SIEMENS

Press

Nuremberg, July 27, 2023

Siemens and BayWa advance CO_2-optimized production

- **In a pilot project, Siemens is combining its Sigreen emissions management software with BayWa Carbon Connect, BayWa's software for emissions offsetting**
- **The real carbon footprint of products is made transparent across the supply chain, from emission generation and reduction to offsetting**
- **In an initial use case, Siemens is offsetting the carbon emissions of selected products of the Simatic S7-1500 family at the Electronics Works Amberg for the duration of the project**

The technology company Siemens and BayWa AG are working together to advance CO_2-optimized industrial production. As part of a pilot project, the two companies are combining Sigreen, Siemens' software for emissions management, with BayWa Carbon Connect, BayWa's software for emissions offsetting.

In the future, this will help industrial enterprises understand product-specific emissions across the supply chain and all the way to their offsetting. The first step is identification of a product's real carbon footprint across the supply chain using Sigreen, after which measures are derived for avoiding CO_2 and, finally, emissions that are currently unavoidable are offset by purchasing CO_2 certificates from trusted climate protection projects via BayWa Carbon Connect. Only projects that store CO_2 – for example, in biomass or humus – are selected for the joint pilot project.

Siemens AG
Communications
Head: Lynette Jackson

Werner-von-Siemens-Straße 1
80333 Munich
Germany

Uniform quality standards for climate protection projects

The combination of the two software solutions will make it possible to forward information on emissions offsetting projects across the supply chain to other companies without restricting the data sovereignty of suppliers and sub-suppliers. This provides a digital means for defining and incorporating uniform quality standards for emissions offsetting projects within a company's own supply chain. In the future, this will inform manufacturers of whether their suppliers' products have been offset and with what projects.

"The declared vision of this joint pilot project is a consistent, end-to-end process that is reliable and certified, from the generation of unavoidable carbon emissions to the ultimate removal of these emissions from the atmosphere," says Dr. Gunter Beitinger, SVP Manufacturing, Factory Digitalization and Sigreen at Siemens and Chairperson of the Estainium Association.

"Until now, the lack of transparency has meant that companies have been unable to fully trust the neutralization and compensation measures of their own supply chain. I believe that by combining BayWa Carbon Connect and Sigreen, we've paved the way for uniform quality standards within the supply chain, and in this way have taken an important transformative step toward credible emissions offsetting in industry," says Steffen Winkler, Business Unit Lead of IT Products and Services at BayWa AG and Head of BayWa Carbon Services.

First specific use case at the Siemens factory in Amberg

Siemens is presenting a specific use case based on its own production in Amberg, Germany: For the duration of the project – from January 1, 2023, to December 31, 2023 – the company is offsetting the carbon emissions that have been generated by the production of selected products from the Simatic S7-1500 controller family. This takes into account emissions from the supply chain to the factory gate ("cradle-to-gate"). During the period from 2015 to 2022, the Electronics Works Amberg demonstrably reduced its CO_2 by 49 percent and set its sights on becoming CO_2-neutral by 2026. A variety of measures are being used to reduce emissions from the supply chain. For example, Siemens is relying on the use of sustainable materials and on cooperation with suppliers to reduce product-specific carbon footprints. In 2023, the factory received the Sustainability Award from the World Economic Forum.

Sigreen

With Sigreen, Siemens is already enabling its customers to identify and share information on product-specific emissions across entire supply chains based on real data. This allows producing companies to quantify the effectiveness of measures to use renewable energies, save resources, and shorten transportation routes across the value chain. To improve the reliability of data, Siemens relies on cryptographic keys and the inclusion of independent certification bodies. Sigreen belongs to the open, interoperable Siemens Xcelerator portfolio.

BayWa Carbon Connect

The BayWa Carbon Connect software is the digital arm of the BayWa Carbon Services Business Unit, which helps companies combine comprehensive climate management with reliable emissions offsetting, supported by digitalization. This means that climate protection projects have to meet certain quality criteria, such as those related to the type of climate protection technology, the traceability of the emissions reduction, project size, or project location, in order to be added to the portfolio. This makes them extremely transparent and credible. Projects implemented by BayWa are evaluated and monitored via remote sensing and individual project measures are documented in BayWa Carbon Connect. BayWa Carbon Connect can exchange data on the acquired neutralization and compensation projects with other software systems via digital interfaces. The register accessed by BayWa Carbon Services ensures that CO_2 certificates are not claimed multiple times.

During the pilot project, data interfaces were designed and climate protection projects were selected in close cooperation with the Estainium Association. With this collaboration, Siemens and BayWa are supporting the association’s vision of achieving the net zero goals of the industrial sector with the aid of digital technologies.

With their joint pilot project, they want to advance CO_2-optimized industrial production: Dr. Gunter Beitinger (center), SVP Manufacturing, Factory Digitalization and Sigreen at Siemens, along with Steffen Winkler (left), Business Unit Lead of IT Products and Services at BayWa AG and Head of BayWa Carbon Services, and Sven Quartier (right), Head of Engineering BayWa Carbon Connect at BayWa.

This press release is available at: https://sie.ag/3DuySCp

Related information on Sigreen: www.siemens.com/sigreen

Related information on the portfolio of BayWa Carbon Services and BayWa Carbon Connect: www.baywa-carbon.com

Contacts

Siemens AG:
Laura Egger
Phone: +49 152 58963051
E-mail: laura.egger@siemens.com

Jil-Patricia Huber
Phone: +49 1623474144
E-mail: jil-patricia.huber@siemens.com

BayWa AG:
Antje Krieger
Phone: +49 162 2094192
E-mail: antje.krieger@baywa.de

Follow us on **social media**
Twitter: https://twitter.com/siemensindustry
Blog: https://ingenuity.siemens.com/
LinkedIn Newsletter (EN only): Digital Enterprise – Accelerating the digital transformation

Siemens Digital Industries (DI) is an innovation leader in automation and digitalization. Closely collaborating with partners and customers, DI drives the digital transformation in the process and discrete industries. With its Digital Enterprise portfolio, DI provides companies of all sizes with an end-to-end set of products, solutions and services to integrate and digitalize the entire value chain. Optimized for the specific needs of each industry, DI's unique portfolio supports customers to achieve greater productivity and flexibility. DI is constantly adding innovations to its portfolio to integrate cutting-edge future technologies. Siemens Digital Industries has its global headquarters in Nuremberg, Germany, and has around 72,000 employees internationally.

Siemens AG (Berlin and Munich) is a technology company focused on industry, infrastructure, transport, and healthcare. From more resource-efficient factories, resilient supply chains, and smarter buildings and grids, to cleaner and more comfortable transportation as well as advanced healthcare, the company creates technology with purpose adding real value for customers. By combining the real and the digital worlds, Siemens empowers its customers to transform their industries and markets, helping them to transform the everyday for billions of people. Siemens also owns a majority stake in the publicly listed company Siemens Healthineers, a globally leading medical technology provider shaping the future of healthcare. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power.
In fiscal 2022, which ended on September 30, 2022, the Siemens Group generated revenue of €72.0 billion and net income of €4.4 billion. As of September 30, 2022, the company had around 311,000 employees worldwide. Further information is available on the Internet at www.siemens.com.