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Press Release

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Rare earth elements for a greener future: Bilfinger contributes to REEtec's groundbreaking separation facility

- **Highly efficient processing plant for rare earth metals used in electric motors and wind turbines, up to 90 percent carbon dioxide emissions savings**
- **Contribution to a competitive European value chain for rare earth minerals that are critical for the energy transition**
- **Continuation of partnership: EPCM services for first industrial-scale unit following successful work on pilot plant**

Herøya / Porsgrunn, Norway. Bilfinger is supporting Norwegian-based technology company [REEtec](#) with EPCM services for a new processing plant for neodymium and praseodymium (NdPr). Known as “magnet metals”, these two rare earth elements (REE) are key to the production of the permanent magnets used in the motors for electric vehicles (EVs) and wind turbines. Bilfinger had previously supported REEtec in the study phases and construction of a pilot plant for its proprietary sustainable and efficient technology; now the industrial services provider is also contributing to the industrial upscaling.

“Building resilience and strategic autonomy for Europe's REE value chains is crucial for the energy transition. REEtec's process combines high efficiency and competitive cost structure with best in class environmental friendliness. We are therefore proud that REEtec is once again relying on Bilfinger's services and that we can support our customer bring its technology to industrial scale”, says Bilfinger Group CEO Thomas Schulz.

As with the demonstration plant, which has been in operation at Herøya Industrial Park since 2019, Bilfinger subsidiary [Bilfinger Nordics](#) is handling project management, engineering, procurement and construction management (EPCM) on behalf of REEtec. To ensure efficient implementation and high quality in the design process, the industrial services provider is developing a 3D-model based on scans of all buildings and facilities. In addition, Bilfinger will support the customer during the testing and commissioning phase.

“Bilfinger has demonstrated its high level of expertise in the study phases and in the construction of the pilot plant. We are pleased to continue our long-standing cooperation in the construction of our first industrial-scale plant,” says Sigve Sporstøl, CEO of REEtec.

The European Commission regards REEs as critical materials for achieving climate neutrality by 2050. Once completed, the REEtec plant on Herøya will have a capacity of 720 tons of magnetic metals per year from the second half of 2024. To illustrate, there is between half a kilogram and one kilogram of this product in every electric car. The production capacity is equivalent to 5 percent of the estimated demand in the EU, and the market is expected to increase fivefold by 2030.

REEs occur as constituents in various minerals, the most important sources being bastnaesite, monazite, xenotime and ionic clay. These minerals typically contain several percent by weight of REEs. Depending on the ore, distribution between the different REEs can vary greatly. The 16 REEs generally all occur together in the same mineral deposits. Their separation into individual elements of high purity is difficult and expensive due to their chemical similarity.

REEtec’s proprietary technology is considered groundbreaking because it can reduce CO₂ emissions by 90% compared to other leading suppliers, as virtually all consumables are recovered and re-utilized in the process and electricity consumption is based fully on hydro-electric sources.



REEtec’s production plant at Herøya © REEtec



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Signing the EPCM contract: Jon Aasen, Head of Engineering and Projects at Bilfinger Nordics, Paul Rune Aasrum, CEO at Bilfinger E&M Nordics AS, Sigve Sporstøl, CEO at REEtec and Geir Moe, Client rep. REEtec

Bilfinger is an international industrial services provider. The Group aims to increase the efficiency of assets in the processing industry, ensure a high level of availability, reduce emissions and lower maintenance costs. Creating sustainable production processes for customers is becoming increasingly important. Bilfinger's portfolio covers the entire value creation chain from consulting, engineering, manufacturing, assembly, maintenance and plant expansion and general overhauls and also includes environmental technologies and digital applications.

The company provides its services in two service lines: Engineering & Maintenance and Technologies. Bilfinger is primarily active in Europe, North America and the Middle East. Process industry customers come from sectors that include chemicals & petrochemicals, energy & utilities, oil & gas, pharma & biopharma, metallurgy and cement. With its approximately 30,000 employees, Bilfinger upholds the highest standards of safety and quality and generated revenue of €3.7 billion in financial year 2021.

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