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Powering the AI Era: Why Data Centers need BESS now.

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The new energy reality for Data Centers.

Data Centers are powering the world's AI acceleration but their energy needs are outpacing what today's grid can reliably deliver.

As facilities scale, their power demand is rising faster than infrastructure can support.

This growing gap introduces real operational, financial, and sustainability risks.

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The AI computing energy challenge.

According to the **IEA**, Data Centers consumed **~1.5%** of global electricity (**415 TWh**) in 2024.

Under current growth scenarios, this demand could more than **double** by **2030**.

Key challenges include:



High demand fluctuations caused by AI workloads creating sharp, short-term spikes in power and cooling needs.

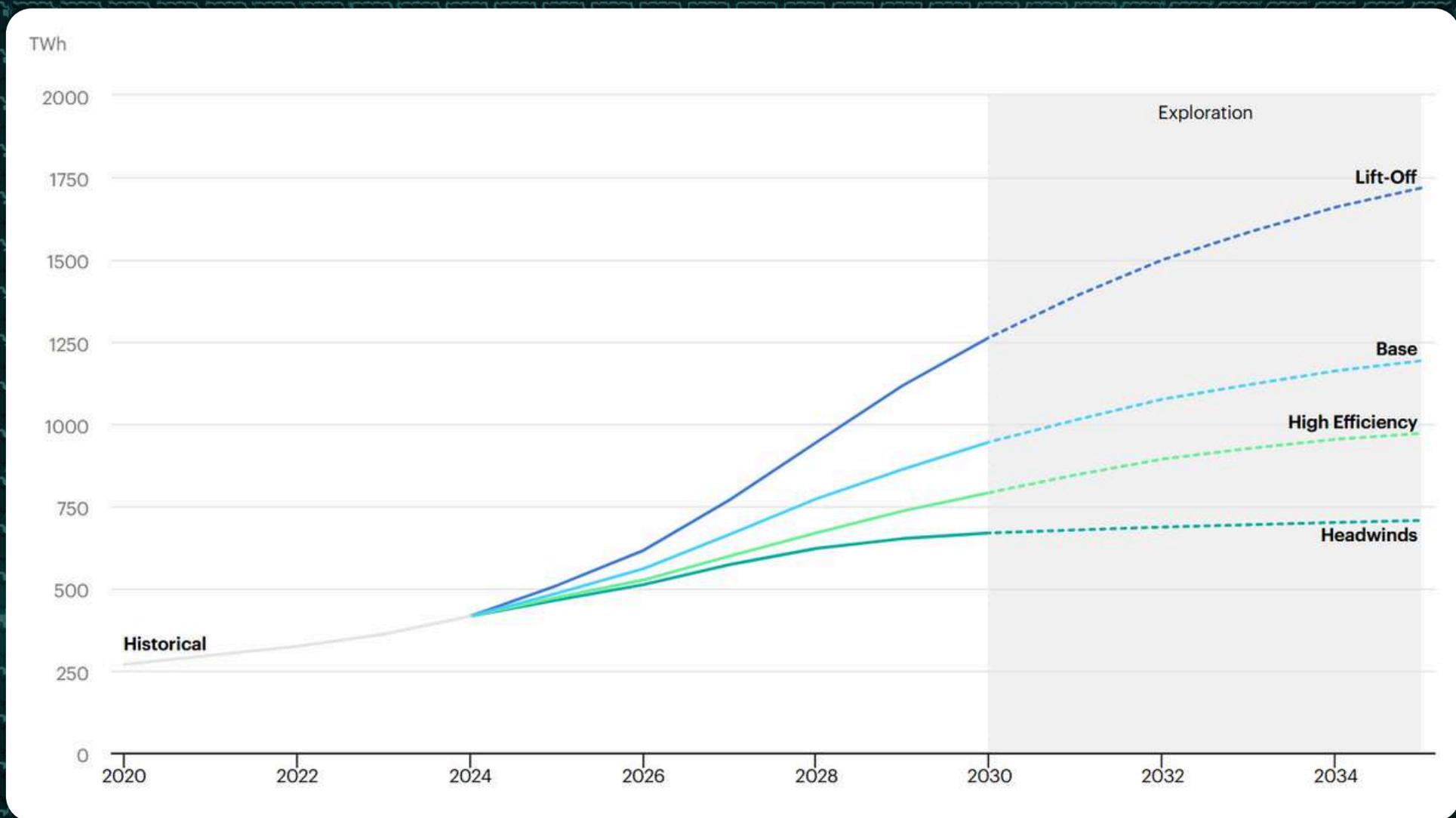


AI drives **inflexible electricity demand** that strains grid capacity and raises costs.



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Global Data Center electricity consumption by sensitivity case, 2020-2035.



Source: International Energy Agency (IEA).



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Meeting Data Centers demands requires more than UPS and generators.

Behind-the-Meter (**BTM**) BESS add a flexible, intelligent layer of power for resiliency, efficiency and cost control:



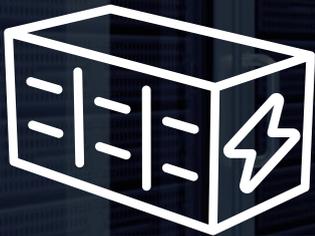
Provides **instant** and **extended backup**, delivering longer runtime to bridge gaps until generators kick in and in some cases, partially replacing generator use.



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Stabilizes voltage, handles surges and enhances **power quality** and support **peak management**, all while reducing demand charges.



BTM storage is directly managed by the data center, **ensuring uptime** and **predictable performance**.



Cuts energy costs, defers grid upgrades, reduces generator fuel usage and **enables integration of renewables**.

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BESS unlocking the next generation of Data Centers.

Data Centers can't grow by adding computing power alone, they also need smarter energy management. BESS give facilities the flexibility to:

- ✓ Handle AI-era power volatility;
- ✓ Reduce operational and financial risk;
- ✓ Improve sustainability metrics;
- ✓ Unlock capacity without overbuilding infrastructure.

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