

Innovative European project to reduce energy costs and water consumption in agricultural irrigation gets underway

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The official launch of the European **WEAM4i** (Water and Energy Advanced Management for Irrigation) took place at the Parc Científic de Barcelona (PCB) on December 3rd and 4th. The aim of the project is to enhance water use efficiency and reduce energy costs of irrigation systems. It has a duration of three and a half years and a budget of €7.6 million. WEAM4i is co-funded by the European Union as part of the 7th Framework Programme.

The WEAM4i consortium, led by Meteosim and ADASA, is made up of 17 organisations belonging to different sectors –business, research, irrigation associations and public bodies- from five European countries: Spain, Germany, Portugal, the Netherlands and France.

The project will address two of the priorities set out by the *European Innovation Partnership on Water*, on the initiative of the European Commission (DG-Environment): “Water-Energy nexus” and “Decision Support Systems (DSS) and monitoring”.

First of all, the project seeks to develop a smart grid for irrigation management that would allow interactive and rational water and energy use based on demand-side management and matching consumption to the available energy supply. In this way, irrigation systems would avail of the reservoir water storage capacity of irrigation associations and consume the energy they require when it is most economical. The project will also see the implementation of an integration model based on an ICT platform geared towards services, with a view to obtaining a prototype that will enable applications to aid irrigation-related decision-making at field level.

As part of the project, results will be tested and evaluated in a practical manner in three European Union regions covering a wide range of crops, water resources and energy markets: Aragón (Spain), Lower Saxony (Germany) and Alentejo (Portugal).

The implementation of the WEAM4i system will enable estimated reductions of about 5-6% in water use and 15% in energy costs.

Partners belonging to the WEAM4i consortium will benefit from the future commercialisation of these results, while irrigators will reduce the operating costs of their irrigation systems and improve water use efficiency: ‘more crop per drop’.

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