



## Robert Habeck, Germany's Minister for Economic Affairs and Climate Action visits thyssenkrupp: thyssenkrupp steel to receive federal and state government funding totaling around two billion euros

- The Federal Ministry for Economic Affairs and Climate Action, together with the state government of North Rhine-Westphalia, is funding thyssenkrupp Steel's "tkH<sub>2</sub>Steel" decarbonization project with around two billion euros
- thyssenkrupp Steel as blueprint for the decarbonization of industry and driver of the European hydrogen economy
- Key decision for climate change mitigation and for Germany as industrial location

Duisburg, 26 July. Robert Habeck, Germany's Vice-Chancellor and Minister for Economic Affairs and Climate Action, visited thyssenkrupp Steel today. The minister informed himself about the progress of thyssenkrupp Steel's "tkH<sub>2</sub>Steel" decarbonization project and confirmed his funding commitment totaling around two billion euros, the formal notification of which is set to be sent out within the next few days. The state government of North Rhine-Westphalia is contributing up to 700 million euros of the total funding.

### thyssenkrupp Steel as blueprint for the decarbonization of primary steel production

With the EU Commission having granted state aid approval last week for the funding of the "tkH<sub>2</sub>Steel" decarbonization project, the final hurdle for the funding of the transformation project was cleared with the confirmation of the German government's formal approval during today's event at the construction site of the future plant complex. This marks the start of one of the largest decarbonization projects worldwide, with the underwriting and promotion of, in particular, the innovative plant technology and an early end to the use of natural gas now guaranteed. On the one hand, this will quickly save a lot of CO<sub>2</sub> and, on the other, "tkH<sub>2</sub>Steel" will become a driver of the European hydrogen economy and thus a sheet anchor for investments in the rapid construction of a cross-border hydrogen infrastructure. thyssenkrupp's own investment is just short of one billion euros. Since an early start of the works had already been approved, thyssenkrupp Steel commissioned the SMS group from Düsseldorf with the engineering, supply and construction of the plant complex at the beginning of the year.

### Pioneering concept with unique and innovative plant combination

The core of the "tkH<sub>2</sub>Steel" concept lies in the integration of a technologically new plant combination in Europe's largest iron and steel plant. The 100% hydrogen-capable direct reduction plant with two melters and an annual production capacity of 2.5 million metric tons of directly reduced iron (making for 2.3 million metric tons of hot metal) is the first plant combination of its kind in the world with this technological concept. thyssenkrupp Steel is thus a

pioneer for the decarbonization of the steel value chain in Europe and will guarantee, among other things, indispensable specialty materials for the success of the energy and mobility revolution. The innovative concept means that all subsequent process steps from the steel mill onwards can be kept in place, and thus guarantees consistently high product quality for CO<sub>2</sub>-reduced steel as well. Customers will continue to receive the complete range of high-quality products in the customary premium quality.

### **Ambitious hydrogen ramp-up initiates development of a cross-border hydrogen economy**

With an annual saving of up to 3.5 million metric tons of CO<sub>2</sub> – equating to almost five percent of the emissions accounted for by the Ruhr region – the direct reduction plant is indispensable towards achieving the climate targets and, at the same time, towards securing the economic resilience of Germany as industrial location. The key to the transformation project lies in the extremely ambitious hydrogen ramp-up, which will quickly make for large CO<sub>2</sub> savings. The plant is scheduled to operate as early as 2029 with around 143,000 metric tons of hydrogen per year – the electricity needed to produce this amount of hydrogen corresponds to the output of around 500 wind turbines or 60 percent of the electricity required by the city of Hamburg. The commissioning is expected to commence towards the end of 2026.

### **Robert Habeck, Germany's Vice-Chancellor and Federal Minister for Economic Affairs:**

"Today is a good day for the climate, the green industry in Germany, for the Duisburg location, for the employees. I am delighted at being able to give thyssenkrupp definitive formal confirmation of funding totaling around two billion euros today. With its extremely ambitious project, the company is demonstrating that the consistent use of hydrogen can enable the decarbonization of the steel sector which is, after all, the biggest source of CO<sub>2</sub> emissions in Germany. At the same time, we are signaling that the steel industry in Germany has a future, thus securing jobs in the long term. Our substantial funding now makes it possible for thyssenkrupp to realize this flagship project and take a decisive step on the path of transformation to green steel."

### **Mona Neubaur, North Rhine-Westphalia's Deputy Prime Minister and Minister of Economic Affairs:**

"North Rhine-Westphalia is Germany's number one steel producing location – and the heart of the North Rhine-Westphalian steel industry beats in Duisburg. In North Rhine-Westphalia, more than 45,000 people in many companies work every day to produce the indispensable material steel in such a way that it meets the highest quality requirements. In doing so, they create the basis for sustainable innovations in a great many industrial sectors. It must therefore be in our collective interest to keep this heart of steel beating in rhythm. In the long term, however, it will only beat reliably if this heart has a green future. With the EU Commission's state aid approval having at last been given for the joint federal and state government funding of the tkH<sub>2</sub>Steel project, steel production here at the Duisburg site will very soon become decisively more climate-friendly. This is a milestone for North Rhine-Westphalia on its way to becoming Europe's very first climate-neutral industrial region.

I am very grateful to Robert Habeck and his team at the Federal Ministry for Economic Affairs and Climate Action for their tireless commitment in this matter. This result would not have been realizable without the many hours of work that the federal government has invested in the discussions with the Commission."

**Miguel Ángel López Borrego, CEO of thyssenkrupp AG:** "We would like to thank the federal government and the state government of North Rhine-Westphalia for their determined

support for the green transformation of our steel production. thyssenkrupp, North Rhine-Westphalia and Germany are thus becoming the pioneers for climate-neutral steel production. This is a great day for climate change mitigation and an important milestone for the development of a sustainable hydrogen economy in Germany. thyssenkrupp can contribute a great deal toward the success of the transformation: besides steel, we have technologies for the expansion of renewable energies as well as for the production and transportation of hydrogen. This enables us to serve key stages of future green value chains. We will make consistent use of these opportunities."

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**Bernhard Osburg, Chairman of the Executive Board of thyssenkrupp Steel Europe AG:** "We expressly thank the German government and the state government of North Rhine-Westphalia for the substantial funding of our "tkH<sub>2</sub> Steel" project. Our project is pioneering the decarbonization of the steel value chain and driving the development of a hydrogen infrastructure extending beyond the borders of the Ruhr region. Through our decision for the direct reduction plant in Duisburg we are building up technological expertise that will play a role in maintaining European technological competence. We are proud that, with the support of the federal government and the state government of North Rhine-Westphalia, we are making a key contribution to achieving the German and European climate targets and realizing the vision of an industrial location that combines progress, prosperity and climate protection."

**Tekin Nasikkol, Chairman of the General Works Council of thyssenkrupp Steel Europe AG:** "The funding is a strong and forward-looking signal for our more than 26,000 colleagues and for Duisburg as steel production location. It also underlines the commitment to the need for a sustainable green steel industry as the heart of the North Rhine-Westphalian economy. Because steel is and will remain the region's engine for the future, and offers vital work and training places. The construction of our plant complex means we will be creating more than 400 high-quality industrial jobs in a sustainable technology, accompanied by the development of future-oriented training concepts. Together, we are now on the road to a greener, more sustainable future for generations to come."

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