

## Environmental and Social Data Sheet

### Overview

Project Name:	XYLEM WATER TECHNOLOGIES (RSFF)
Project Number:	20120216
Country:	Sweden, Germany, Italy, United Kingdom, Hungary, Norway and Austria
Project Description:	The project concerns activities in the research, technical innovation and product development for the development of technologies and products for the water industry and more specifically in the areas transport, analysis and transport of water. The project will be implemented at the promoter's European locations from 2013 to the end of 2016.
EIA required:	NO
Project included in Carbon Footprint Exercise <sup>1</sup> :	NO
(Details are provided in section: "Carbon Footprint")	

### Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project concerns investments in research and development that will be carried out in existing facilities already authorised. An Environmental Impact Assessment (EIA) is therefore not required by EIA Directive 2011/92/EU. The project per se does not have any impact on the environment and its outcome is expected to have positive impact in terms of sustainable use of natural resources, improved energy efficiency and generation of energy from renewable sources. Therefore the project is overall considered as environmentally acceptable with positive residual impact.

### Environmental and Social Assessment

#### Environmental Assessment

The project concerns selected R&D activities for the development of technologies and products in the areas of : (i) Analytical Instruments (analyzers, flow samplers, temperature gauges etc.); (ii) Flow Control equipment (regulators, switches, tanks, valves, specialty pumps); (iii) Pump systems for residential, commercial and industrial heating and water applications; and (iv) Water & Wastewater Treatment Solutions (Biological Treatment, Desalination, Filtration & Clarification, Ultraviolet & Ozone Disinfection) and in integrated systems incorporating the above components with monitoring and control software. In terms of technologies, the developments concern new materials, electronics, remote monitoring, control and diagnostics.

The sustainability challenges that the society is facing with the excessive water withdrawals, the deteriorating source water and the wasteful energy consumption are also the main drivers of the sector. Activities in the Water infrastructure area are largely driven by the depleting water supply, tightening regulations and also aging and inefficient infrastructure, while the

<sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100 000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

Applied Water activities are driven by the population growth coupled with strong urbanization, and requirements for sustainable and energy efficient solutions. Related R&D activities in Xylem include the improvement of energy efficiency, re-use of resources and also creation of bio-fuel as a by-product of the waste water treatment process.

The development of sustainable water infrastructure requires efficient solutions in terms of Energy, Water Supply and Life Cycle Costs, and most importantly requires a paradigm shift in considering waste water as a resource instead of waste. Energy Efficiency targets the reduction of grid power usage through more efficient components, on-site energy generation with subsequent reduction of CO<sub>2</sub> footprint, and less energy consuming processes. In Water Supply Efficiency, the objective is to improve the utilization and re-use of water, improve recovery of nutrients from waste water, and reduce the losses in the different networks. Finally, in Life Cycle Cost Efficiency, the objective is to reduce overall capital spending both through the reduction of components and systems cost, but also through the development of intelligent and modular systems and solutions that would match the required volumes and infrastructure capacities, enabling the implementation of the most appropriate facilities around the world.

In addition to the focus in developing efficient and sustainable water technologies and applications, the company pays high attention on its internal environmental practices in terms of reduction of emissions and energy use, improving product design and reducing the use of hazardous materials. Finally the environmental impact of the used products is evaluated throughout their entire life cycle.

### **EIB Carbon Footprint Exercise**

Project is not included - the EIB draft Carbon Footprint Methodologies only include emissions from Investment Loans, and large allocations under Framework Loans, above the methodology thresholds.