



Joint News Release

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BASF and Advent Technologies sign agreement to establish end-to-end supply chain for hydrogen fuel cell systems in Europe

- **Hydrogen can enable the transformation toward climate neutrality and decrease dependence on fossil fuels**
- **BASF will expand its hydrogen related portfolio including precious metal services, catalysts, components and recycling by scaling up production of Celtec® MEA (Membrane Electrode Assembly) technology for fuel cells**
- **Advent will produce fuel cell systems at planned state-of-the art manufacturing facility in Greece under the Green HiPo IPCEI program**

Iselin, NJ USA and Boston, MA USA – BASF Environmental Catalyst and Metal Solutions, a global leader in precious metals and catalysis, and Advent Technologies Holdings, Inc. (NASDAQ: ADN), an innovation-driven leader in the fuel cell and hydrogen technology sectors, have concluded the terms of a new agreement to join efforts in building a full loop component supply chain for fuel cells and enter discussions to extend the partnership into the field of water electrolysis.

For 20 years, BASF Environmental Catalyst and Metal Solutions has been a leader in membrane and MEA technology for high temperature proton exchange membrane (HT-PEM) fuel cells with a strong foundation in precious metal services and catalysis. Advent is the largest manufacturer of HT-PEM fuel cell systems targeting emerging markets in the field of sustainable and decentralized energy such as stationary power that can replace diesel generators, marine power from e-methanol fuel cells and heavy-duty mobility.

HT-PEM fuel cells operate at 120 to 180°C, offer a broad operating window and tolerate impurities in the hydrogen fuel gas. The fuel cells also enable simplified cooling and need no humidification. Advent offers competitive fuel cell systems for stationary and portable applications based on methanol and on-site reforming. In the future, HT-PEM fuel cells will be also available for heavy duty mobility and marine power.

“We are committed to building a full loop supply chain for green hydrogen technologies including precious metal services, catalysts, components and recycling. Expanding our longstanding cooperation with Advent enables us both to grow in the HT-PEM fuel cell market and helps position Europe as a leading region for the hydrogen industrial transformation,” said Tim Ingle, Senior Vice President, BASF Environmental Catalyst and Metal Solutions.

The scope of the agreement includes BASF’s role in scaling up MEA production at Advent’s planned state-of-the-art manufacturing facility in Western Macedonia, Greece, while offering Advent its full portfolio of products and services to enable circularity in key materials. Both companies will cooperate on BASF’s latest membrane development, Celtec[®]-Z, and the new *Ion Pair*[™] MEA membrane concept by Advent, aiming for improved performance, lifetime and cost competitiveness.

Dr. Vasilis Gregoriou, Advent’s Chairman and CEO commented: “The Advent team is thrilled to further strengthen its collaboration with BASF, a world-class catalyst and membrane leader. This partnership will enable the combination of Advent’s expertise in fuel cell stacks and systems with BASF’s expertise in catalyst and membrane development, creating a powerful synergy that will drive innovation in the fuel cell industry.”

Advent’s Green HiPo project involves the development, design and manufacture of HT-PEM fuel cells and electrolyzers. The project is under the framework of the Important Projects of Common European Interest (IPCEI) that is promoting hydrogen development and deployment to boost jobs and growth throughout Europe while contributing to a green and resilience agenda. BASF will support further market uptake of the HT-PEM fuel cells by providing a broad portfolio of services and products at scale, including PGM (Platinum Group Metals) services, catalysts, membranes, and recycling.

Celtec[®] is a trademark of BASF

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About BASF Environmental Catalyst and Metal Solutions

Leveraging its deep expertise as the global leader in catalysis and precious metals, BASF Environmental Catalyst and Metal Solutions (ECMS) serves customers in many industries including automotive, aerospace, indoor air quality, semiconductors and hydrogen economy, and provides full loop services with its precious metals trading and recycling offering. With a focus on circular solutions and sustainability, ECMS is committed to helping our customers create a cleaner, more sustainable world. Protecting our elements of life is our purpose and this inspires us to ever-new solutions.

ECMS operates globally in 15 countries with approximately 20 production sites and over 4,000 employees.

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 – offering a flexible fuel option for the automotive, aviation, defense, oil and gas, marine, and power generation sectors. For more information, visit www.advent.energy.

About Green HiPo

The Green HiPo project involves the development, design, and manufacture of HT-PEM fuel cells and electrolyzers for the production of power and green hydrogen, respectively. The project will be based in the Western Macedonia region of Greece and will aid significantly in the region's transition from a coal-based economy to a greener economic model. A new state-of-the-art facility in Western Macedonia will be home to the production of fuel cells and electrolyzers and will contribute to the economic development of the region. This project is under the framework of the Important Projects of Common European Interest (IPCEI).