# Sustainability and Life Cycle Assessment of feedstock digestion systems

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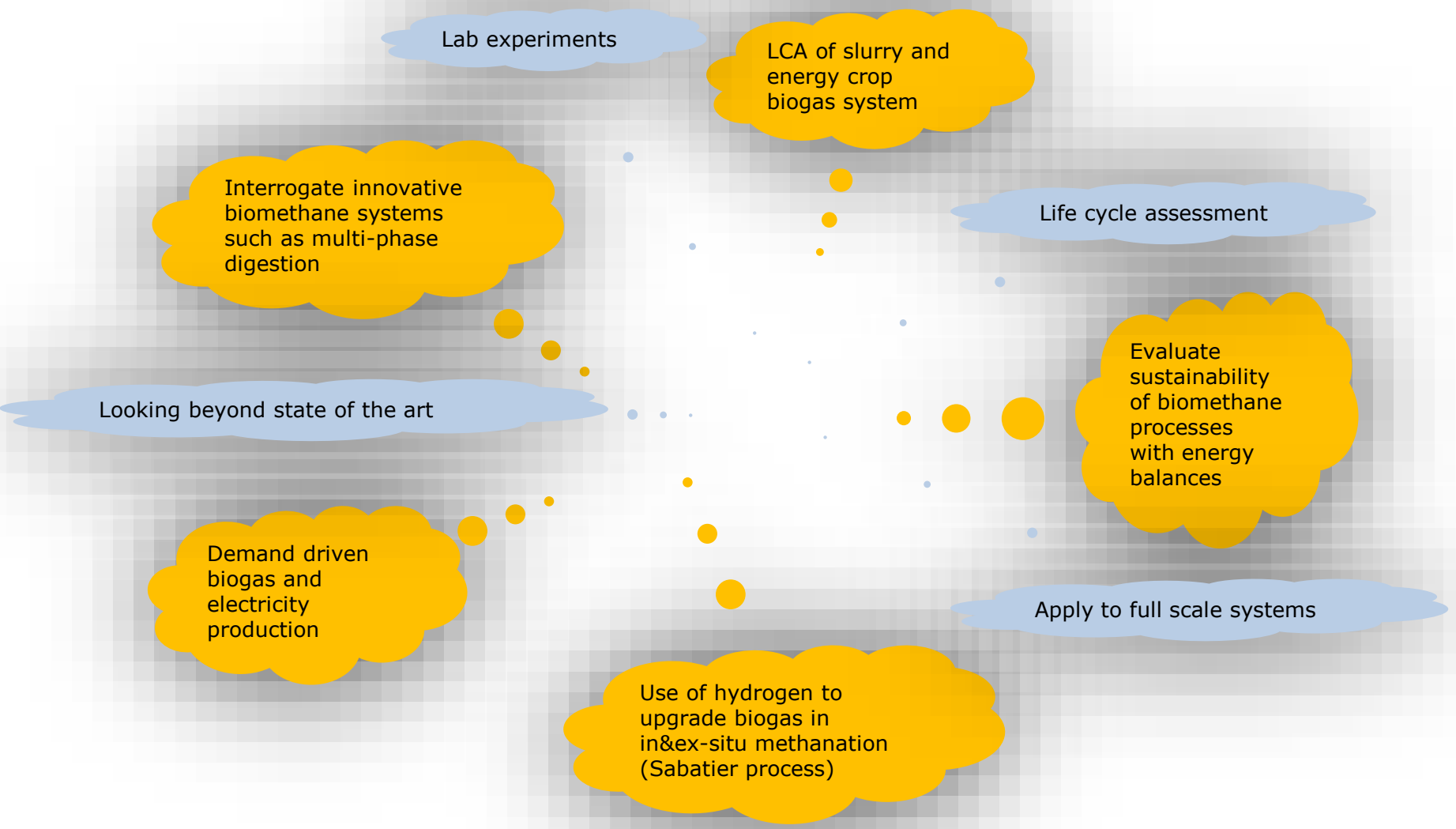
# RESEARCH PROJECT

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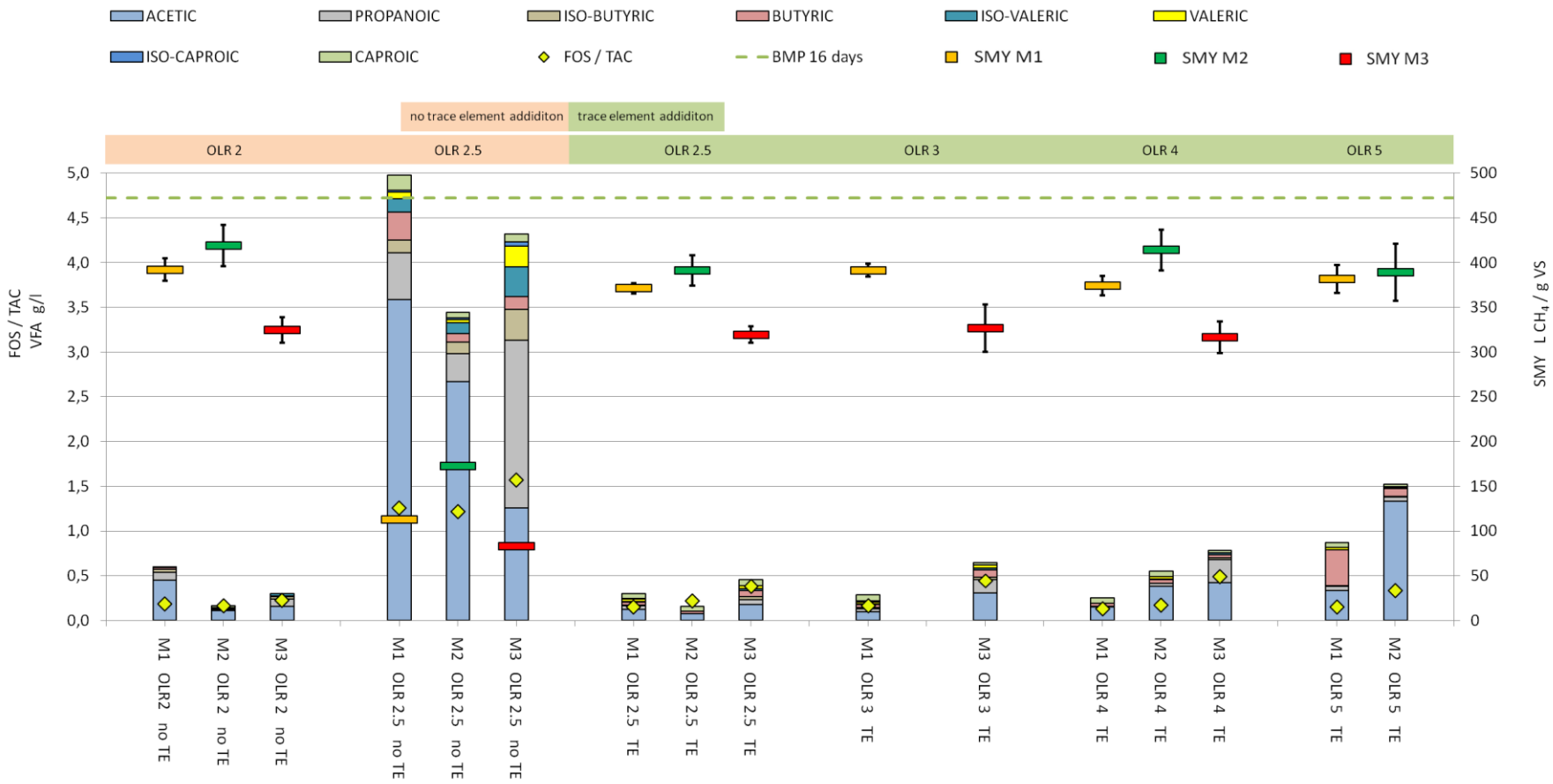
## Performance, yields & impact of trace element addition

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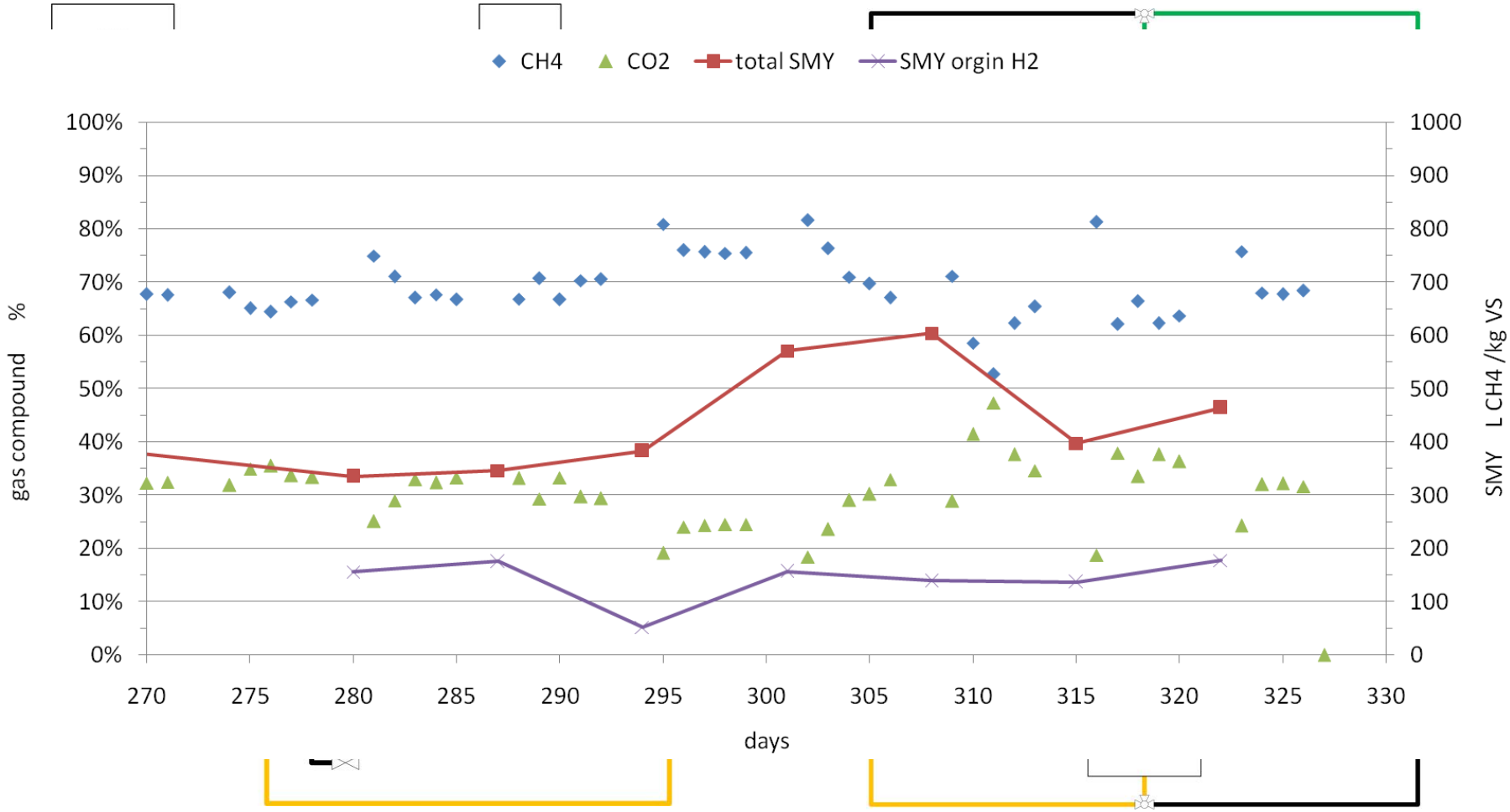
# BIOLOGICAL METHANATION

## Lab scale experiment in-situ

## Combined in & ex-situ methanation





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# IMPACT & BENEFITS FOR INDUSTRY

1) Efficiency of two-stage digestion as compared to single-stage

2) Role of trace elements at variable loading rates in continuous digestion systems

3) Thermophilic grass digestion as novel and more efficient approach than mesophilic

4) Development and operation of a lab scale in-situ & ex-situ biological methanation reactor

5) Life cycle assessment of a novel full scale biogas plant

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# Thanks for listening

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