



| Press Release
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pHYnix selects Howden as compressor supplier for Vitale, its first commercial-scale 10 MW renewable hydrogen production facility in Spain

- Vitale will have a production capacity of 4.3 tonnes of hydrogen per day. The plant located in Alcázar de San Juan, Spain, has just broken ground and is starting construction.
- Howden will provide two hydrogen diaphragm compressors for Vitale facility to compress and inject the hydrogen from the electrolyser into the gas infrastructure and into tube trailers. In addition, the contract includes the maintenance service consisting of continuous equipment monitoring through Howden Uptime and service capabilities.

pHYnix, an independent renewable hydrogen producer, has selected **Howden**, a leading global provider of mission critical air and gas handling products, technologies and services, to supply two hydrogen diaphragm compressors for Vitale plant. This facility is the first commercial-scale 10 MW renewable hydrogen production plant in Spain, and is one of the largest electrolysis projects under construction in Europe.

Enabled with *Howden Uptime*, the diaphragm compressors consist of a booster and a high-pressure compressor that will compress the hydrogen from the electrolyser into the gas infrastructure (from 30 bar to 60 bar) and into tube trailers (from 60 bar to 380 bar).

In addition to the diaphragm technology, the maintenance service is decisive for the selection of Howden compressors. In particular, Howden Uptime's continuous monitoring ensures the security and safety required by the plant.

pHYnix CTO/COO, **Philippe Guinot**, underlined the importance of this agreement: "*Howden is a partner with proven expertise in manufacturing safe, efficient and reliable equipment for hydrogen compression, a major guarantee for Vitale plant. We are getting closer and closer to producing the renewable hydrogen needed to decarbonise the most challenging sectors: industry and transport and doing our bit to reach the ambitious European sustainability targets*".

Salah Mahdy, Global Director of Renewable Hydrogen at Howden, said: "*By working closely with pHYnix, we identified the right compression solution for their process. Our efficient*



hydrogen compression technology along with a clear focus and understanding of the full lifecycle, we are able to minimise the total cost of ownership of operations.”

“This project will play a key role in supporting the energy independence of Spain and accelerate the adoption of green hydrogen in Europe. We are pleased to be supporting pHYnix in implementing a clean energy solution and advancing the hydrogen economy.”

Vitale will be one of the first renewable hydrogen production plants in Europe and the first in Spain on a commercial scale with different applications. The sale of the renewable gas will be destined, to local industrial players through direct supply, to the logistics and heavy transport sectors, as well as to urban and interurban transport in the Community of Madrid. In addition, a percentage of the production will be injected into the gas grid to be exported to the European market (gas blending).

Vitale is under construction and will produce 1,450 tonnes of renewable hydrogen per year from 2024. Thanks to this, pHYnix will meet its objectives of distributing green hydrogen in Spain and contributing to the decarbonisation of the most critical sectors: industry and transport.

About pHYnix

pHYnix is an independent European company dedicated to the development, construction and commercial operation of renewable hydrogen generation plants, with teams and business spread across France, Spain and Portugal. pHYnix is a subsidiary of EverWatt, an integrated player specialised in energy management and the decarbonisation of territories, whose majority shareholder is Transition Evergreen, the first listed investment fund in France dedicated to the ecological transition and the reduction of the carbon footprint.

pHYnix contributes to the energy independence of territories and countries and to the energy transition of its customers, achieving for them the decarbonisation of their activity, a competitive migration and the supply of green hydrogen. www.phynix-energy.eu

About Howden

Howden focuses on helping customers increase the efficiency and effectiveness of their air and gas handling processes enabling them to make sustainable improvements in their environmental impact. Howden designs, manufactures and supplies products, solutions and services to customers worldwide across highly diversified end-markets and geographies.

Howden recently announced its target to be carbon Net Zero by 2035. Going beyond its own carbon net zero targets, Howden is focused on, and investing in, the impact that its



technologies, service and solutions have on its customers' sustainability and decarbonisation efforts.

www.howden.com

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