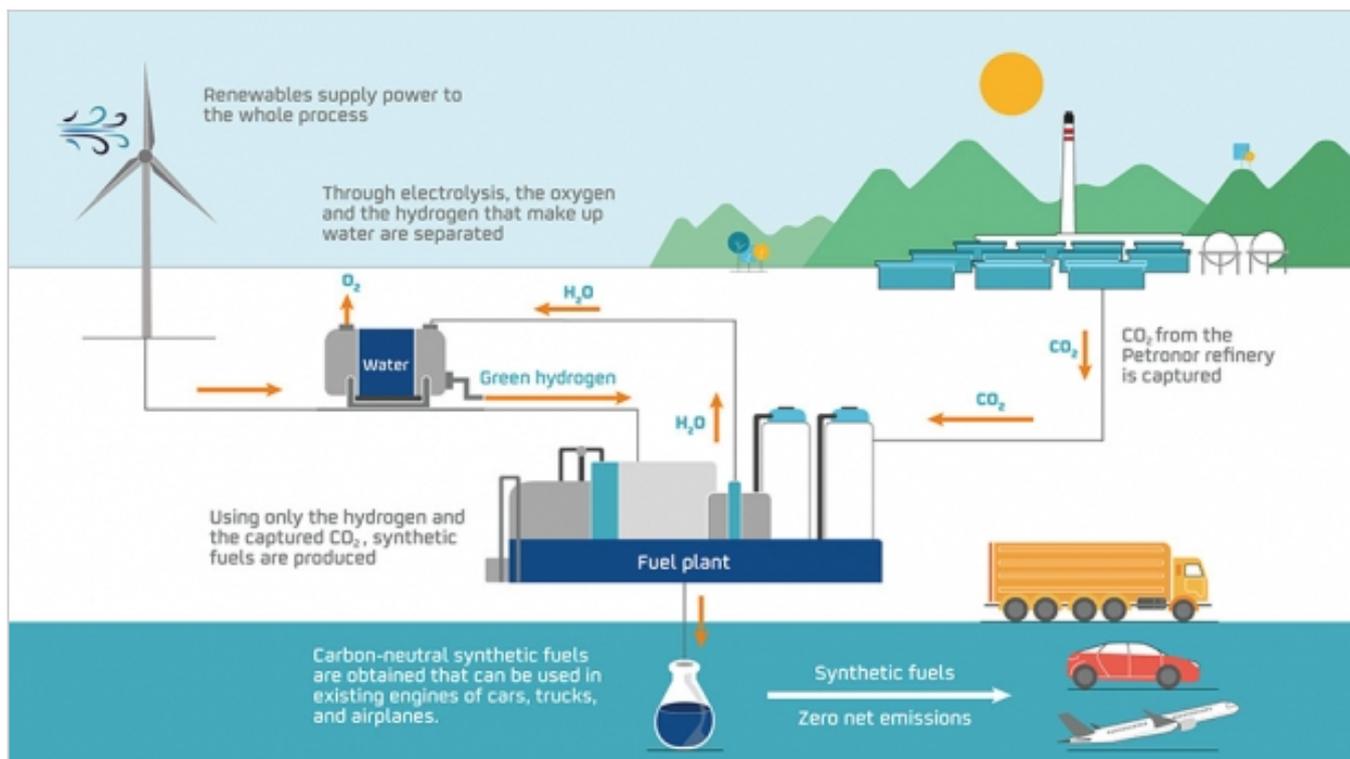


# Petrol PLAZA

## Repsol bets on e-fuels with €60mn decarbonization project

Repsol will invest around €80 million in two pioneering industrial decarbonization projects that the company will undertake with the participation of prominent Spanish and international partners.



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The first project, with an initial investment of 60 million euros, involves building one of the largest net zero emissions synthetic fuel, also known as e-fuels, production plants in the world, based on green hydrogen generated with renewable energy. The main feature of these new fuels is that they are produced using water and  $CO_2$  as the only raw materials. They can be used in the combustion engines that are currently installed in automobiles in Spain and the rest of the world, as well as in airplanes, trucks, and other machinery.

The facility, which will be fully operational within four years, will set a new benchmark in Europe due to its technology and the use of  $CO_2$  captured in the nearby Petronor refinery. Its development will be led by the Repsol Technology Lab research center. It will combine green hydrogen—a 100% clean

energy generated from renewable sources—with CO<sub>2</sub> as the raw materials in the process, and it will position Repsol on the leading edge of the development of net zero emissions fuels.

In the first phase 50 barrels of synthetic fuel will be produced per day, with net zero emissions of CO<sub>2</sub> in the entire production cycle. Conceptual engineering will begin this year. Petronor is the only refinery in the Iberian Peninsula and one of few in Europe that has integrated the process of capture, storage, and use of CO<sub>2</sub>, and it is expected to be able to capture the CO<sub>2</sub> directly from the air.

“Spain must base its decarbonization strategy on its technological and industrial capabilities. The production of green hydrogen in combination with the capture and use of CO<sub>2</sub> to produce net zero emission fuels is part of the industrial decarbonization strategy of Repsol. With this project, the Spanish industry is positioning itself to become a leading European player in reducing emissions”, said Jon Imaz, Repsol’s CEO.

The project represents a major boost for e-fuels. One of the biggest supporters of synthetic fuels has been German fuelling association UNITI, which recently opened an office in Brussels to push the production of climate-neutral liquid fuels in Germany and Europe.

### **Turning urban waste into gas**

The second project, which will be located next to the first one, also with the port of Bilbao and its surrounding area as the priority option, will represent an initial investment of 20 million euros. Led by Petronor, it will consist of a plant for generation of gas from urban waste. The generated gas will be used to replace part of the traditional fuels that the Basque refinery, one of the largest in Spain, currently uses in its production process.

This second initiative aligns with Repsol’s strategy of promoting the circular economy which is applied in many phases of the company’s production cycle through technology and innovation. Repsol has already implemented over 200 projects in this area which it has identified as one of the key levers for achieving net zero emissions by 2050.

In its first stage, this pyrolysis plant will be able to process around 10,000 tons of urban waste a year, and its capacity could be increased in later stages to approximately 100,000 tons a year, equivalent to all the urban waste produced in the surrounding area.