2015-01-30 Press release

A Consortium of MTSA Technopower B.V., Nedstack Fuel Cell Technology B.V., Ynnovate Shanzheng (Yingkou) Fine Chemicals Co. Ltd. and AkzoNobel Industrial Chemicals B.V. signed a cooperation contract for designing, constructing, testing and operating World's first 2 megawatt PEM fuel cell power plant. The cooperation contract is supported by Fuel Cells and Hydrogen Joint Undertaking (FCH JU), Brussels via the Demcopem-2MW project .

Fuel cells are increasingly recognized as important new energy technology for a range of applications like mobility, cogeneration and mobile power units. Fuel cells turn the chemical energy of hydrogen into clean electricity via an electro-chemical reaction with oxygen from the air, whereby apart from electricity only pure water and heat is being formed. The PEM power plant is very efficient, safe and emission free. Nor will there be any release of fine particles or dust. The PEM fuel cells comprise of large numbers of proton membrane modules (stacks) put in series.

Hydrogen is a by-product from the ChlorAlkali process at Ynnovate. The accordingly produced electricity covers approximately 20% of Ynnovate's total power consumption and as such contributes significant to a better environment.

MTSA Technopower is project leader during realization and responsible for the design and construction of the fuel cell power plant. Nedstack Fuel Cell Technology provides the fuel cell modules, which form the heart of the system. AkzoNobel covers the business development role for this project.

In addition to generating power, the cooperation will execute a research program to develop and optimize further the fuel cell technology and applied proton exchange membranes. Nedstack is project leader of the R&D part of the project.

This is an important project for both MTSA and Nedstack. MTSA and Nedstack also designed and realized today's largest fuel cell power plant. This 1 MW installation is successfully in operation at Solvay in Antwerp already for several years. The project in China is a logic follow up and proofs the public importance of utilizating hydrogen and the development and adoption of environmental friendly applications in the nearby future. Parties expect to develop and realize multiple installations of this kind.

Ynnovate is the end user of the 2 MW fuel cell power plant, which will be installed at the Ynnovate Industrial site at Yingkou, China and is expected to become operational in the 2nd half of 2016.