

## Novel carbon capture technology to filter CO<sub>2</sub> from industrial emissions, including pulp and paper, waste-to-energy, fertilizer industry and more

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Svante Technologies Inc. (Svante) and SAMSUNG E&A announced that they have signed a joint development agreement to jointly develop a set of standardized skid-mounted modular carbon capture plants based on Svante's novel VeloxoTherm solid sorbent-based carbon capture filter technology, leveraging SAMSUNG E&A's advanced digital solutions and modularization capabilities. The agreement was signed during Svante's Grand Opening Event, which marked the commissioning of its new commercial filter manufacturing facility in Vancouver, Canada. This is the world's first gigafactory for Svante's filter technology, capable of producing enough filters to capture 10 million tonnes of CO<sub>2</sub> annually.

"We are working to remove the biggest barriers to rapid deployment of industrial carbon capture by first building our world-class manufacturing facility and second by partnering with SAMSUNG E&A to reduce project execution schedule and on-site construction costs through standardized design and fabrication solutions," said Claude Letourneau, President & CEO of Svante.

SAMSUNG E&A, a total solutions provider for the global energy industry, is one of the world's leading engineering, procurement, and construction (EPC) and project management companies in the world, with an ambition to assist in the energy transition. SAMSUNG E&A's extensive experience in executing large capital projects based on modularization and digitalization, paired with Svante's second-generation carbon capture and removal technology, makes this collaboration an

innovative, accessible solution for clients in heavy industries and the energy sector looking for engineering-based carbon management solutions.

SAMSUNG E&A is expanding its eco-friendly business portfolio with E&Able, a solution that fosters a sustainable future through advanced technology. E&Able embodies SAMSUNG E&A's commitment to resolving pressing societal challenges such as climate change, by swiftly securing groundbreaking technologies for its customers. It also represents the company's mission to achieve global objectives, including carbon neutrality and the circular economy, faster. The company is accelerating the promotion of new businesses in the energy transition and eco-friendly sectors, focusing on three E&Able strategies: E&Able Low (low carbon), E&Able Zero (carbon-free), and E&Able Circle (environment). "The time is now for the CCUS industry value chain players to rethink how they approach projects to deliver them faster, more cost-effectively, and more efficiently. Undertaking multiple projects in parallel while using the same EPF contractor will greatly improve project performance," said Hong Namkoong, President and CEO of SAMSUNG E&A. "Additionally, we have pioneered with our Engineering Data Platform (EDP) utilizing digital tools to enhance project execution efficiency, ultimately driving down schedule timelines and costs."

Svante has developed a unique, environmentally responsible carbon capture and removal technology, which employs what it calls "structured adsorbent beds", known as "filters". The company's filters are coated with nanoengineered solid adsorbent materials, which can capture CO<sub>2</sub> from industrial emissions, including pulp and paper, waste-to-energy, cement, steel, fertilizer, hydrogen, and more. The company's filter technology can also be leveraged for direct air capture (DAC), in which CO<sub>2</sub> that has already been emitted into the atmosphere is trapped and removed from the ambient air.

"We are looking forward to partnering with SAMSUNG E&A to deliver global commercial carbon capture projects at scale," said Claude Letourneau, Svante's President and CEO. "SAMSUNG E&A's 50+ years of experience in modularization across the industrial and energy sectors will be invaluable as we continue to hyperscale our operations and filter manufacturing capacity to expand our order book."

One of the objectives of this collaboration is to offer industrial customers a one-stop shop via an integrated project delivery model for carbon capture plants. SAMSUNG E&A and Svante will develop standardized advanced front-end (FEL3) engineering package deliverables. During the project execution phase, it is anticipated that SAMSUNG E&A will be the exclusive EPF supplier of skid-mounted modules for CO<sub>2</sub> capture plants, while Svante will supply its patented carbon capture machines (contactors) and filter beds. This collaborative approach to building large industrial facilities is shown to be effective at optimizing industrial project management and performance.

"This agreement will assist us in continuing to deliver world-class, environmentally responsible carbon capture plants that provide customers with both cost and schedule certainty, as well as convenient pre-engineered modules and automated data-driven engineering packages -- an offering we can now provide to our clients in addition to the other unique benefits our technology brings," Letourneau adds, "An integrated project delivery model means customers no longer have to rely on the traditional bid-buy transactional relationships that they've been forced to deal with in the past."

The two companies will work together to identify, develop, and deliver commercial-scale carbon capture projects globally, ensuring heavy industries and energy producers in these regions have more viable pathways to meet their emission reduction targets.