

## Vale and the Port of Açu sign an agreement to develop a Mega Hub for the decarbonization of steelmaking

Rio de Janeiro, September 26th, 2023 – Vale S.A. (“Vale”) informs that it signed a MOU with the Port of Açu Operações S.A. (the “Port of Açu” or “port”) to study the development of a Mega Hub at the port located in São João da Barra in the state of Rio de Janeiro, to produce HBI (hot briquetted iron) using the direct reduction route.

The Mega Hub will initially receive pellets from Vale and could, in the future, include an iron ore briquette plant at site to supply the direct reduction route at the industrial complex. According to the agreement, both companies will seek to attract investors and clients to build and operate the Direct Reduction plant using natural gas which will be available at the port, with the possibility of eventually converting to green hydrogen, producing HBI with near-zero carbon emissions.

It is a pioneer initiative that considers a technical study coordinated by the Port of Açu and sectorial academics which proposes the use of HBI as partial burden in blast-furnaces, reducing greenhouse gas emissions and increasing steelmaking productivity without needing to substitute existing assets, such as the blast-furnaces and steelworks. Currently, HBI is mostly used in electric arc furnaces. Using HBI in this type of furnace will enable a smoother decarbonization process for the Brazilian steelmaking industry.

The agreement with the Port of Açu marks another step in the development of Mega Hubs in Brazil. Mega Hubs are industrial complexes designed to produce low-carbon steel products and Vale has already begun implanting such hubs in three countries in the Middle East (Saudi Arabia, UAE and Oman).

“We believe that Brazil has a lot of potential to be a low-carbon steel making hub. We have high-quality iron ore, abundant natural gas reserves and the potential to develop green hydrogen. As a Brazilian company, Vale is seeking to partner with other entities that can add value to this process. We want to foster “neo-industrialization” in Brazil, a green-based industrialization”, says Marcello Spinelli, vice-president of iron ore solutions.

### **About the Port of Açu**

Located in the northern region of Rio de Janeiro, the Port of Açu is the largest deep-sea port complex in Latin America. Operating since 2014, the port is managed by the Porto f Açu Operations, a partnership between Prumo Logística, controlled by EIG, and the Port of Antwerp-Bruges International. 20 companies, including clients, partners, and some world-class companies, are already installed at the Port. With the mining, petroleum and gas activities already established and in expansion, the port intends to accelerate industrialization with a focus on low-carbon projects, to be recognized as the energy transition port of Brazil.

Gustavo Duarte Pimenta  
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# Press Release



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