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On the way to CO₂-free steel production: Luther accompanies Avacon on "Windwasserstoff Salzgitter"

The pioneering energy project "Windwasserstoff Salzgitter" is ready to go. Salzgitter Flachstahl GmbH, Linde AG and Avacon Natur GmbH have signed a cooperation agreement. Luther advised Avacon on the innovative industrial climate protection project.

The project's goal is to drastically reduce direct CO₂ emissions through the future use of larger quantities of hydrogen in the production of steel. The hydrogen is produced in a climate-friendly way by electrolysis from wind power. The three partners are thus jointly focusing on an innovative technology that is important for the future and that can reconcile climate protection and industrial production.

As part of the project, Salzgitter Flachstahl plans to build and operate a PEM electrolysis plant. Avacon Natur will provide seven wind turbines with a capacity of 30 megawatts on the site and industrial gas supplier Linde will secure the supply of hydrogen. The cost of the project is around EUR 50 million.

The use of hydrogen in metallurgical plants has the potential to significantly reduce process-related CO₂ emissions from steel production in the future. To achieve this goal, Salzgitter AG has designed the SALCOS (Salzgitter Low CO₂ Steelmaking) project, which shows a realistic path towards a step-by-step CO₂ reduction and, in the long term, even towards almost CO₂-free steel production.

Hydrogen produced on the basis of renewable energies is to replace the carbon previously required for the smelting of iron ore.

With this project, Salzgitter Flachstahl intends to gather operating experience in the field of "hydrogen from renewable energies", which is important for SALCOS, and which could later be used as a basis for large-scale industrial standards. Although the current framework conditions do not yet allow the direct coupling of wind power generation and electrolysis operation without subsidies, the three partners are determined to further develop this climate-friendly technology, which is important for the future.

About Salzgitter AG

Salzgitter AG is one of the leading steel and technology groups in Europe - with external sales of around EUR 9 billion, over 25,000 employees and almost 160 national and international subsidiaries and associated companies. It is divided into the Flat Steel, Heavy Plates/Profilstahl, Mannesmann, Trading and Technology divisions. Salzgitter Flachstahl GmbH is the largest subsidiary. It produces a wide range of high-quality special and brand steels for demanding customer industries such as the automotive industry.

About Avacon AG

Avacon AG is the largest distribution network operator in Germany. The company reliably operates electricity and gas grids in Saxony-Anhalt, Lower Saxony, Hesse and North Rhine-Westphalia. Avacon makes the networks fit for the future and the tasks of tomorrow. Every year, more than 160 million euros are invested in grid expansion and the integration of renewable energies. As a regional area supplier, Avacon is actively involved in shaping the energy revolution - with strong and innovative networks.

Avacon Natur GmbH is a 100% subsidiary of Avacon AG. The company develops energy supply solutions based on renewable energies and innovative, efficient technologies for industrial companies, commercial and private customers. Avacon Natur GmbH is the executing company of Avacon AG in this project.

About Linde AG

The Linde Group generated sales of EUR 17.113 bn in the 2017 financial year, making it one of the world's leading gas and engineering companies. With around 58,000 employees, Linde is represented in more than 100 countries. The Linde Group's strategy is geared towards profitable and sustainable growth. The focus is on

the targeted expansion of international business with forward-looking products and services. Linde acts responsibly towards shareholders, business partners, employees, society and the environment - worldwide, in every business segment, every region and at every site. Linde develops technologies and products that combine customer benefits with a contribution to sustainable development.

For Avacon:

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Brief Profile Luther

Luther is a leading German commercial law firm that offers comprehensive legal and tax services. The full-service law firm employs more than 380 lawyers and tax advisors and is represented at 10 German economic centres and at important investment locations and financial centres in Europe and Asia with international offices in Brussels, London, Luxembourg, Shanghai, Singapore and Yangon. Our clients are medium-sized enterprises and large corporations, as well as the public sector.

Luther works closely with other commercial law firms in all the prevailing jurisdictions worldwide. On the Continent, Luther is part of a group of independent leading law firms who have worked together for many years on joint cross-border projects.

Luther Rechtsanwaltsgesellschaft mbH is a law firm with a business approach: our innovative awareness aspires us to provide our clients with customised legal advice that addresses individual needs and delivers the greatest possible economic benefit.

Our lawyers and tax advisors have a solid understanding of interdisciplinary matters and a wealth of experience in collaborating on complex tasks. Further information is available at: www.luther-lawfirm.com

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