

# Joint Press Release

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## **Green Hydrogen for Green Steel – *Stahlwerk Thüringen* and *Ferngas* *Netzgesellschaft* to plan jointly the hydrogen connection of the plant in Unterwellenborn**

### Contact

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**Unterwellenborn, 8 August 2023.** *Stahlwerk Thüringen* and the pipeline network operator *Ferngas* hereby announce their plans to connect the plant in Unterwellenborn to the hydrogen grid, probably as of 2027. For this purpose, both partners signed a memorandum of understanding. The next concrete steps for the planning and technical preparation of the connection to the hydrogen network are to be elaborated in the near future.

### **Support comes from the Thuringian Economic Affairs Ministry**

"I much welcome this cooperation. The Thuringian Ministry of Economics has already signaled to the Federal Ministry of Economics the importance of connecting the energy-intensive steel plant in Unterwellenborn to the planned hydrogen core network. On the part of the state, we will also set in motion all levers to create the necessary framework conditions for a hydrogen connection of the steel plant. After all, this is not least about securing the industrial jobs there," says Carsten Feller, State Secretary for Economic Affairs.

### **Hydrogen to gradually replace natural gas**

Stahlwerk in Thüringen has long been committed to the decarbonisation of its products and already uses 100 % renewable electricity for its "Green Steel". The decision to purchase "green" hydrogen via the network infrastructure in the future is another important step towards a largely decarbonised steel production. Hydrogen produced without CO<sub>2</sub> is to gradually replace the natural gas used in important production steps. At the beginning, hydrogen is to account for more than half of the previous volume of natural gas. Subsequently, the proportion of hydrogen is to be successively increased. As in other energy-intensive processes in which high energy performance is required together with large continuous energy volumes, the use of hydrogen plays a crucial role.

Electrification of these process steps is only possible to a comparatively minor extent according to the state of the art. This requires technical upgradings of the corresponding plants from natural gas operation to a natural gas-hydrogen mix.

### **Connection to the hydrogen network maintains competitiveness**

Through their targeted cooperation, both companies show their commitment to a sustainable and future-oriented industry. "The plans to connect our plant to the hydrogen network is a milestone for us", says Alexander Stolze, Head of Purchasing and Authorized Signatory of Stahlwerk Thüringen GmbH. We want to take the next step towards the sustainable development of the steel industry and underline our leadership in the application of greener technologies. The connection to the hydrogen network will maintain our competitiveness and strengthen Stahlwerk Thüringen as a center of low-carbon steel production," Stolze continued.

### **Entire region to be developed with hydrogen**

Together with the other German transmission system operators, *Ferngas* published a current planning status for a hydrogen core network on 12 July 2023, so to speak these are the hydrogen highways in Germany. At the same time, *Ferngas* is already working with its customers on how the connections to these motorways can be realized. Regions and customers not directly adjacent to this core network are also considered. Kevin George Greiling, Head of Network Management at *Ferngas*, says: „Legislators must now quickly make it possible for this hydrogen core network to be realised. This means the connection of Stahlwerk Thüringen to the hydrogen infrastructure to mark the start of H2 development for the entire region as well. Converting the pipeline will enable the future-proof supply of industry and heat in the city triangle. To this end, we are in constructive talks with other network users, not only of this line.”

The *Ferngas* Netzgesellschaft mbH, based in Schwaig near Nuremberg and Erfurt, plans to create the necessary infrastructure to transport the hydrogen to the steel plant. One of the plans is to convert an existing natural gas pipeline of around 70 kilometres from the Erfurt area to Unterwellenborn. In order to be able to carry out the conversion to hydrogen, *Ferngas* needs not only the permits to be obtained and proof of the suitability of H2 operability, but also the regulatory framework from the legislator to operate the hydrogen pipelines.

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## **General Information**

### **Stahlwerk Thüringen:**

Stahlwerk Thüringen GmbH was founded on 1<sup>st</sup> July 1992. The company has its roots in the former "Maxhütte Unterwellenborn". The tradition of industrial steel production at the Unterwellenborn steel production site started in 1872 with the founding of the "Maximilianshütte". After several changes of ownership, Stahlwerk Thüringen GmbH has been a company of the Brazilian steel group CSN (Companhia Siderúrgica Nacional) since 1st February 2012.

With modern production facilities and a motivated team of about 750 employees, the company produces steel sections according to European and international standards, mainly IPE- and HE- The company is committed to the principle of sustainable development in designing its production processes.

An integrated Management System including the components Quality Management (DIN EN ISO 9001), Environmental Management (DIN EN ISO 14001), Health & Safety Management (DIN EN ISO 45001) and Energy Management (DIN EN ISO 50001) accompanies all operational processes. Stahlwerk Thüringen is also a member of the Thuringia Sustainability Agreement.

Since August 2022, SWT has been offering the **Stahlwerk Thüringen Green Steel** product family, which is eco-balanced with less than 327 kg of CO<sub>2</sub> emissions per tonne of sectional steel. Stahlwerk Thüringen GmbH is present in the globalised economy and yet feels regionally rooted, supporting many cultural, sporting and social projects in the surrounding communities.

As an apprenticeship employer, the company has trained over 300 young skilled workers since 1994, most of whom have also chosen to work for the company.

Further company and product information can be found on the website <https://www.stahlwerk-thueringen.de/>

### **Ferngas Netzgesellschaft:**

**Ferngas** based in Schwaig near Nuremberg, sees itself as an innovative and reliable service provider in the field of energy supply. The company owns and operates high-pressure natural gas pipeline networks with a total length of more than 3,100 km in Bavaria and Thuringia as well as in Hesse, Saxony and Saxony-Anhalt. It also provides technical services and advises customers on questions relating to natural gas and hydrogen.

Please find further information about the company at: <https://www.ferngas.de/>