

Data center power consumption to double by 2030

Data center power consumption will double this decade from 3 GW at the end of 2021 to 5.4 GW in 2030, shows a survey conducted by BloombergNEF in cooperation with Eaton and Statkraft.

According to a more optimistic estimate, this power consumption could reach 7 GW in eight years.

The cited survey also shows that data centers' design capacity will see a jump of 83 percent by 2030, and that these facilities will provide the European energy market 16.9 GW of flexibility. "As the European energy market is set to attain in 2030 an almost 60 percent coverage of the total energy needs from renewable sources (solar and wind) compared to only 27 percent in 2021, data centers will turn into providers of energy flexibility," the specialist survey states.

Experts assert that the Romanian market will contribute to this process, as data centers see a fast-paced development similar to the European one. Existing data shows that the data center infrastructure market has grown by over 20 percent in 2021 and this trend will continue in 2022 too.

"The development of data centers is a unique opportunity for the energy system. By the way they are built, especially due to the large energy storage capacity of data center back-up systems, they can become important players in the market. There is an enormous potential in terms of market flexibility for making data center resources available, and we believe that all parties should work together to accelerate this process in the Romanian market. There is a rising domestic demand for data centers with an installed capacity of up to 100 KW, and once they are developed they will be able to integrate in the national energy system," said Eaton Electric Romania general manager Gabriel Tache.

The survey was conducted in the five major European markets, specifically the UK, Germany, Ireland, Norway and the Netherlands.

Eaton is an intelligent power management company founded in 1911 and currently listed on the New York Stock Exchange. In 2021 the company reported revenues of \$19.6 billion.