

### Name

“TOP-REF” to be written in capital letters, since the project

### Tagline

Increasing the competitiveness and efficiency of the European intensive process industry.

### One sentence

TOP REF aims to develop and validate specific indicators, methodologies and non-invasive tools devoted to the improvement of resource efficiency in energy intensive continuous industrial processes in the chemical, petrochemical and agro-chemical sectors

### Bullet points

TOP-REF will improve the competitiveness and efficiency of the European process industry by means of specific indicators, methodologies and tools that will contribute to:

- Improve energy and resources efficiency by 20%.
- Pave the way for achieving SPIRE2030 objectives of reducing non-renewable, primary raw material intensity and fossil energy intensity
- Increase the reusability and recycling of materials around 30%.
- Reduce production costs up to 15 %.
- Achieve a significant reduction of the environmental impacts

### Half page

TOP-REF – Innovative tools, methods and indicators for optimizing the resource efficiency in process industry – is an international collaborative project funded by the European Commission under the 7<sup>th</sup> Framework Programme. The total cost of TOP-REF amounts to 5.7m€ being the EU contribution of 3.8m€.

The project objective is to increase the competitiveness and efficiency of the EU resource-intensive process industry, focusing in the chemical, agrochemical and petrochemical sectors. TOP-REF will improve the **efficiency in the use of energy, water and raw materials by up to 20%**, while reducing production costs by up to 15%. Furthermore, it will contribute towards achieving the targets set by the European industry association **SPIRE**, which aims to reduce the use of non-renewable raw materials by 20% and of fossil fuels by 30%. In addition, the project will achieve an important reduction of the environmental impact linked to these processes (CO<sub>2</sub> emissions, water footprint, etc)

To achieve this goal, TOP-REF will develop and demonstrate a **robust, resource-efficiency-focused and cross-sectorial methodology** that will be validated through demonstration under real conditions in three pilots, one in each sector.

The final goal is to contribute to drive Europe to a leadership position in energy efficiency in industries by means of the promotion of a more efficient, greener and competitive economy based on knowledge and innovation

