# **RE4Industry**

## Success Case Factsheet



## Fertiberia Fertilizer plant, Spain

### **Key information**

#### Fertiberia CO<sub>2</sub> roadmap:

Targeting in emissions reduction from its industrial activity to zero before 2035 using science-based targets, thus leading the development of Europe's green ammonia market

Company: Fertiberia Fertilizer plant,

Fertiberia Group (FG)

Founded: 1958

Located: Puertollano, Spain

**Products:** Fertilizers

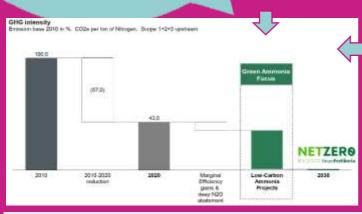
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Target: emission reduction of 48,000

tons of carbon dioxide per year



Grupo Fertiberia successfully reduced its greenhouse gas emissions by more than 63% between 2010 and 2020



The renewable H<sub>2</sub> produced is utilized in the ammonia factory of FG allowing it to reduce its natural gas consumption by 10%. The residual heat generated during electrolysis by the H2 plant will be used to establish a "100% green heat network" & reduce its dependence on fossil fuels for heating



### On-site improvement of energy efficiency

Puertollano plant will be the world's 1<sup>st</sup> large company in the crop nutrition sector to manufacture CO<sub>2</sub>-free NH<sub>3</sub> and crop nutrition solutions on an industrial scale

- The project will have zero CO<sub>2</sub> emissions due to the use of renewable energy from an innovative 100 MW photovoltaic solar plant that is integrated in the facility. The green H<sub>2</sub> produced by Iberdrola plant is used in Grupo Fertiberia's ammonia factory in Puertollano, which has carried out considerable innovation work in adapting its processes to this new energy vector
- The project includes a 5MW lithium-ion battery system, with a storage capacity of 20MW
- Dedicated underground power line for exclusive use to ensure that all energy used in the electrolyser is renewable and environmental impact is minimised
- The production process is carried out with a polymer electrolysis system with a 20 MW power supply and a capacity to generate 360 kg/hour of hydrogen
- A total of 11 tanks that allow the storage of 6,000 kg of green H<sub>2</sub> at 60 bars

#### The future

- Grupo Fertiberia expects to further reduce emissions to zero by using its own renewable energy in its installations
- ❖ Iberdrola and the spanish company Ingeteam, have created a new venture under the name of Iberlyzer which is set to become Spain's first integrator of large-scale electrolysers expected to decarbonise the overall production of ammonia in Spain by 2027. This alliance aims to establish a circular hydrogen and oxygen economy in Huelva, Spain









