



## Project Information Sheet

### Water Saving Processes for Textile Production (WASATEX)

<b>Programme area:</b>	Osijek, Croatia
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<b>Website:</b>	<a href="http://www.wasatex.eu">www.wasatex.eu</a>
<b>Benefits (max. 150 characters incl. space):</b>	An enhancement of environmental and cost sustainability of industrial processes, through the use up to 90% of water recovered with Wasatex technology
<b>Keywords:</b>	Water treatment, re-use of water, water technology
<b>Sector:</b>	Recycling
<b>Type of solution</b>	Process and technology
<b>Duration:</b>	01/07/2014 – 31/12/2016
<b>Budget:</b>	€ 1.700.097, 00 (EU contribution: 50%)
<b>Contract number:</b>	ECO/13/630322 WASATEX

#### Summary

The WASATEX project uses an innovative combination of well-tested technologies in water treatment that allows the re-use up to 90% of water treated with Wasatex technology, in any part of the industrial processes. This allows a significant savings in water itself, in costs associated to its discharge and to incoming water.

A further reduction of environmental impact is due to a lower consumption of natural resources to heat the incoming water (because the re-used water has a temperature of 30°C against 15°C of well water), with a consequent fewer gaseous emissions and a cost saving related to fuel.

For the execution of the Wasatex project was chosen the production plant in Osijek- Croatia of group Benetton Tekstil (the Benetton group production and distribution branch for Croatia), which currently re-uses in production processes only 5-10% of water, treated only with a biological plant and standard clarifier.

However, the system has substantial potential of exploitation, addressing the needs of the textile industry, and being re-adaptable to other water intensive productions such as paper, tannery or the agro-food sector.

#### Expected and/or achieved results

- The Net Saving cost related to the WASATEX project (water treatment technology for 735 mc/day) is of 386.334 €/year. That consider primarily a saving on water cost of about 321.300 €/year due to re-use up to 85-90% of water treated with Wasatex technology, in the industrial processes, and saving on natural gas cost of about 260.008 €/year due to reduction of needed heat and natural gas. So, the Total Saving cost is 581.308 €/year, from which it must be subtracted the increase on plant management costs of 203.150 €/year, getting a Net Saving cost of 386.334 €/year;
- Installations like the one proposed have an average return on investment (ROI) time of about four years;
- The reduction of environmental impact is summarized in a water conservation of 306.000.000 l/year and a lower production of CO<sub>2</sub> 1.251 ton of CO<sub>2</sub>/year due to lower demand of natural gas for heating water.
- Furthermore, the described technology results to be really flexible and customizable, based on characteristics of water to be treated, customers' needs and local laws restrictions. This guarantee the possibility to extend the technology to even bigger plants and to replicate it in several other conditions.



- The quality of treated water (permeate) is higher than the well water and allows to improve the characteristics of final product and limit the use of chemicals in dyeing and finishing processes.

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