



NEWS RELEASE

Advent Technologies & Vantage Towers Greece announce Proof of Concept project to replace Diesel Generators with Fuel Cells operating on Biomethanol aiming to reduce greenhouse gas emissions

12/19/2022

BOSTON--(BUSINESS WIRE)-- Advent Technologies Holdings, Inc. (NASDAQ: ADN) ("**Advent**"), an innovation-driven leader in the fuel cell and hydrogen technology sectors, today launched a proof of concept ("PoC") project with Vantage Towers Greece ("**Vantage Towers**") to replace diesel generators with fuel cells. Vantage Towers Greece is the largest and only independent tower infrastructure company in Greece, operating more than 5,250 towers for Vodafone Greece and Wind Hellas. By replacing diesel generators with fuel cells at non-permanent sites that are not connected to the power grid, they can be supplied with electricity even more environmentally friendly.

Under the PoC, Vantage Towers Greece, a subsidiary of Vantage Towers Group, one of Europe's leading tower companies, will explore the applicability of Advent's Serene biomethanol-powered fuel cell systems as back-up and primary power sources for its telecom towers. This new collaboration is particularly aligned with the overall strategy of Vantage Towers, which aims to drive sustainable digitalization in Europe by reducing carbon emissions across their network by using clean energy solutions. Following the successful completion of the PoC project in Greece, Advent and Vantage Towers could consider wider deployments.

Liquid biomethanol as a carrier of hydrogen allows for easier transportation, logistics and storage compared with hydrogen gas, and enhances the safety of operations by simultaneously achieving more than 80% CO2 emissions reduction compared to diesel generators. Key advantages of using Advent's methanol-powered fuel cells include:

- Significantly less CO2 emissions and noise compared to conventional generator units

- No NOx or SOx emissions
- Small footprint
- Long operating lifetime
- Low service and maintenance fees

In addition, Advent fuel cells can operate across a range of conditions, such as weather, ambient temperatures from as low as -20°C and up to +50°C, and work in humid and polluted environments. Advent has already installed approximately 500 methanol-powered Serene fuel cell systems in the Asian market, primarily used as back-up and primary power source for the telecommunications sector.

Athanasios Exarchos, Chairman & Managing Director of Vantage Towers Greece, stated:

"Operating more than 5,250 towers in Greece and constantly expanding our presence, at Vantage Towers we work every day to connect people, businesses, and devices in Greek cities, islands and rural areas, making a significant contribution to a better-connected Europe. Vantage Towers is highly interested in using fuel cells to drive carbon emissions reductions in the European telecom sector as back-up and primary power source. We look forward to the successful completion of this PoC project and the continuation of our collaboration with Advent, as it will further enhance the Group's goal to continue supporting partners through technological innovation in decarbonization and achieving their climate goals."

Dr. Vasilis Gregoriou, Advent Technologies Chief Executive Officer & Executive Chairman of the Board, commented: "Regardless of the location, I strongly believe that fuel cells are the most appropriate solution when there is a need for uninterrupted and sustainable back-up power, particularly for off-grid locations. We are delighted that Vantage Towers Greece has recognized the great potential that Advent's biomethanol-powered fuel cells hold for decarbonizing their operations. We truly hope this is the beginning of a long and fruitful collaboration that will allow us to lead in the decarbonization of the telecommunications sector in Europe."

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.

Contact:



For more information contact Elisabeth Maragoula/Michael Trontzos (press@advent.energy) or visit www.advent.energy.

About Vantage Towers

Vantage Towers is a leading tower company in Europe with around 83,000 sites in ten countries, connecting people, businesses and devices in cities and rural areas.

The company was founded in 2020 and is headquartered in Düsseldorf. Vantage Towers has been listed on the Deutsche Börse's Prime Standard in Frankfurt since 18 March 2021. The shares are included in the MDAX, TecDAX, STOXX Europe 600 and FTSE Global Midcap Indices.

Vantage Towers' portfolio includes towers, masts, rooftop sites, distributed antenna systems (DAS) and small cells. By building, operating and leasing this infrastructure to MNOs or other network providers such as IoT companies or utilities, Vantage Towers is making a significant contribution to a better-connected Europe.

While already 100% of the electricity that Vantage Towers uses to operate its infrastructure is obtained from renewable energy sources, green energy is increasingly being generated directly on site with the help of solar panels, micro wind turbines and in future also hydrogen solutions. This fits well into the overall strategy of the company to drive a sustainable digitalisation in Europe and to support partners through technological innovation in decarbonisation and achieving their climate goals.

For more information, please visit our website at www.vantagetowers.com, follow us on Twitter at [@VantageTowers](https://twitter.com/VantageTowers) or connect with us on LinkedIn at www.linkedin.com/company/vantagetowers.

Contact:

media@vantagetowers.com

For more information contact Ms. Elias Gerafenti, 210 728 9000, e.gerafenti@tsomokos.gr

Elisabeth Maragoula/Michael Trontzos (press@advent.energy)

Ms. Elias Gerafenti, 210 728 9000, e.gerafenti@tsomokos.gr

Source: Advent Technologies Inc.