Project Air

## The chemical industry may become climate neutral thanks to hydrogen

Uniper will help the chemical group Perstorp to become a self-sufficient producer of sustainable methanol. It would reduce the company's carbon dioxide emissions by 500,000 metric tons per year, which corresponds to just over one percent of Sweden's total carbon dioxide emissions.

METHANOL IS an important fuel for the world's chemical industries. One example is the chemical group Perstorp, that uses methanol in the production of chemicals for the paint industry. Globally, methanol is mainly produced through natural gas, a fossil gas that contributes to carbon dioxide emissions.



## SUSTAINABLE METHANOL THAT COVERS PERSTORP'S EUROPEAN NEEDS

As part of their sustainable transition, Perstorp plans for an annual production of 200,000 metric tons of sustainable methanol at its factory site in Stenungsund. The methanol will be produced in an innovative way, through a combination of captured carbon dioxide from the chemical production, other residual materials, biogas and hydrogen.

## UNIPER DELIVERS THE HYDROGEN

The hydrogen that is necessary in the process will be supplied by Uniper. In a so-called electrolyser with a capacity of 25 MW, one of the largest in Scandinavia, water will be divided into hydrogen and oxygen using electricity. By using electricity from fossil-free sources, the hydrogen also becomes fossil-free. That hydrogen in turn contributes to sustainable methanol, which means that Perstorp can offer its customers sustainable products. The planned use of purified wastewater for the electrolysis instead of regular drinking water is also a technical breakthrough for commercial hydrogen production.

## **GROUNDBREAKING COLLABORATION**

The investment in sustainable methanol is being made in a collaboration between Perstorp and the energy company Uniper.

The project has been granted investment support from the EU Investment Fund.

Read more at www.projectair.se