Accompanying note VLAKWA-matrix:

Challenges VLAKWA – initiating, coordinating and facilitating of R&Dprojects and demonstration projects

1. Definition priority sectors

Water plays a vital role for the Flemish economy. Farmers use water as drinking water for livestock, for irrigation of crops. The chemical industry, power plants, refineries, steel industries are in need of cooling water, and the food industry, semiconductor industry and other high-value industries cannot exist without the presence of high-quality water.

The study "Socio-economic importance of water in Flanders (<u>click here</u>)" showed that **1 out of 6 employees** is directly linked to the **15** most water intensive sectors.

On basis of the criteria water consumption, employment and water cost/Gross Value Added, 9 sectors have been identified requiring the priority of the attention regarding the sensitivity of water prices and water availability against the economic growth and employment:

- Manufacturing of chemical products (Nace-code 20)
- Agricultural sector (Nace-code 1)
- Food processing companies (Nace-code 10)
- Manufacturing of basic metals (Nace-code 24)
- Textile (Nace-code 13)
- Drinking water companies (Nace-code 36)
- Energy production (Nace-code 35)
- Logistics (Nace-code 52)
- Horeca (Nace-code 56)

Specific and targeted actions should be taken towards these priority sectors to ensure their sustainable anchoring in Flanders.

2. Priority R&D themes defined by the European Innovation Partnership on Water

The European Innovation Partnership on Water (EIP on Water), established by the European Commission, focuses on cooperation between international water stakeholders to accelerate innovation and time to market by stimulating innovative actions with a high impact on the water sector. The EIP water defined important topics to be given priority. The strategic goal is to position Europe as the world leader with respect to water technology and related services by stimulating innovation. The topics proposed are crucial to attain the water goals put forward by the European Commission.

The following 5 priority themes for innovative actions have been defined:

- Water reuse and recycling
- Water and wastewater treatment, including recovery of and resources

- Water-energy nexus
- Flood and drought risk management
- Ecosystem services

Furthermore 3 cross-cutting priorities have been defined i.e. water governance, decision support systems and monitoring and financing for innovation. Additionally, smart technology has been defined as an enabling factor for all priorities.

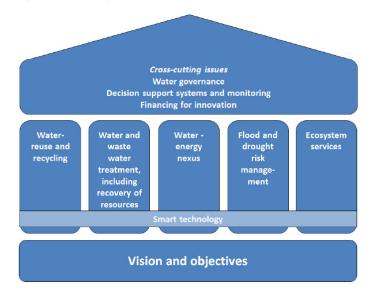


Figure 1: Priorities of the EIP Water

3. VLAKWA matrix

In follow up of the study "Socio-economic importance of water in Flanders", sectors have been selected which are important for Flanders in terms of employment and economic growth and which are sensitive to an increase of water prices. These priority sectors (steel, agriculture, energy, textile, chemistry, tank cleaning, food and the food service industry) are visited each 6 months to discuss their challenges and the consequently desired actions within Flanders.

Based on the priority themes defined by EIP on water and the resuls of the consultations between VLAKWA and the priority sectors in Flanders, the challenges of the water sector, industry and agriculture have been summarised in an Excel table (= VLAKWA matrix). These are also the challenges which feed VLAKWA to initiate, coordinate and facilitate R&D projects and demonstration projects. VLAKWA has already given support to different projects which meet these challenges. The VLAKWA matrix gives an overview of the finalised and currently ongoing projects. Via the hyperlinks you can get more information about the projects.