NEWS RELEASE

Advent Technologies Participates in Major European Hydrogen Project (IPCEI) “White Dragon” Proposal Submission

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“White Dragon” is poised to be an important step in the green energy transition to hydrogen technology

BOSTON--(BUSINESS WIRE)-- Advent Technologies Holdings, Inc. (NASDAQ: ADN) (“Advent”), an innovation-driven company in the fuel cell and hydrogen technology space, today announced the achievement of an important milestone in the development of hydrogen technologies. Specifically, on Wednesday, May 5, the national proposal for hydrogen technologies "White Dragon" was submitted by a group of the largest energy companies in Greece. The proposal sets forth a future vision for the entire hydrogen value chain and a path to expand its role in the Greek energy system’s reduced carbon goals.

DEPA Commercial will serve as the project coordinator of “White Dragon” and, in collaboration with Advent Technologies, Damco Energy S.A. (Copelouzos Group Company), PPC Greece, The Hellenic Gas Transmission System Operator (“DESFA”) S.A., Hellenic Petroleum, Motor Oil, Corinth Pipeworks, TAP and Terna Energy (together the “consortium”), on May 5, 2021, submitted the consortium’s proposal, a more than 8 billion euro plan for the development of an innovative, integrated green hydrogen project in Greece, to the Greek government and the European Union. The proposal already has the support of the Region of Western Macedonia and the Cluster of Bioeconomy and Environment of Western Macedonia.

The objective of the project is to gradually replace the lignite power plants of Western Macedonia and transition to clean energy production and transmission, with the ultimate goal of fully decarbonizing Greece's energy system. The "White Dragon" project plans to use large-scale renewable electricity to produce green hydrogen by electrolysis in Western Macedonia. This hydrogen would then be stored and, through Advent’s high-temperature fuel cells,

supply all of Greece with clean electricity, green energy and heat. Advent's fuel cells provide a combination of both heat and electrical power, and the heat generated by the project can initially be used in conjunction with the district heating networks of Western Macedonia, and in the future in other applications that require a heating and/or cooling system, such as industrial workings, data centers and greenhouses.

Another primary goal of the "White Dragon" project is the development by the consortium of an integrated Hydrogen Industrial Research Center within the Hydrogen High Technology, Research, Development & Innovation Center that is anticipated to be created in Western Macedonia.

Upgrading the existing energy infrastructure, electricity networks and gas pipelines is particularly important to the continued success of the green energy efforts already underway across the EU. Gas pipelines can be used both for transporting green hydrogen to end users and to indirectly store the hydrogen for future use, with a regulatory framework for Energy Net Metering serving as a transition option until the full infrastructure required by the hydrogen economy is built out. To accelerate this development, under "White Dragon," the study and construction of a dedicated hydrogen pipeline in Greece would commence, as would plans to implement the first widescale hydrogen fueled projects for the entire transportation sector, which includes heavy duty trucks, trains and cars. A corresponding infrastructure for hydrogen refueling stations (HRS) and the transportation and distribution of hydrogen over the area's roads and highways are planned to facilitate the project's end goals. The dedicated hydrogen pipeline would link green hydrogen production with large hydrogen end users, such as refineries and the fertilizer industries, and will drive their efforts to make their production processes greener. Finally, through the integrated "White Dragon" project, the international transportation and export of hydrogen through the TAP Interstate Pipeline from Greece to Italy is expected to be explored as a future potential goal.

The combined budget for the project, if approved in its entirety by the European and Greek authorities, is €8.063 billion.

- Project duration: 2022 - 2029 (R&D, FID and EET phases)
- Anticipated Hydrogen production: 250,000 tons / year*
- Anticipated Hydrogen for other uses: 58,000 to 71,000 tons / year
- Anticipated CO2 savings: 11.5 million tons / year
- Anticipated Job creation: 18,000 direct jobs and 29,500 indirect

* Renewable hydrogen will be channeled almost entirely into pipelines.

Dr. Vasilis Gregoriou, Advent Chairman and CEO, stated that 'The approval of the 'White Dragon' project would be an important step for the creation and development of clean energy hydrogen technologies in Greece. We are excited to participate as the fuel cell partner in the submission of such a large-scale project. This is a long-term

venture that, although still in the submission phase and awaiting multiple levels of approval, presents exciting possibilities for the future. Its successful implementation could be the key that unlocks the transition to greener power creation and transmission across Greece and potentially, the EU."

About Advent Technologies Holdings, Inc.

Advent Technologies Holdings, Inc. is a U.S. corporation that develops, manufactures, and assembles critical components for fuel cells and advanced energy systems in the renewable energy sector. Advent is headquartered in Boston, Massachusetts, with offices in the San Francisco Bay Area and Europe. With 120-plus patents (issued and pending) for its fuel cell technology, Advent holds the IP for next-gen high-temperature proton exchange membranes (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. These forward-looking statements address various matters including the Company's plans and expectations with respect to Project White Dragon. 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 realize the benefits from the business combination; 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 our corporate reputation and brand; expectations concerning our relationships and actions with our 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 our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 26, 2021, as well as the other information we file 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 our 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 we undertake no obligation to update or revise any of these statements. Our 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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