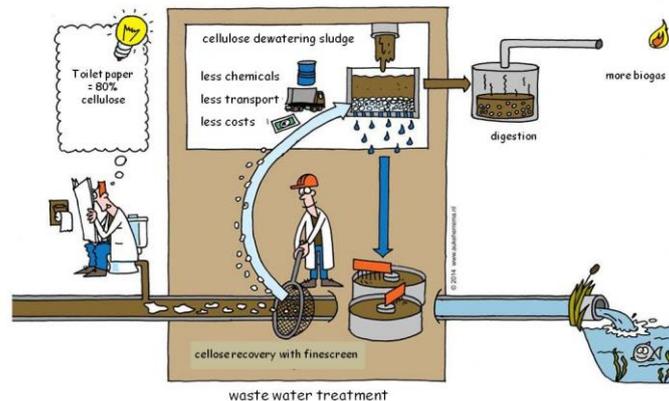


## SITE VISIT 5 - Cellulose assisted dewatering of sludge (CADoS)



Cellulose assisted dewatering of sludge (CADoS) uses a fine screen to separate toilet paper cellulose fibres from municipal wastewater. After separation, the fibres serve as a filter aid for effective dewatering of biological sludge. The benefits of this process are immediately apparent: chemical consumption is minimized, less electricity is consumed for aeration, phosphate release risk is reduced and much lower sludge volume to discharge results in reduced transport movements and costs.

CADoS is in operation as a full scale prototype at the WWTP Ulrum in the Netherlands. In addition to the operational benefits the screenings (cellulose) provide a valuable product for further processing, both through the initial production of biogas as well as a raw material for bioplastics or board. The CADoS concept can be used in small as well as large sewage treatment plants in the Netherlands and internationally.

CADoS is a joint venture of Brightwork, Waterboard Noorderzijlvest, Waterboard Wetterskip Fryslân, University of Groningen, Attero, and Centre of Expertise Watertechnology. The project was awarded by the Union of Dutch Water Boards with Water Innovation award in 2014.

This project is co-funded by Northern Netherlands Provinces alliance (SNN), and the provinces of Groningen, Drenthe and Friesland.

### Time/accessibility/other information:

During the visit, the participants will be accompanied by the project manager of Brightwork BV, consortium member of the CADoS research project as well as an operational staff member of the water utility Noorderzijlvest. Visitors may have a look at both the finescreen pilot plant at the head of the works and the full biological treatment works. WwTW Ulrum has a capacity of 15,000 PE and consists of a conventional carousel type of biological treatment.

Participants will have access to all features of the pilot plant, and will be able to see the output of the finescreened material after dewatering.

To better enable technical discussion and exchange of experiences, the maximum number of attendees for this visit is limited to approximately 25 people. The facility is not adapted to people with reduced mobility. The bus will start from Leeuwarden at 9:00 AM; the bus drive is approximately 75 minutes. We expect to be back in Leeuwarden at 12:30.