



Efficient energy supply for Data Center

DECENTRALIZED ENERGY SOLUTION ENABLES MAXIMUM SECURITY OF SUPPLY



The Centersquare BOS1-A data center in Waltham, Massachusetts, with a total area of 165,968 m², is one of the leading locations for data center services in the greater Boston area.

Centrally located in Boston's tech corridor, BOS1-A provides a powerful and secure data infrastructure for demanding business applications, including financial, media and

cloud services companies.

However, the data center services provided require large amounts of energy.

In order to significantly reduce the associated high energy costs while maximizing security of supply, Centersquare relies on two highly efficient avus 1000plus combined heat

and power units from 2G Energy. This solution was deliberately chosen because it offers a stable, reliable energy supply while at the same time being highly economical.

In its first year of operation, Centersquare is expected to save around USD 360,000 in energy costs compared to the conventional supply from the local energy supplier - a significant contribution to optimizing operating costs. The system also scores highly in terms of sustainable energy generation.

At the heart of the system are two powerful natural gas piston engines, each with an electrical output of 997 kW. With an electrical efficiency of 41%, a large proportion of the energy used is utilized efficiently. The system covers over 75% of peak load requirements and supplies the data center with 88% of its annual electricity consumption. Thanks to load-following operation and island mode, the system reacts flexibly to actual energy requirements and guarantees uninterrupted operation even in the event of external power failures.

The development and integration of a microgrid by Unison Energy ensures a reliable supply of natural gas to the CHPs.

The entire system is financed, operated and maintained by Unison Energy under a 20-year energy service contract.

By opting for this CHP solution, Centersquare is increasing the energy efficiency of its data center, reducing operating costs, increasing security of supply and improving its sustainability balance - an investment that is both economically and ecologically convincing and sustainably strengthens its competitiveness.



Centersquare BOS1-A

www.centersquaredc.com/data-centers/boston

2 x avus 1000plus
Natural gas
997 kW electric

