NEWS RELEASE

Advent Technologies Enters Into Technology Assessment Agreement With Second Large Global Automotive Manufacturer

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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 space, is pleased to announce the signing of a technology assessment agreement with a second large global automotive manufacturer.

With a common goal of sustainability and the faster decarbonization of the U.S. automotive industry, Advent is supporting efforts to advance innovative fuel cell technology as a sustainable and efficient option for achieving carbon neutrality. More specifically, Advent will provide assistance, through:

- Supplying Membrane Electrode Assemblies (“MEAs”) for testing, evaluation, and optimization under the collaborator’s conditions.
- Providing support on MEA operational parameters while the collaborator supplies feedback to Advent on performance and durability.
- Sharing technical know-how for fuel cell stacks, proprietary HT-PEM technology, and leveraging HT PEM for advanced cooling systems.

One of the primary objectives will be to conduct a detailed assessment of Advent’s proprietary HT-PEM technology and newly launched MEAs for consideration of future opportunities. Contingent upon the successful execution of the first phase of the project, the companies will work to establish a Joint Development Agreement governing, among other things, specific product requirements, goals, milestones, and plans.

The new Advent MEAs to be tested as part of this project, are currently being developed within the framework of

L'Innovator, Advent's joint development program with the U.S. Department of Energy's Los Alamos National Laboratory, Brookhaven National Laboratory, and National Renewable Energy Laboratory. MEAs are the most important components of a fuel cell as they greatly define the performance, lifetime, weight, and cost of the end system. Advent MEAs operate at high-temperature (80oC to 240oC) while the incumbent LT-PEM technology is limited to below 100oC. High-temp operation is essential for efficient heat removal in heavy-duty mobility applications, making HT-PEM an ideal technology for trucks, aviation, and marine. Furthermore, Advent MEAs can work with impure hydrogen which can be reformed on-board from methanol, natural gas, and other renewable fuels, and are resilient to extreme temperature, humidity and air quality conditions.

Dr. Emory De Castro, Advent's Chief Technology Officer, stated, "We are anxious to decarbonize the automotive industry using next-generation fuel cell technology and welcome this highly impactful collaboration. MEA is the heart of the fuel cell and a critical component used in fuel cells and other electrochemistry applications such as CO2-free hydrogen production, and energy storage. All of us at Advent technologies look forward to a long and productive collaboration, which will enable us to share our long-standing expertise and help reshape the automotive industry by replacing the need for conventional fuels while producing clean power."

About Advent Technologies Holdings, Inc.

Advent Technologies Holdings, Inc. is a U.S. corporation that develops, manufactures, and assembles fuel cell systems and the critical components for fuel cells and other advanced energy systems. Advent is headquartered in Boston, Massachusetts, with locations in California, Denmark, Germany, Greece, and the Philippines. With 150-plus patents issued, pending, or licensed for its fuel cell technology, Advent holds the IP for next-generation HT-PEM that enable various fuels to function at high temperatures under extreme conditions – offering a flexible "Any Fuel. Anywhere." option for the automotive, maritime, aviation, 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, 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 corporate reputations and brand; expectations concerning relationships and actions with technology partners and other third parties; impact from future regulatory, judicial and legislative changes to the industry; future arrangements with, or investments in, other entities or associations; and intense competition and competitive pressure from other companies worldwide; 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, as well as the other information each has files with the SEC. We caution investors not to place considerable reliance on the forward-looking statements contained in this press release. You are encouraged to read the 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, with no obligation to update or revise any of these statements. Investors, potential investors, and others should give careful consideration to these risks and uncertainties.

Advent Technologies Holdings, Inc.
Michael Trontzos / Chris Kaskavelis
press@advent.energy

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