



NEWS RELEASE

Advent Technologies and Safran Power Units Sign MoU to Advance HT-PEM Fuel Cell Technology for the Aerospace Sector

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BOSTON--(BUSINESS WIRE)-- Advent Technologies Holdings, Inc. (NASDAQ: ADN) ("Advent" or the "Company"), an innovation-driven leader in the fuel cell and hydrogen technology sectors, today signed a Memorandum of Understanding ("MoU") with Safran Power Units, a leader in auxiliary power systems and turbojet engines. Leveraging Advent's proprietary Ion Pair™ Membrane Electrode Assembly ("MEA") technology, and Safran Aerospace knowledge and capabilities, this new collaboration will seek to advance the development of next-generation high-temperature proton exchange membrane ("HT-PEM") fuel cell technology, specifically for the aerospace sector.

HT-PEM enables more efficient heat management versus low temperature-PEM ("LT-PEM"). It is more adapted for applications requiring high amounts of power combined with strong integration constraints such as aviation. HT PEM is more robust and can withstand toughest conditions, such as extreme temperatures and pollution, versus LT-PEM.

The collaboration is further supported by a strong research consortium including Safran Tech (the Research & Technology Center of Safran Group), the French Alternative Energies and Atomic Energy Commission, Fraunhofer Institute, the French National Centre for Scientific Research, the University of Strasbourg, and the IMDEA Energy Institute. Led by Safran Power Units and with the support of Advent, the consortium has secured a grant for the Clean Hydrogen Partnership **TC3-08 NIMPHEA Project**. Running from 2023 to 2026, the project is funded by Horizon Europe. NIMPHEA Project's main objective is to develop an aircraft-compatible, next-generation HT-PEM MEA. This involves optimizing and enhancing various components such as the catalyst layer, membrane, and gas diffusion layer. Advent's Ion Pair™ MEA technology serves as the foundation for these advancements.

As part of the newly signed MoU, Advent and Safran Power Units are exploring a Joint Development Agreement for the advancement of HT-PEM fuel cells in aviation and for enhancing Advent's supply capability.

"We are excited about the collaboration with Safran Power Units, as it signifies a major leap forward in advancing our HT-PEM fuel cell technology for the aerospace sector," commented **Dr. Vasilis Gregoriou, Advent's Chairman and CEO**. "With our collective expertise, we are ideally poised to accelerate the development of next-generation fuel cell solutions, making aviation cleaner, more efficient, and more sustainable. This collaboration represents a remarkable opportunity to demonstrate the applicability and potential of Advent's fuel cell technology in decarbonizing the aviation industry."

Vasilis Kopelas, Advent's Vice President of Corporate Strategy & Business Development (Green Mobility), added, "We are proud to collaborate with Safran Power Units, a major aviation partner focused on innovation, to advance the decarbonization of the aerospace sector through the development of HT-PEM fuel cell technology. We look forward to a long and highly successful collaboration, leveraging our Ion Pair™ MEA technology and Safran Power Units expertise, to drive the adoption of Advent's next-generation fuel cell solutions and contribute to a greener future for aviation."

Ghislaine Doukhan, Safran Power Units CEO, commented: "We are delighted to start this exciting collaboration with Advent. By combining our strengths, we are confident in our ability to spearhead the advancement of HT-PEM fuel cell technology in the aerospace sector. This partnership perfectly aligns with our unwavering dedication to innovation and sustainable aviation."

About Advent Technologies Holdings, Inc.

Advent Technologies Holdings, Inc. is a U.S. corporation that develops, manufactures, and assembles complete fuel cell systems as well as supplying customers with critical components for fuel cells in the renewable energy sector. Advent is headquartered in Boston, Massachusetts, with offices in California, Greece, Denmark, Germany, and the Philippines. With more than 150 patents issued, pending, and/or licensed for fuel cell technology, Advent holds the IP for next-generation HT-PEM that enables various fuels to function at high temperatures and under extreme conditions, suitable for the automotive, aviation, defense, oil and gas, marine, and power generation sectors. For more information, visit www.advent.energy.

Cautionary Note Regarding Forward-Looking Statements

This press release includes forward-looking statements. These forward-looking statements generally can be identified by the use of words such as "anticipate," "expect," "plan," "could," "may," "will," "believe," "estimate,"

“forecast,” “goal,” “project,” and other words of similar meaning. Each forward-looking statement contained in this press release is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. Applicable risks and uncertainties include, among others, the Company's ability to maintain the listing of the Company's common stock on Nasdaq; future financial performance; public securities' potential liquidity and trading; impact from the outcome of any known and unknown litigation; ability to forecast and maintain an adequate rate of revenue growth and appropriately plan its expenses; expectations regarding future expenditures; future mix of revenue and effect on gross margins; attraction and retention of qualified directors, officers, employees and key personnel; ability to compete effectively in a competitive industry; ability to protect and enhance Advent's corporate reputation and brand; expectations concerning its relationships and actions with technology partners and other third parties; impact from future regulatory, judicial and legislative changes to the industry; ability to locate and acquire complementary technologies or services and integrate those into the Company's business; future arrangements with, or investments in, other entities or associations; and intense competition and competitive pressure from other companies worldwide in the industries in which the Company will operate; and the risks identified under the heading “Risk Factors” in Advent's Annual Report on Form 10-K filed with the Securities and Exchange Commission (“SEC”) on March 31, 2023, as well as the other information filed with the SEC. Investors are cautioned not to place considerable reliance on the forward-looking statements contained in this press release. You are encouraged to read Advent's filings with the SEC, available at www.sec.gov, for a discussion of these and other risks and uncertainties. The forward-looking statements in this press release speak only as of the date of this document, and the Company undertakes no obligation to update or revise any of these statements. Advent's business is subject to substantial risks and uncertainties, including those referenced above. Investors, potential investors, and others should give careful consideration to these risks and uncertainties.

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