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## Innovation Success Story



### COMMERCIALISING KNOWLEDGE TO RECOVER NUTRIENTS FROM URINE

*To recover nutrients from urine, Dr. Kai M. Udert and his team at the Swiss Federal Institute of Aquatic Science and Technology (Eawag) have developed a small, efficient and decentralised reactor that not only produces a fertiliser but also reduces water pollution. At the Swiss-Dutch Water Technology Event, Udert met the Dutch startup company BLUE-tec, who had the industrial engineering expertise needed to accelerate the commercial development of the reactor.*

With a demonstration reactor in operation in their main building in Dübendorf, Switzerland and two in South Africa, Dr. Kai M. Udert, a senior scientist at Eawag, was looking for a business partner to further develop their product. The demonstration reactors, based on the VUNA (Valorisation of Urine Nutrients in Africa) technology developed by Eawag, show that the technology works in practice. The small and highly efficient decentralised reactors enable an affordable, flexible dry sanitation system based on separated wastewater streams. They allow the recovery of nutrients from urine and produce a liquid fertiliser, while also reducing water pollution.

#### **Partnering event**

“For the further technological and technical advancement and to scale up the number of reactors, we

were looking for a partner with industrial engineering expertise. We did not find a Swiss partner with the profile required and therefore started looking abroad”, explains Udert.

*“EEN events are very useful for exchanging ideas and meeting partners, in particular when you have a specific need”*

At the Swiss-Dutch Water Technology Event in January 2014, jointly organised by the Swiss and Dutch counterparts of the Enterprise Europe Network (EEN), Udert met with entrepreneur Lex van Dijk, CEO of the Dutch start-up company BLUE-tec, and found the partner he was looking for. “The event offered the opportunity to meet in person and explore

cooperation possibilities. EEN events are very useful for exchanging ideas and meeting partners, in particular when you have a specific need”.

#### **Joint cooperation**

“In BLUE-tec we found the partner to take our technology to the next level”, Udert explains. The cooperation started with a market study to explore the interest of potential clients, such as architects, water utilities and housing cooperatives. The latter showed the most interest in this innovative concept as a way to improve sustainability. Based on the outcomes, Eawag built a business model to identify ways to capture market opportunities. “We are setting up a collaboration to bring the developed technology to the market, thereby enabling society to benefit from our knowledge” says Udert.

# Cooperation Overview



*“Working together  
internationally opens  
up a new perspective”*

**Dr. Kai M. Udert**

Swiss Federal Institute  
of Aquatic Science and  
Technology (Eawag)

## ABOUT THE ORGANISATION

Eawag is the Swiss Federal Institute of Aquatic Science and Technology and is part of the ETH (Swiss Federal Institutes of Technology) Domain. Eawag aims to harmonise ecological, economic and social interests with respect to water usage. It researches concepts and technologies for dealing sustainably with water bodies and with water as a resource.

### **Eawag**

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**Euresearch** is the Swiss network mandated by the State Secretariat for Education, Research and Innovation providing targeted information, hands-on advice and transnational partnering related to European research and innovation programmes.

## EEN SUPPORT

EEN supported Eawag in:

- organising an international brokerage event
- establishing contact with a company in The Netherlands
- initiating a successful joint cooperation

## BENEFIT TO THE ORGANISATION

Thanks to EEN support, Eawag:

- was able to present their technology to international businesses
- found a business partner to further develop their technology
- was able to expand their network

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