

NEREUS Start Conference

Thursday the 31th of May 2018

CAPSO St. Omer (France)

Minutes of the Energy Recovery session

Participants:

Bruneel Kris – Bbouwadvies

Bossaerts Wim – waterlink

De Langhe Piet – Pantarein

Poelstra Anke – Hoogheemraadschap van Schieland en de Krimpenerwaard

Mulder Jan Willem – Evides Industriewater

Maes Alexandre – Artelia

Evrard Christophe – Agriopale

Chapelet Sébastien – SEM Energies Hauts-de-France

Joly Adèle – CAPSO

Courouble Sabine – CAPSO (Moderator of the session)

De Man Stéphanie – Flanders Knowledge Center Water (Vlakwa/VITO) (taker of the minutes of the Session)

Competition or combination with alternative technology (solar panels, wind turbines, ...)?

- Does wastewater treatment go together with the alternative technology?
- It is complimentary – if you decentralise not the same condition
- You spend energy to treat wastewater and you lose energy containing the water... energy is a resource so combining it is restoring water and producing energy so interesting to recover energy from wastewater
- It is not competing, but different techniques can stay next to each other, but not necessary
- From a process point of view Evides does not see a combination
- Solar panels take a lot of space and not a good idea to combine it – not a good idea to make a condition out of it
- It can work and show to the people green energy, but It shouldn't have to be a fixed condition/a obligated term
- It is case by case
- Whether you are installing large, energy-efficient installations on site or using some kind of small installations where usage will be externally afterwards, in any way you prove to work with green energy/recovery of energy with the same end result as achievement – no need for a combination, you can achieve the same results with smaller ones

Who should undertake this kind of equipment? What are the expectations?

- In France is water at regional level, but not the same for renewable energy
- Water municipalities, can decide Does wastewater treatment go together with the alternative technology?
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- If you use renewables can be produced offside – prove by green energy – at the end it will end up the same
- what they want to do
- Agrofoodbusiness – big agricultural companies use a lot of water and they have their own wastewater treatment plant
- Be in connection with private sector to catch different solutions and make similarities between different actors
- Use energy as level for economic development
- Provide best background to the industry to let them start a new industrial solution for industrial private initiatives that work in a strategy

What about safety risk e.g. biogas installation?

- It is an issue that can be solved
- Risk but also a regulation (controlled) - less dangerous than power plant
- Financial risk
- Gas bottles in house are more dangerous than the ones on sites so explosions almost for fantasy
- But still important when designing an installation
- Smell is more the issue (risk for comfort) – WNTF because of inputs / BIOGAS dangerous substances

What could put a stop to a project?

- Important to know what you put in your project
- Price green energy Belgium vs France
- Having a natural vs rural living area
- Combining everybody's interest can be quite complicated
- Local acceptance difficult... Price, location, ...
- Not easy to test on a small scale and then take conclusions on a large scale
- Biogas only a normal investment if you do it on a large population scale
- The issue/problem with biogas for small units is often that the effluent is subsequently discharged in the green or in the sewerage system without further processing

Are energy recovery project in urban economically self-sustaining? Should they be stimulated by financial instruments? How do you know?

- You have to change the mentality
- Global cost: operation, construction, ... but not just think about this but see it as a global system, network, ... then global vision of all costs
- When more there will be more chosen for renewable energy, it will become more interesting/ more money making. So in the future it will be cheaper – only win win situation

Within the NEREUS project we will develop a decision support tool (DST) to assist decision makers in the optimal selection of recovery technologies

2 Seas Mers Zeeën

European Regional Development Fund

- Characterise the resource – what kind we have, quantity, how collect it ... then build a decision support tool
- Feasibility study
- Choose 1 max 2 solution and see what is the best
- The more knowledge you have concerning territory, potential, network, the more good insights
- Way between need and strategic short middle long term
- Technical, financial aspect (public authorities and banker are major barriers) also technical expertise changes quickly so important to stay updated on the market opportunities
- Create a tool assessing the risks so we can keep them very low and in that way have more integration of stakeholders and investors