



NEWS RELEASE

Advent Technologies Launches Portable Clean Power Solution for Construction and EV Charging Applications

12/20/2023

The Company is organizing an exclusive webinar in collaboration with Mission Hydrogen to introduce its new product line on February 7, 2024

BOSTON--(BUSINESS WIRE)-- Advent Technologies Holdings, Inc. (NASDAQ: ADN), an innovation-driven leader in the fuel cell and hydrogen technology space, is pleased to unveil the SereneP, a cutting-edge product line set to redefine portable power solutions with a particular focus on construction and EV charging applications.

(Photo: Business Wire)

Advent's SereneP offers unparalleled flexibility,

configurable to exact power needs ranging from 10kVA to 300kVA. It combines a battery and a fuel cell, and operates seamlessly on liquid green fuels like methanol, biomethanol, or eMethanol. SereneP can be readily mobilised to a diverse range of locations, ensuring power where it's needed the most.

- Construction sites, and EV charging station Applications: SereneP caters to a wide array of power applications, including construction sites, remote EV charging stations, microgrid support, critical infrastructure applications, events, and concerts, as well as providing reliable backup power for buildings and camps.
- Environmental Benefits: SereneP is the epitome of eco-friendly power generation, offering 80% CO2 emissions reduction with biomethanol and up to 100% reduction in CO2 emissions with eFuel use when compared to traditional fossil fuel power sources. SereneP outperforms battery-only systems charged from the grid in many countries and regions in terms of net emissions. The system's load-following capabilities ensure optimal fuel efficiency while dynamically adjusting power output to match specific load requirements,

reducing operational costs and environmental impact.

- **Rugged and Reliable:** Engineered to withstand diverse environments, SereneP functions flawlessly in ambient temperatures ranging from -20°C to 50°C. Its reliance on liquid green fuels ensures simple and cost-effective logistics.
- **Competitive:** Battery-only systems are not ideal for off-grid applications because they require continuous relocation to the grid or other power source for recharging. Diesel generators emit harmful emissions and noise, as well as representing substantial risk of fuel theft. Pure hydrogen systems incur substantial costs associated with fuel sourcing, storage, and transportation in off-grid locations. SereneP, in contrast, addresses all of these challenges by leveraging the advantages of liquid eFuels, offering a cost-effective and environmentally friendly solution with significant carbon reductions, and virtually unlimited capacity.

Unlike traditional grid charging, SereneP's fuel cell charges its batteries, enabling virtually limitless green power generation even during grid outages, dependent only on the availability of liquid green fuel. The Methanol Institute is tracking over 801 global projects focused on renewable methanol, projecting an annual output of eMethanol and Biomethanol in excess of eight million metric tons by 2027. In addition, Advent has established a global network of fuel suppliers, guaranteeing its clients a steady methanol supply for SereneP.

In Denmark, 14 of the largest public sector builders have signaled that they will impose a requirement for contractors to use emission-free work machines at building and construction project sites. As a significant advancement in addressing this need, the SereneP product line was officially introduced in November 2023 by Advent, during an event organized by Denmark's National Centre for Public-Private Sector Innovation in Copenhagen. Furthermore, the UK also aims to eliminate diesel use on most construction sites. Currently, around 300,000 Non-Road Mobile Machinery² units in the UK construction industry run on diesel, consuming 2.5 million tons of oil equivalent and producing significant carbon emissions. The Zero Diesel Sites Route Map outlines steps to reduce this volume by 78% by 2035, in line with the UK's 2021 Sixth Carbon Budget goals.

Dr. Vasilis Gregoriou, Advent's Chairman and CEO, commented: "We are confident that SereneP is well-positioned to efficiently replace diesel generators in construction and other global applications. Recognizing a specific market need within the construction rental sector, where upcoming regulations are expected to prohibit diesel gensets, SereneP is ideally positioned as a valuable solution available today. We are currently engaged in discussions with industry-leading companies looking to phase out diesel, who view SereneP as the way forward. As a result, SereneP becomes an integral component of our sales strategy, allowing us to play a pivotal role in meeting the evolving demand for clean and highly portable power across construction and beyond."

In partnership with Mission Hydrogen, Advent is proud to host an exclusive webinar on February 7, 2024, focused on introducing SereneP. Secure your spot by registering for the event:

<https://event.webinarjam.com/register/846/34lyrh13w>. To explore specific models within Advent's cutting-edge

SereneP product line, access our newly-published brochure by clicking [here](#).

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.

¹<https://www.methanol.org/renewable/>

²<https://www.constructionleadershipcouncil.co.uk/wp-content/uploads/2023/06/CLC-Press-Release-05-June-2023-Diesel-to-disappear-from-most-construction-sites-by-2035-under-new-plan.pdf>

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Source: Advent Technologies Inc.