NEWSLETTER

EUROPEAN SOURCE SEPARATION SYSTEMS

On June 18th, HAMBURG WASSER celebrated the commissioning of the blackwater treatment system of the HAMBURG WATER Cycle in the Jenfelder Au. The HAMBURG WATER Cycle is a concept of source separation of wastewater (blackwater and greywater) in order to link the treatment of wastewater with the generation of renewable energy.

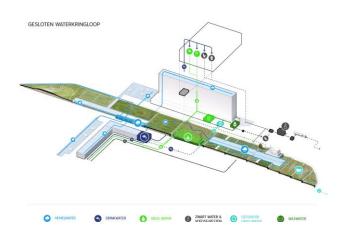
HAMBURG WASSER took the opportunity to invite sister cities from Europe that are also currently planning, building or operating areas with source separation wastewater systems. On the 19th of June, a joint workshop took place in order to kick-off European exchange on experiences and intense networking among project managers and science. Topics addressed were current operational and technical challenges, the identification of our joint drivers, barriers and driving forces for further development of source separation wastewater systems in Europe.

This summarising newsletter provides a short profile of each demo site as well as a summary of the workshop held on June 19th in Hamburg.



SUPER LOCAL

- Total of 130 houses (113 apartments, 13 houses, 3 experimental dwellings and 1 expo pavilion)
- December 2020 all people will move in.
- www.superlocal.eu
- External funding: UIA (sum: 5 million) & LIFE (sum: 2,5 million)
- Contact person: Diederik van Duuren (d.vanduuren@wml.nl)



BUTIKSLOTERHAM

- Size (people or house units) 538
- Year and month when people started moving / are planned to move in. Currently around 60 people have move in , fully inhabited around 1250 people, estimated that building ends in 2021.
- Project web site
 https://www.waternet.nl/werkzaamheden/nieu
 we-sanitatie/
- External funding programs (names and sum)
 City-Zen (2014-2019) http://www.cityzen-smartcity.eu. Aprox. 2 mio Euro.
- Email of contact person: <u>marcel.zandvoort@waternet.nl</u>; marina.gaton@waternet.nl



H+

- Size (people or housing units) 1800 pe (phase 1)
- Year and month when people started moving in / are planned to move in: March 2020
- Project web site www.recolab.se
- External funding programs (names and sum)
 Horizon 2020 Run4Life, 0,58 Mio. €
 Klimatklivet, approx. 0,2 Mio. €
 Naturvårdsverket, approx. 0,6 Mio. €
- Email of Contact person hamse.kjerstadius@nsva.se



JENFELDER AU

- Size (people or housing units):835 housing
- Year and month when people started moving in: 2017 (fully inhabitated approx. 2021)
- Project web site: https://www.hamburgwatercycle.de/en/home/
- External funding programs (names and sum):
 EU LIFE+ (€ 2.8 million); BMBF KREIS (€ 0,3 million); BMWI EnEffStadt (€ 0,18 million)
- Email of Contact person:
 Wenke.Schoenfelder@hamburgwasser.de;
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SUMMARY OF THE WORKSHOP ON SOURCE SEPARATION PROJECTS IN EUROPE

19th JUNE IN HAMBURG

As a side event of the official commissioning of the demonstration project Hamburg Water Cycle (HWC) Jenfelder Au in Hamburg 31 participants from other European cities planning and/or operation similar source separation systems (NASS) met to discuss common aspects of the design, construction and operation. Representatives of Helsingborg and Stockholm (both Sweden), Amsterdam and Kerkrade (both the Netherlands), Hamburg (Germany), of the Dutch University Maastricht, the German Universities Hamburg and Weimar and a representative of the World Bank, New York and giz, Eschborn discussed after introducing their projects in a world café format 5 different topics. Key findings are:

Drivers, barriers and needs for a large rollout of the concept of new sanitation

- European Union has to be involved, supporting NASS by legislation.
- A not just cost based frame for decision-making, which integrates national economics and business economics of varies companies, has to be established.
- Addressing and involving public has to be strengthened.

Nutrient recovery from digestate

- Approval as fertilizer and fertilizer demands are most important.
- Marketing has to be improved. It should be clear, who is the client for fertilizers from digestate and whether fertilizer and fertilized products are accepted.
- Technically dewatering in different steps (collection in toilets, after digestion) has to be improved.

Greywater separation, treatment and reuse

- Greywater reuse options have to be figured out and linked to quality demands.
- Fit-for-purpose solutions offer the advantage of distinct treatment requirements for certain levels of quality.
- Heat recovery is one of the reuse options.
- Options for the separate collection of greywater in existing buildings is a very important topic.

Operation and maintenance of vacuum sewers

- Design and operational experience of blackwater vacuum sewers is lacking.
- Scaling up and the transition to bigger systems should be investigated more closely.

Customer and stakeholder management

- Stakeholder involvement is very important and there are many unanswered questions.
- There is a lot of data and experience on stakeholder in the group.
- Social sciences have to be better involved and learning from other fields of research should be included.

Next steps

An extensive evaluation of all the projects in all stages of development would help to share information and knowledge in the established network, which may be extended in the future. Targeted meetings with smaller groups can be arranged and work results shared afterwards with the others. It was proposed to choose special and well-processed aspects, which might be interesting for others for a next meeting with the whole group or in sub-groups. Personal communication in the network will be an effective way of solving problems.

Sharing project information on different platforms, a newsletter, a next meeting in Amsterdam and the forming of several sub-working groups has been agreed on.

Applying for money from EU-funding would help to intensify the exchange.