Press release

Steel Europe

October 10, 2024

50 years ago: August Thyssen-Hütte AG appoints the first environmental protection officer - a milestone for the sustainable steel industry

- In 1974, Dr Jürgen Philipp became the first full-time environmental protection officer at August Thyssen-Hütte AG.
- The new position was created in the same year the first Federal Immission Control Act came into force.
- The anniversary commemorates not only the beginnings of environmental protection in the steel industry but also all the developments and challenges that have been successfully overcome since then.
- Today, thyssenkrupp Steel spends around 350 million euros a year on environmental protection measures, including approximately 140 million euros on air pollution control and a further 140 million euros on noise protection.

Dr Jürgen Philipp, who was thyssenkrupp's first Environmental Protection Officer, had previously worked for the company in Japan and was later also a professor at the Technical University in Clausthal-Zellerfeld. The position of Environmental Protection Officer was created after a three-year preparation period and was initially based in the Chemical Laboratories department. In 1974, the position was then expanded and Dr Jürgen Philipp was appointed full-time environmental officer. The position reported directly to the Technical Director and was intended to monitor and coordinate the implementation of environmental protection measures, primarily emission reductions at the time. At the beginning of Dr Philipp's term of office, the team consisted of just three employees. Today, there are around 50 committed specialists dedicated to the challenges of environmental protection.

New environmental awareness since the 1960s

Particularly in the Ruhr area as an industrial metropolis with heavy air pollution from unfiltered exhaust fumes, a greater awareness of environmental protection and air pollution control

thyssenkrupp Steel Europe AG, Kaiser-Wilhelm-Straße 100, 47166 Duisburg, Deutschland, T: +49 203 52 -25168, press-steel@thyssenkrupp.com, www.thyssenkrupp-steel.com

developed from the 1960s onwards. Willy Brandt's much-quoted demand 'The sky above the Ruhr must turn blue again!' in 1961 and the 'smog crisis' in 1962 led to a series of new laws aimed at reducing environmental pollution. In 1974, the Federal Immission Control Act finally came into force, which laid down standardized requirements for environmental protection.

The former August Thyssen-Hütte also accepted its responsibility to improve air quality in the region. In addition to the appointment of an environmental officer, this included major investments in process gas purification technologies and modern sintering and cloth filter systems over the following years and decades. Special attention was also paid to environmental protection aspects during the construction of the new blast furnace 1, which went into operation in 1973. The 'Black Giant' is still in operation today and was upgraded again in 2021, meaning that it is still not only one of the largest but also one of the most modern blast furnaces in Europe.

thyssenkrupp Steel on the way to a new era of climate-friendly steel production

The demands on environmental protection measures have continued to increase massively since the 1970s. As early as the 1980s, the company was a pioneer in dedusting steelworks. Since then, considerable funds have been repeatedly spent on improving environmental protection. And in order to meet the ever more demanding requirements, thyssenkrupp Steel now spends around 350 million euros annually on environmental protection measures, of which around 140 million euros is spent on air pollution control and a further 140 million euros on noise protection.

Not only have the requirements changed, the focus has also shifted. 'Today, prevention takes precedence over the elimination of environmental damage,' says Dr Wolfgang Volkhausen, Head of Environmental Protection at thyssenkrupp Steel Europe. 'The perspective has changed, and not just with the European Green Deal or the new Industrial Emissions Directive (IED), which came into force in June 2024. We want to continue to play a leading role in environmental protection in the European steel industry in the coming years and face up to the challenges of climate change.'

The central element of this strategy is the tkH2Steel transformation project, which aims to make steel production climate-neutral by 2045 at the latest by switching from coal-based to hydrogen-based technology. In the long term, the coal-based blast furnaces, as well as the

'Black Giant', will be replaced by hydrogen-powered direct reduction plants or alternative technologies as part of the transformation to climate-neutral steel production.

Industrial environmental protection is more than just CO2 reduction

But thyssenkrupp Steel is also focusing on environmental protection and nature conservation beyond the green transformation of steel production: in waste management, for example, the aim is to recycle as many by-products of pig iron production as possible. One example of this is blast furnace slag, 100 per cent of which is marketed as a secondary raw material.

Water protection also plays an important role, as the enormous demand for water is roughly equivalent to the annual consumption of the German states of Bavaria and Baden-Württemberg combined. However, only three per cent is used as fresh water: 97 per cent of the water used is recycled water, which can be used up to 40 times thanks to effective treatment before it either evaporates or is discharged as purified waste water. Soil protection is also taken into account both when planning new production facilities and when decommissioning.

The long-term and strategic efforts to protect the environment are paying off and have long been part of a holistic environmental management system within the company.

For example, thyssenkrupp Steel has had its climate targets validated on the basis of the science-based guidelines of the 'Science Based Targets initiative' (SBTi). This makes the company one of the first steel manufacturers to have its climate targets reviewed on a scientific basis and assessed as being in line with the 1.5 degree target of the Paris Climate Agreement - both with regard to the short-term target of 2032 and the net zero target of 2045 according to SBTi. The SBTi is a global initiative that supports companies in setting science-based targets to reduce greenhouse gas emissions in line with the latest climate science.

In addition, thyssenkrupp Steel has joined the global sustainability initiative ResponsibleSteel, a non-profit organization that uses a global standard and certification program to ensure that the steel used has been responsibly sourced and produced at every stage. thyssenkrupp Steel sees its commitment to the ResponsibleSteel standard as another important component of its sustainable transformation process.

Contact:
thyssenkrupp Steel
Mark Stagge
Head of Public and Media Relations
T: +49 203 52 - 25159
mark.stagge@thyssenkrupp.com
www.thyssenkrupp-steel.com