Press release

Solvay and partners launch the ecoFluor project to test climate friendly new technology and reduce emissions

Hannover, December 10th, 2015 - Solvay's Global Business Unit (GBU) Special Chem, Texas Instruments, Muegge and Fraunhofer EMFT will combine their technology and know-how to reduce greenhouse gas emissions released by thin film tools used in the Semiconductor Industry during the production of semiconductors by using alternative fluorine gas mixtures. This three-year project, called ecoFluor, is partly funded by the German Federal Ministry of Research and Education (BMBF) and will start on 1st January 2016.

The program focuses on new cleaning processes for chemical vapour deposition (CVD) chambers in the semiconductor industry and replaces the three major cleaning gases hexafluoroethane (C_2F_6), tetrafluoromethane (CF_4) and nitrogen trifluoride (NF_3) with gas mixtures based on F_2/N_2/Ar mixtures.

"ecoFluor's cleaner alternative will reduce greenhouse gas emissions and will moreover improve the process efficiency for the users", said Rodrigo Elizondo, Commercial Director, GBU Special Chem, "We will produce these new F_2 gas mixtures in our plants in Bad Wimpfen, Gemany and Onsan, Korea."

Such replacement can have a meaningful environmental impact considering that the most widely used cleaning gas, nitrogen trifluoride, has a Global Warming Potential (GWP) of 17,200 times that of CO_2 while the proposed alternative has a GWP equal to CO_2.

The ecoFluor project is partly funded within the core program of "r+Impuls - innovative technologies for higher resource efficiency of industrial processes", embedded in the framework of "research for sustainable development" (Forschung für nachhaltige Entwicklung (FONA)). The project will run for three years with major milestones including validation and optimization of the new cleaning processes on production equipment and final release to industrial production.

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As an international chemical group, SOLVAY assists industries in finding and implementing ever more responsible and value-creating solutions. Solvay generates 90% of its net sales in activities where it is among the world's top three players. It serves many markets, varying from energy and the environment to automotive and aerospace or electricity and electronics, with one goal: to raise the performance of its clients and improve society's quality of life. The group is headquartered in Brussels, employs about 26,000 people in 52 countries and generated 10.2 billion euros in net sales in 2014. Solvay SA SOLB.BE) is listed on Euronext in Brussels and Paris (Bloomberg: SOLB.BB - Reuters: SOLB.BR).

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