



## Innovation

Innovation is important to EUWMA members. Water managers have been innovative for years to prohibit flooding and to keep the land dry and provide circumstances for land use (e.g. farming, housing). EUWMA therefore supports the initiatives currently taken by the European Commission (f.e. the European Innovation Partnership for Water) which aim to support and facilitate the development of innovative solutions to deal with the many water related challenges Europe and the world are facing, as well as to support economic growth by bringing such solutions to the market. Water managers are aware that they might have to take on board more than their core business and are ready for that.

However, EUWMA considers it to be of utmost importance that initiatives:

- Define long term inspirational goals;
- Have a bottom-up approach: problems should be identified at the bottom;
- Address not a single sector, but focus on cross links within society such as energy and water, food security and water, agriculture and water etc.

For EUWMA members, three focus areas are of particular interest:

### 1) The water-energy nexus

- Combine water safety with energy from water technologies such as blue energy and tidal current, integrated in dikes, dams and barriers;
- Setting up of IT systems to manage energy for irrigation as well as other sectors to minimize and manage the energy use;

### 2) Resource efficient urban water supply and wastewater treatment

- Innovation in the field of heat recovery from waste water in households and firms, heat recovery from sewage water ('riothermie');
- Water treatment; innovations in the entire chain of wastewater collection to purification and drinking water. New technology in monitoring sewers, new concepts for replacement of obsolete sewerage in urban areas to decentralized wastewater treatment, wastewater separate collection at source, vacuum sewage closing water cycles in municipalities.

### 3) Water re-use

- Investing in the modernization of irrigation systems. In many southern EU member states, water use efficiency increased a lot. For example in Portugal this was 30% in 30 years. While only a quarter of the irrigated area is gravity flow. Therefore permanent crops are drip irrigated in 88% of the area. Temporary crops are sprinkler irrigated in 52% of the area;



- Investment in water use efficiency - “*more crop per drop*”. Reducing the amount of water that crops use is an important challenge.

The European Commission is currently preparing a guidance document on water reuse. This has first been discussed in the Blueprint (November 2012). This document is expected to be finished in 2016. Currently, the Joint Research Center (JRC) works on possible draft standards, especially for irrigation and recharge of aquifers. In Fall 2016, this exploratory work will be used to determine what instrument is suitable to promote this standards, legally binding or not. As water is scarce in many EUWMA member states, they have been working on innovative measures in this field.

Aside from these priorities, EUWMA considers the following priorities of equal importance:

#### **5) Integration of rural water management and land-use planning**

- Innovation to anticipate increasing salinity in coastal areas and deltas;
- Innovations in dams, dikes sensors and ICT to better predict and information in case of emergencies;

#### **6) Water supply for small rural communities**

- Irrigation techniques;
- Sensors and satellite data for the visualization of drought, soil nutrients and salinization in agriculture, monitoring water quality and quantity for industrial and agricultural use;

#### **7) Management of extreme events**

- For Drainage and Irrigation Boards- especially in the South of Europe, floods and drought control is of major importance for their work.

#### **EIP on Water: the WIRE project**

EUWMA members have been, since the beginning, active in the EIP on water. One of the action groups that they are active in it the WIRE action group: WIRE - Water & Irrigated agriculture Resilient Europe.

Climate change effects are resulting in increasing farmers’ need to irrigate, not only in the southern and central part of Europe, but also in Northern Europe. Therefore, sustainable adaptation strategies in new and mature markets need innovation and well-targeted investments.

Three priorities have been identified and will be primarily addressed:

- efficient water reuse in irrigation
- energy saving in irrigation
- integrated agricultural water management under drought.



WIRE helps customizing existing or upcoming innovation to the farmers' and growers' needs, and to facilitate innovation uptake in the complex, multi-faceted irrigated agriculture reality and market.

### **Innovation Deals**

In the framework of the circular economy, the European Commission is working on the establishment of so called Innovation Deals in which the European Commission, together with different stakeholders work together in voluntary agreements to tackle barriers to innovation. EUWMA members consider this a very interesting approach and are very willing to actively be involved in this process by propose projects for the upcoming call for innovation deals in April 2016.

### **Easier access to funding**

Adequate funding is needed for these innovative initiatives, but obtaining EU funding can be very difficult. Also, after money has been granted, it is still difficult to comply with all the rules. Therefore, EUWMA members ask for more relaxed and flexible rules.

*EUWMA, the European Union of Water Management Associations, represents public local and regional water management organizations from nine EU member states, covering a surface of at least 50 million hectares.*  
**EUWMA members:** Belgium/ Belgique - Vereniging van Vlaamse Polders en Wateringen (VVPW); France – wateringues & Association Syndicales Autorisées (ASA); Germany - Deutscher Bund der Verbandlichen Wasserwirtschaft (DBVW); Hungary - Vízgazdálkodási Társulatok Országos Szövetsége (VTOSZ); Italy - Associazione Nazionale Bonifiche, Irrigazioni e Miglioramenti Fondiari (ANBI); Portugal – Federação Nacional de Regantes de Portugal (FENAREG); Spain - Federación Nacional de Comunidades de Regantes de España (FENACORE); The Netherlands – Unie van Waterschappen (UvW); United Kingdom - Association of Drainage Authorities (ADA).