



Wetskills: back to Romania

On 5th of June, the new edition of the Wetskills Water Challenge started in Bucharest. After the successful event in 2013, Wetskills was invited by the Politehnica to hold a new event. Romanian Water Association and the Technical University of Civil Engineering became part of the consortium. The Netherlands Embassy in Romania is supporting this event.

18 students from Romanian and Dutch universities will participate in the two-weeks programme. The programme will start in Constanta with the teambuilding trip to wastewater treatment plant and a construction site of Van Oord's project aimed at preventing further costal erosion. Wetskills will end with the presentations and awarding during the ExpoApa (17 June). In between the student teams need to come up with out-of-the-box solutions for water challenges of the sector. The teams will work on four cases on temporary embankments, European water traineeship, resource recovery from ash of incenerated sludge and multipurpose structures to use water from flash floods for irrigation, see the description below

BrainHurricane

For the first time in Romania, Wetskills will organise the so-called BrainHurricane on Monday 8th of June at Politehnica University in Bucharest. This is the official kick-off of Wetskills and the start of the working activities of the students. In an interactive session, eight external experts from various organisations and with various backgrounds will help the teams during a speeddate session of ten minutes.

About Wetskills

Wetskills Water Challenges is an innovative approach of an experimental learning combined with a competition element at formal water events. In this pressure-cooker programme, creative solutions for real-life local study cases are formed and presented by transdisciplinary and international teams. It is a networking and knowledge exchange event for students and young professionals in the global water sector.

Since 2010, Wetskills attracted more than 250 participants from more than 50 international universities and organisations in one of the thirteen Wetskills events in China, Indonesia, Oman, Israel, Egypt, Morocco, South Africa (2x), Mozambique, Romania, The Netherlands (2x) and Canada.

For more information, see www.wetskills.com. For Romanian press Elena Manea (elena,manea@wetskills.com) and international press: Johan Oost (johan.oost@wetskills.com).



Wetskills-Romania 2015: overview of study cases

Team 1: Valorisation Programme Delta – Technical University of Delft

Temporary Embankments in Danube Delta

Almost yearly Romania suffers from floods at various impacts levels. The national governments are responsible for the river systems, on a more regional level responsibility for flood risk prevention is with the municipality. At the Dutch Flood Proof Holland test- and demonstration facility various measures against floods on a local level are tested. The challenge for the team is to address the opportunities for each measure in the Romanian context; what will work and for which types of municipality (geographically), is there any relevance of the available techniques in the Romanian context and what types of measures are really necessary? All in all; can the Dutch temporary embankments make the difference during Romanian floods and what's the strategy the Dutch companies should follow to make business while protecting against floods?

Team 2: H₂O-job / National Water Traineeship

Capacity development for young water professionals in an European perspective

Knowledge and skills exchange in Europe is one of the major policies. For the water sector this is in extremes, because water does not have (country) borders. So exchange of information, communication and cultural understanding is crucial. Specific programs for young water professionals could contribute to a better training of skills. In the Netherlands the National Water Traineeship (NWT) started five years ago. The aim of the NWT is to give fresh graduates a kick-start in the Dutch water sector. The program consists of two main components, namely a personal leadership program and a broad outlook on the Dutch water sector. The NWT cooperates with the broad water sector. Due this combination trainees are able to bring their professional knowledge in relation to their working activities in the broader sector, which should lead to a more effectiveness in their work. The challenge is if there is a need for a European water traineeship and how could this be implemented on a self-supportive way?

Team 3: Energy- and resource factory Dutch Water Authorities & Waterboard De Dommel

Resource recovery from ash after incineration of wastewater sludge

The dried sludge from the sewage treatment plants (STP) is mostly burned in the Netherlands. Nowadays this STP sludge is considered as a potential source for energy, minerals, like phosphorus, and metals. An economical sustainable way to recover phosphorus from the sewage sludge is burning the sludge and recovers phosphorus from the ashes. Beside phosphorus, STP sludge contains other materials, which end up in the ash after incineration of the sewage sludge, metals such as Zn, Cu, K. The challenge for the team is to come up with possible method for recovering elements from the ash of burned sewage sludge on a technical and economical way.

Team 4: Valorisation Programme Delta – Technical University of Delft *Multipurpose Dams in flash flood prone areas for agricultural benefit*

Romania is prone to flash floods occurring from the higher grounds in the country. The flash floods occur during the whole year. Meanwhile droughts in the summer periods can occur in the delta areas. Romania constructed many small and large dams to manage the water, and the flash floods. Are there applicable solutions thinkable where flashflood measures (i.e. dams), which also yield agriculture in, dry periods? The team is challenged to create an design for flash flood measures with existing water retaining functions and some possible structures that can be developed either mobile/temporary and of permanent character in the case of floods, benefiting agriculture in the dryer periods.