



euroslam

“The beneficial use of sewage sludge from small and medium sized municipalities”



Part-financed by the European Union
(European Regional Development Fund)

Introduction to the project



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Main purpose and objective

The overall purpose is to improve the capacity of small and medium sized waste water treatment plants for modernised sludge handling.

The long term objective is to reduce the load of nutrients to the Baltic Sea and heavy metals to the environment.

How?

- Three interacting steps for improved sludge handling and the use of the sludge as a resource:
 - WWTP analysis and Anaerobic digestion for biogas production
 - Biogas utilisation as a renewable energy source
 - Nutrients recycling by biosolid utilisation in agriculture
- Adaptation of technologies for smaller scale installations / municipalities
- Cross-border actions for knowledge exchange to strengthen the results

Expected results

- Introducing new technologies adapted for small and medium sized municipalities
- More nutrients used on farmland instead of released into the Baltic Sea
- More biogas converted into usable form of energy replacing other fossil fuels

Expected outputs – to be used in the entire South Baltic Area

- A handbook of the implementation of new technologies at small and medium sized waste water treatment plants
- Biogas utilization analysis
- A Quality Assurance (QA) program for the use of biosolids in agriculture
- Cooperation and discussions between partners in the South Baltic Sea region.

Project description

- Project duration: 1 July 2011- 31 December 2014
- Total budget: 1,2 million Euro
- 8 partners in 3 countries (Sweden, Poland, Lithuania)
- 5 associated organizations for the implementation and dissemination of the results
- Lead partner: Region Skåne, Sweden
- Project management: Sustainable Business Hub



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Five "components"

1. Management and co-ordination
2. Communication and dissemination
3. WWTP analysis
4. Biogas production/utilisation
5. Biosolid utilisation

Component 3:

WWTP Analysis



- **Activities:**
 - Survey of available technologies and need for adaptation to small scale plants
 - Feasibility studies and WWTP process analysis (upstream etc.)
 - Study visits for knowledge exchange
- **Results:**
 - Making the WWTP process more effective by using technologies adapted for small and medium sized municipalities
- **Output:**
 - A manual for implementation of innovative solutions at smaller treatment plants to improve the WWTP process.

Component 4:

Biogas utilisation

- Activities:
 - Studies for different possibilities to convert biogas to usable energy (car fuel, electricity or heating) at different sizes of production capacity
 - Development of methods for collaboration and partnering with stakeholders for a proper biogas utilisation
- Results:
 - More biogas converted into usable form of energy replacing other fossil fuels
- Outputs:
 - A manual of the biogas utilisation process describing the most effective use in terms of environmental impact and costs at different conditions



Component 5:

Biosolid utilisation

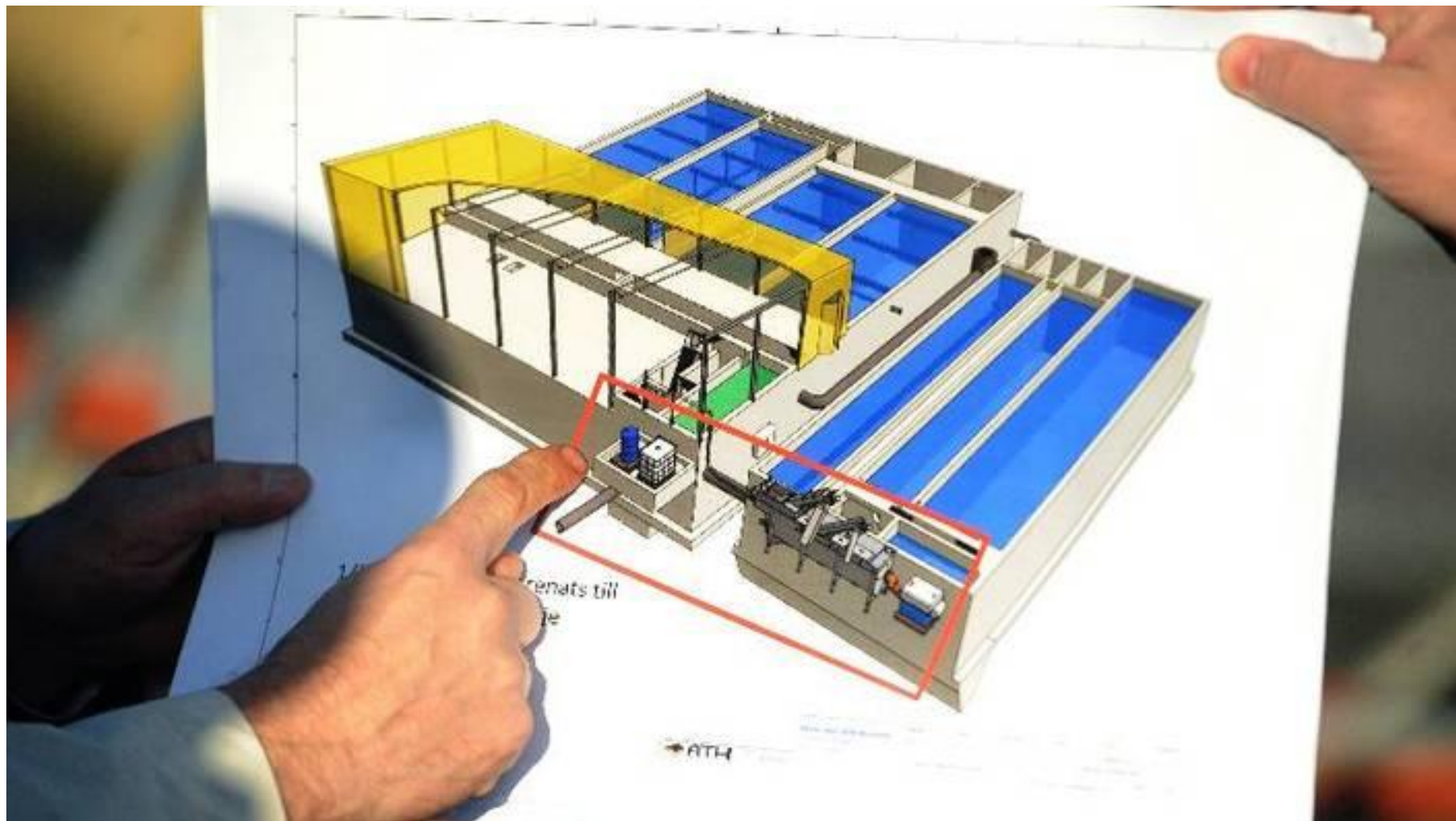


- **Activities:**
 - Involve stakeholders to discuss the use of sludge on farmland
 - Studies of hygiene, heavy metal flows and nutrient mass balance and tracing in the collection systems
 - Development of traceability system for monitoring biosolid use
- **Results:**
 - More nutrients used on farmland instead of being released into the Baltic Sea
- **Outputs:**
 - Quality Assurance (QA) programme for long term use of biosolids





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Project websites:

www.hpwm.eu



www.euroslam.eu



www.innoheat.eu



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