FICHE PROJET

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Spotview

Optimizing the use of water within the dairy, pulp and paper and steel processing sectors, through innovative, sustainable and efficient processes.

Inspiration

In Europe, 12% of water utilization is nowadays devoted to industrial use. Furthermore, the industrial sector treats only 60% of its wastewater before being disposed of into the environment. As water is a valuable yet limited resource, it is therefore crucial for the European industry to change this current paradigm and to develop more efficient water use practices.

The optimization of resources, such as water, energy, raw materials and additives, is a key issue in maintaining competitive, sustainable production. In the EU there is a need for innovative, sustainable and efficient processes and technology components, in order to optimize the use of our natural resources, specially water. Dairy, pulp and paper, and steel sectors are more particularly concerned as they alone contribute to almost half of the industrial water usage in the EU.

Innovation

During the SpotView project, several existing and new technologies will be assessed in simulated or operational environments to develop new water management practices in the three identified industrial sectors. Up to 7 technology demonstrators will be selected, for deployment in real industrial environments. Demonstration trials could use existing industrial scale equipment (i.e. sand filter and conventional biological treatment processes) in combination with other pilot scale equipment. Furthermore, the processes and technologies implemented will be evaluated in terms of the environmental impacts and benefits towards reducing the water use, water emissions and energy use.

As a key partner, LIST is dedicated to environmental and techno-economic evaluation of the technological solutions and demonstrators. In particular LIST's experts are responsible for the holistic environmental evaluation based on the Life Cycle Assessment (LCA) methodology and for the occupational risk assessment and compliance with environmental regulation.

Impact

Among the expected impacts at the end of the project, sustainable water and wastewater treatment practices leading to technological advances will be developed. Those practices, will significantly reduce water use by at least 20%, wastewater production by at least 30% and energy use by at least 15%, in the three targeted sectors (diary, pulp and paper, and steel) compared to the current practice in the sector.

Estimating that an important amount of money can be saved annually or invested in water efficient technologies, the partners expect the project to develop new market opportunities and to generate several new facilities and thousands of new jobs in Europe.
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Partenaires

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