

InvestEU Scoreboard

Presentation of the financing or investment operation:

Implementing Partner: NIB

Name of the Operation: H2 GREEN STEEL

Type of approval:

- Individual financing or investment operation or
 Framework Operation

Name of the final recipient (for direct operations): H2GS Boden AB

Country(-ies) of implementation of the operation: Sweden

Short description of the financing or investment operation:

The project will consist of developing a hydrogen-based steel manufacturing plant in Boden, Sweden. The manufacturing plant project will supply green steel and green hot briquetted iron. Once operational the plant will produce 2.5 Mtpa of steel. First steel production is scheduled to take place in 2025.

The project will include one of the first large-scale electrolyzers in Europe in order to supply the hydrogen needed to run the direct reduction facility. The steel to be produced will be very low carbon, targeting mainly the automotive, construction, white goods, industrial equipment and energy sectors.

Public Statement

The project will contribute to the overarching aim for the EU to be climate-neutral by 2050 and is aligned with policies for greenhouse gas emissions reductions in energy intensive sectors, such as the steel industry. The project is furthermore aligned with Sweden's climate policy and long-term target to achieve zero net greenhouse gas emissions by 2040 at the latest.

The project is aimed at the development, construction and operation of the large-scale green steel plant with the intention to reduce CO₂ emissions with 90% or more compared to traditional steelmaking by replacing coal with hydrogen. The green steel products will be produced using electricity from renewable energy sources (>90%) and with limited total CO₂ emissions (scope 1 and scope 2 emissions) per ton of steel. The plant is expected to be the first large scale and very low carbon primary steelmaking plant in Europe and the world and hence entails extensive positive environmental externalities. In comparison, other traditional steel making processes have a far higher environmental footprint.

The project will build the largest electrolyser plant to date using direct reduction of hydrogen which has not been done on a commercial scale before. The establishment of the new industry will provide significant employment opportunities and a positive impact on the demographics in the place of operations. The long tenor combined with the uncovered nature of the facility makes the InvestEU support critical for NIB participation. NIB's participation is expected to support crowding in of other lenders.

This project contributes to NIB's environmental and productivity mandates.

Pillar 3 - Market failure or sub-optimal investment situation addressed by the financing or investment operation (Very Good)

Pillar 4 - Financial and technical contribution by the implementing partner (Very Good)

Pillar 5 - Impact of the financing or investment operation (Very Good)

Pillar 7 - Complementary indicators

Leverage and multiplier effect:

Ex-ante estimated leverage effect is 4.2x
Estimated multiplier effect is 2,015x.

Amount of investment mobilised:

Ex-ante estimation of investment mobilised is EUR 4.3bn.