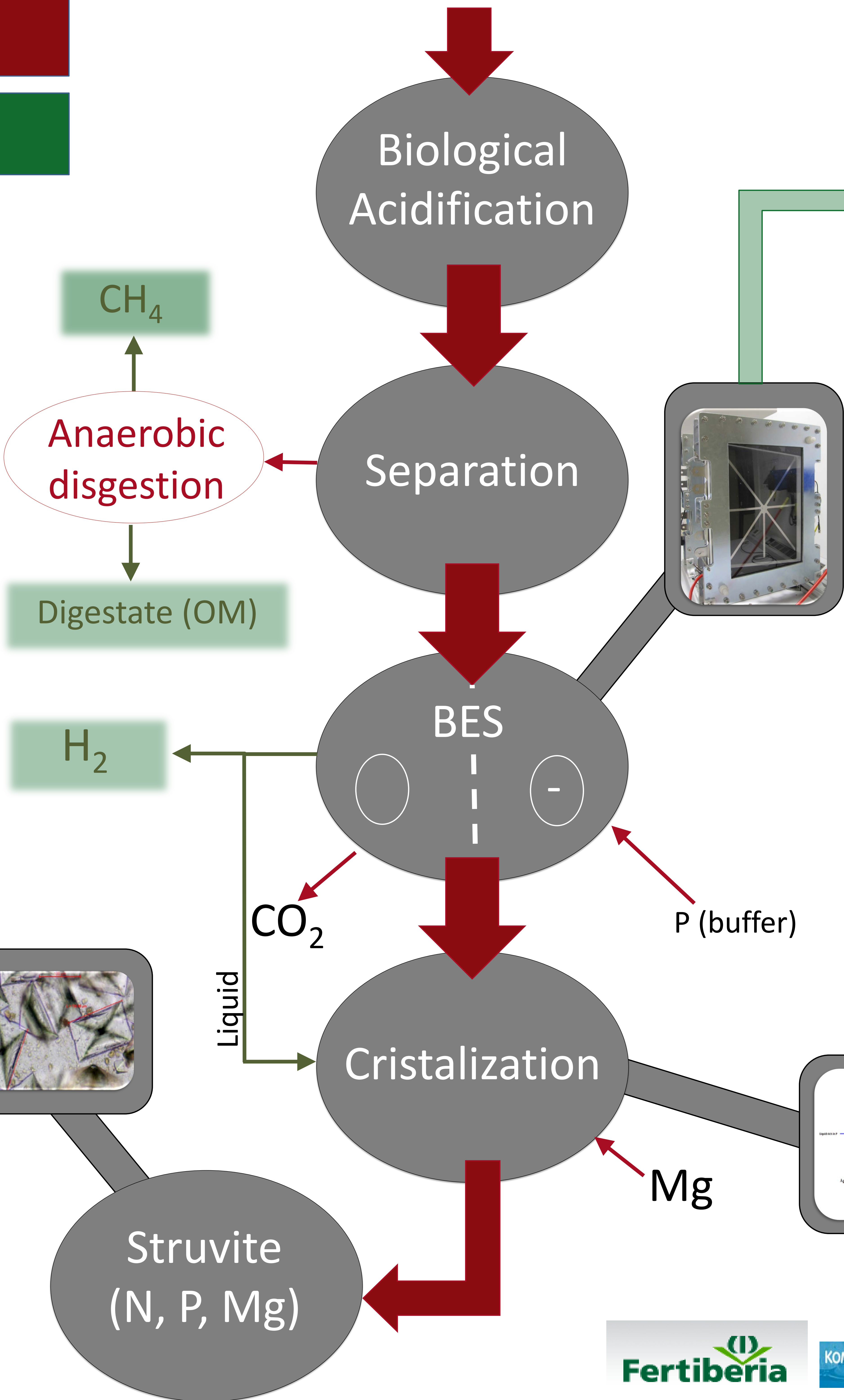


Pig slurry + co-substrate



## Bioelectrochemical systems (BES).

- **Anode biofilm** can operate in a stable way at high concentrations of nitrogen and organic matter.
- 57% of the initial **nitrogen** in the pig slurry is **recovered**.
- The **maximum nitrogen recovery rate** is  $325 \text{ mg-NT} / (\text{L}_{\text{reactor}}\text{d})$ .
- **Hydrogen production**:  $0,2 \text{ LH}_2/\text{L}_{\text{reactor}}\text{d}$  is produced in the cathode.

## Struvite cristalization

- **Ionic composition** of the product shows the presence of both P and N in abundance.
- **Organic Content** of the product was between 14 and 18%.
- **Heavy metals** concentration is low.
- **Shape and size** of the struvite crystals depended on the operation conditions (stirring rate, retention time and solid retention time) and pH.



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