

Power Couple: The Strengthening Bond Between Data Centres and Battery Storage

Special Report: Insights into data centre opportunities for the battery storage sector in the U.S. and Europe from a panel of experts convened by Tamarindo, in partnership with Troutman Pepper Locke

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Data centres' soaring energy demands provide, in theory, a massive opportunity for the energy storage industry.

According to the International Energy Agency, data centre electricity consumption is set to more than double to around 945 terawatt-hours by 2030. Crucially, data centres are operated in accordance with stringent requirements for both continuous uptime and power quality — consequently, as battery manufacturer Saft has highlighted, any disruption, even for a fraction of a second, can lead to “significant data loss, operational failures, and severe financial repercussions.”

This requirement for an uninterrupted service has resulted in the creation of robust power infrastructure, traditionally relying on uninterruptible power supplies (UPS) backed by diesel generators. However, with data consumption rocketing, the energy footprint of data centres is also expanding exponentially. In the U.S. alone, data centre consumption, which currently accounts for 3%-5% of the electricity produced, according to Saft, is expected to climb to 8%-12% by 2030.

But how realistic is it to expect data centres to use battery storage to meet their energy needs?

Tamarindo, in partnership with Troutman Pepper Locke, convened a panel of energy storage industry experts and digital infrastructure specialists to discuss the strengthening bond between data centres and battery storage and the potential investment pitfalls. We summarize the key conclusions of the panel discussion:

- Explore to what extent battery storage can help to address the needs of data centres in Europe.
- Assess the barriers that exist to data centres making more use of battery storage.
- Identify the lessons Europe could potentially learn from the U.S. market and vice versa.
- Discuss whether more needs to be done to facilitate closer cooperation between the data centre industry and the battery storage sector.
- Examine the potential pitfalls for battery storage investors seeking to meet the energy demands of the global data centre industry.
- Predict how the relationship between data centres and the battery storage sector will evolve in the coming 12-24 months.

[Read the full report here.](#)

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