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# Energy storage power demand side





## Overview

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Should energy storage be a supply-side or a demand-side route?

Meeting these challenges will require both 'supply-side' and 'demand-side' routes. Indeed, Supply-side action is critical; the ETC has previously outlined the need to build new grids, and focused on the role of energy storage in short to long durations. However, the role that demand-side flexibility can play has been previously understated.

How does energy storage affect electricity demand?

Storage can reduce demand for electricity from inefficient, polluting plants that are often located in low-income and marginalized communities. It can also help smooth out demand, avoiding price spikes for electricity customers. The electricity grid is a complex system in which power supply and demand must be equal at any given moment.

What drives demand-side flexibility?

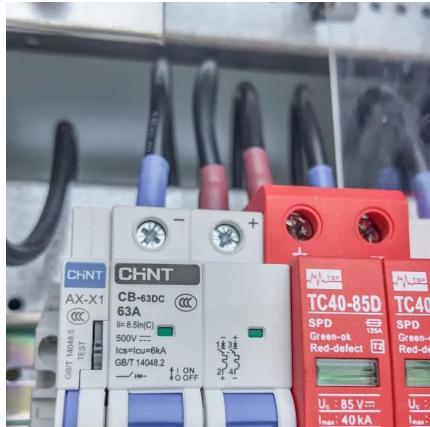
Demand-side flexibility is largely driven by smart technologies and storage solutions. In buildings and industry, thermal energy storage systems can store heat, while battery storage systems provide electricity backup, both of which allow for strategic shifts in energy use.

How do energy storage systems work?

In buildings and industry, thermal energy storage systems can store heat, while battery storage systems provide electricity backup, both of which allow for strategic shifts in energy use. Meanwhile, hydrogen production via electrolysis presents an especially promising flexibility solution.



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### Demand side management , Energy Storage Systems

The storage technologies presented so far have used different physical and chemical principles to store energy. According to requirement G1, they stored surplus energy to make it available for ...

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