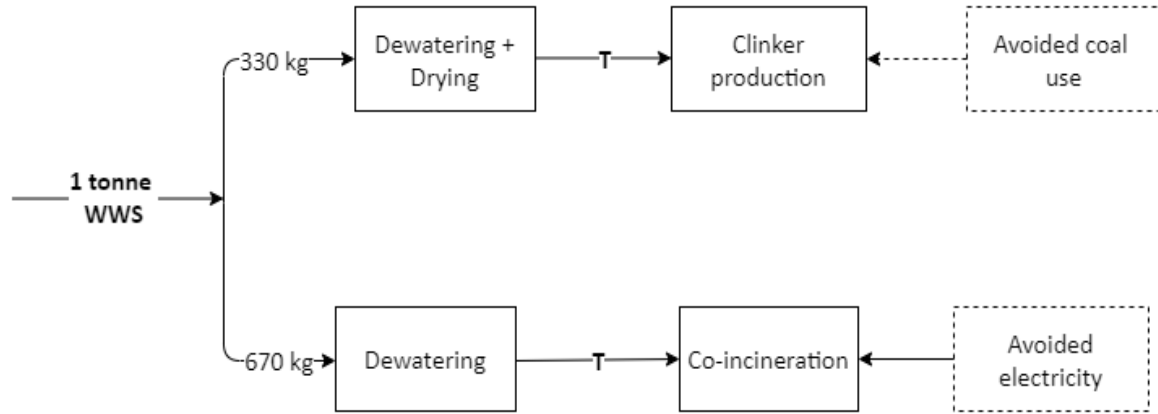


Model 1: Results

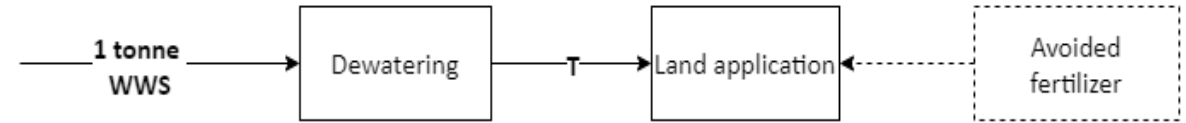


Model 2

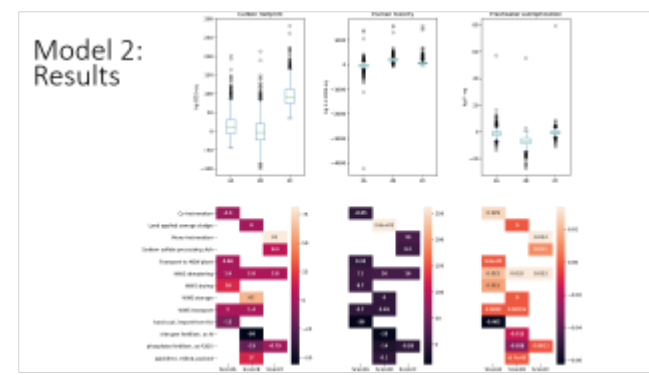
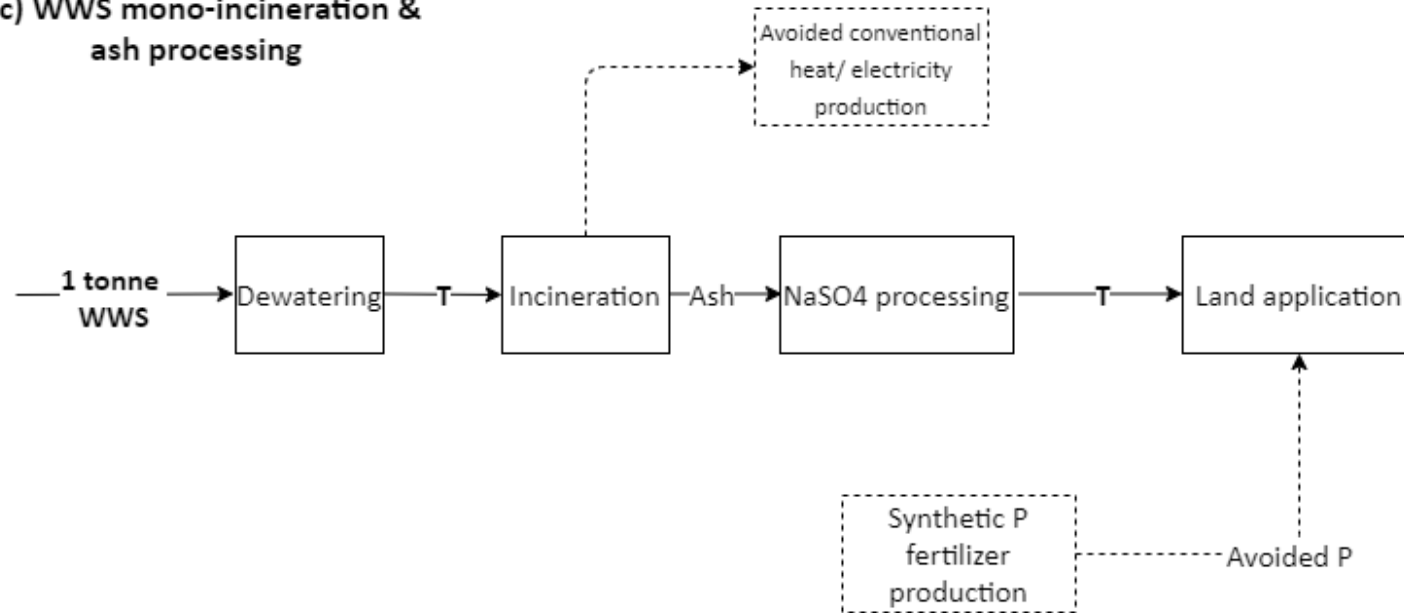
2(a) Status quo



2(b) WWS land application



2(c) WWS mono-incineration & ash processing



- Reflecting future consequences
- Consequential, ex-ante approach

Note: FU: 1 tonne of digested WWS (5% DM)
 After dewatering: 30% DM
 After drying: 90% DM

T refers to transport and dotted lines indicate avoided processes