



Wetskills-The Netherlands 2018

Overview of Study Cases

Case 1: Self-supportive temporary shelters for multi-purpose use

Case owners: Province of Fryslân and LabVlieland

Vlieland is one of the islands in the Dutch province of Friesland, that sees a high influx of tourists in the summer, especially during the eco-minded Into The Great Wide Open festival. To provide a playing ground for innovations in the field of sustainable and clever use of energy and resources, LabVlieland was created. Their current quest is for an out-of-the box design of an advanced, mobile, integrated Shelter system –AMIES in short. Think a self-sustainable, closed-loop resource building, built on industrial ecology principles with the latest circular technologies that can be readily deployed where needed.

Case 2: Self-supportive cities and islands on water & energy

Case owner: Waternet Amsterdam

Waternet wants to increase the pace of improving sustainability in the Dutch capital. The goal for 2020 is being climate neutral concerning CO₂. If we want to have a 100% sustainable energy supply, we have to look for other sustainable energy sources in the near future. How can water contribute to this transition? And how can we learn from self sufficient islands, considering a city as an island? A previous Wetskills team in South Korea came up with the 'Water Wide Web', building an energy network where you can store energy on different levels close to households. Waternet wants the next team to work out this idea in more detail and come up with logical solutions we can really implement in the near future.

Case 3: Wastewater reuse for agriculture

Case owners: Water Application Center and Van Hall Larenstein University of Applied Sciences

In the Netherlands, almost all WWTP effluents are discharged onto surface water bodies like canals and rivers. As a result of climate change, agriculture will be confronted more and more with yield losses due to drought. The use of alternative freshwater sources, such as treated wastewater from industries and sewage treatment plants, can reduce drought damage. One interesting opportunity may be to combine wastewater (post)treatment and agriculture (crops / biomass growth). Under what conditions and on which scale could the reuse of (treated) wastewater in agriculture be beneficial?

Case 4: BioBizzHub for energizing start-ups to scale up their business

Case owner: Paques

WaterCampus Leeuwarden is an important driver for new business in the water technology sector, and has facilitated the start of many new companies in the past 15 years. A crucial step for these new companies is to “scale up” and “go to market”. The new BioBizzHub is set-up for this purpose. Here, startups can benefit from dedicated test and office facilities and the engineering and market experience of Paques. How can BioBizzHub find and attract companies from outside the Netherlands to join this initiative and benefit from the BioBizzHub.