



NEWS RELEASE

Advent Technologies and Hyundai Motor Company enter into Technology Assessment, Sales and Development Agreement

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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, is pleased to announce the signing of a technology assessment, sales, and development agreement with Hyundai Motor Company ("Hyundai"), a leading multinational automotive manufacturer offering a range of world-class vehicles and mobility services in over 200 countries.

Advent and Hyundai aim to deliver green energy solutions to current high carbon applications, using fuel cell technology. Under the agreement, Hyundai will provide catalysts to Advent for evaluation in its proprietary Membrane Electrode Assemblies ("MEAs"), while Advent intends to support Hyundai in fulfilling its fuel cell project needs, through:

- Developing inks and structures using IFAT catalysts, which will then be evaluated by IFAT. Following evaluation, Hyundai will determine whether IFAT or standard catalysts will be used for this project.
- Supplying MEAs throughout the development/commercialization cycle ("Advent MEAs") for testing, evaluation, and optimization under conditions set by Hyundai.
- Assisting Hyundai with the use and specifications of MEAs as well as their implementation into Hyundai's designs.

Following the completion of the first phase of the project, the companies will collaborate closely to set out specific product requirements, collaborative product goals, as well as milestones for achieving established goals and plans for phase 2, which shall also include Advent's stack cooling technology.

The new Advent MEAs to be tested by Hyundai 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 a high temperature (80oC to 240oC) compared to the incumbent low temperature PEM technology, which is restricted to an operating temperature of below 100oC. The ability to operate at a high temperature confers significant advantages such as the efficient heat removal in heavy-duty mobility applications, making Advent’s high temperature PEM an ideal technology for trucks, aviation, and marine applications. Advent’s MEAs can operate effectively with fuels such as impure hydrogen which can be reformed on-board from methanol, natural gas, and other renewable fuels. Advent’s MEAs are also resilient to extreme temperature variations, humidity, and air quality conditions.

Dr. Emory De Castro, Advent’s Chief Technology Officer, stated, “We are excited and proud to join forces with Hyundai, aiming to greatly contribute to their mission and to jointly participate in the pivotal role to transition global society to clean energy, therefore making hydrogen an economically viable energy source. MEAs form the heart of the fuel cell and they are also a critical component for other electrochemistry applications, such as CO2-free hydrogen production, and, energy storage. We hope our proprietary MEAs will best serve Hyundai’s business needs and look forward to a long and highly successful collaboration, sharing our long-standing expertise to support Hyundai in bringing its future mobility strategy to life.”

About Advent Technologies Holdings, Inc.

Advent Technologies Holdings, Inc. is a U.S. corporation that develops, manufactures, and assembles complete fuel cell systems, and the 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 100 patents issued for its 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 – offering a flexible “Any Fuel. Anywhere.” option 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/A filed with the Securities and Exchange Commission on May 20, 2021, 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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