HYP_Link

atNorth Recognized for Innovative Approach to Energy Innovation and Sustainable Building Design

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RECENT DEVELOPMENT

atNorth has made the 2023 shortlist for two categories of the UK National Sustainability Awards. This is the second annual National Sustainability Awards, which recognizes organizations within all sectors that are innovating to create a more sustainable and better future. atNorth made the shortlist for the 'Energy Innovation' and the 'Building of the Year' categories.

The Energy Innovation Award nomination was for the bespoke direct liquid cooling (DLC) system developed for the atNorth SWE01 datacenter facility in Stockholm, Sweden, in collaboration with CoolIT, a Canadian-based DLC supplier. The DLC and warm water combined system at SWE01 allows for higher rack density and higher peak performance, all while using less power.

SWE01 was also nominated for the "Building of the Year" for its approach to sustainable large-capacity (+10 MW) datacenter design. In addition to the DLC and warm water combined system, SWE01 is designed to recover warm air exhaust and recycle it. In partnership with Stockholm Exergi, SWE01 recycles warm air exhaust and provides heat and hot water to as many as 20,000 nearby apartments.

ANALYST COMMENT

As a result of the global energy crisis, datacenters are more concerned with energy costs affecting their operating expenditures. The use of DLC at SWE01 serves as a prime example of maximizing HPC capabilities while considering current and future energy concerns. It is important for future datacenters to evaluate the energy and cooling resources available to the local region during the planning stages. Adding DLC systems to targeted hotspots in a system can decrease dependence on fans and energy costs of air handling systems.

Environmental stewardship continually gains space in the global zeitgeist and HPC users are prioritizing datacenters that track their environmental footprint and come up with innovative ways of reducing it. This includes the footprint of the entire lifecycle of HPC systems, from manufacturing to discontinuation and recycling. The warm air exhaust recycling system of SWE01 is an excellent example of deploying circular economy principles within a datacenter.