ACORE | Energy Storage Tax Credit

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Background

Energy storage has the potential to transform the power system and fundamentally change the way we think about energy. The technology's value lies in its ability to improve grid flexibility and shift electricity supply to times of peak load, as well as provide a wide range of services that enhance reliability and resilience while enabling greater renewable energy integration.

By acting as both capacity and load, energy storage helps the grid respond to unanticipated changes to the power system, reducing risk through increased resource optionality. It enhances grid operation by distributing capacity, frequency, and voltage support, as well as adding fast-ramping resources that prevent system bottlenecks and improve power quality. **Despite these capabilities, the value of storage is only partially recognized in today's markets:** system and non-energy benefits of storage are often excluded in cost-benefit analyses; regulatory frameworks inadvertently limit energy storage; and new business models are still in their infancy.

An Investment Tax Credit for Energy Storage

A federal tax credit for energy storage would have a transformative impact, promoting private sector investment and helping monetize the value of energy storage technology. Currently, energy storage can only qualify for the federal investment tax credit (ITC) when integrated with ITC-eligible solar resources under specific conditions. This tax treatment creates uncertainties for investors and significantly limits energy storage deployment in suboptimal ways.

ACORE supports the creation of a freestanding energy storage ITC, or the modification and extension of the existing ITC to clarify that all storage technologies are eligible for the credit (e.g. batteries, pumped hydro, compressed air, flywheels, thermal storage, hydrogen storage, etc.), whether integrated into a hybrid project or deployed on a standalone basis**. ACORE also supports the inclusion of a direct pay option for an energy storage tax credit to allow the broadest possible array of stakeholders to develop energy storage projects.**

In March 2021, Sen. Heinrich (D-NM), Sen. Collins (R-ME), Rep. Doyle (D-PA), Rep. Blumenauer (D-OR), and Rep. Buchanan (R-FL) introduced the Energy Storage Tax Incentive and Deployment Act (S.627/H.R.1684). The legislation extends the existing investment tax credit (section 48) and residential credit (25D) for solar energy to qualifying energy storage technologies. Phaseout of the credit is on the same schedule as the current solar ITC — 26 percent in 2022, and 22 percent in 2023. After 2024, the credit would remain at 10 percent permanently for commercial and utility scale projects and zero out for residential energy storage. According to an analysis by research firm Wood Mackenzie, a 30% storage ITC enacted this year would increase the U.S. storage forecast by 20-25% over the next five years.

Additionally, the GREEN Act (H.R.848) introduced by House Ways and Means Select Revenue Measures Subcommittee Chairman Mike Thompson (D-CA) in February 2021 expands the ITC to include energy storage technology. In April 2021, Senate Finance Chairman Ron Wyden (D-OR) reintroduced the Clean Energy for America Act (S.1298), which also makes investments in renewable-enabling grid improvements like energy storage eligible for an investment tax credit on a standalone basis. Importantly, both pieces of legislation allow energy storage projects to claim the tax credits as direct payments, allowing access by the broadest possible universe of stakeholders.

A Multi-Sector Priority

In March 2021, ACORE joined over 150 organizations on a multi-sector coalition letter to House and Senate leadership on the importance of making standalone storage eligible for the investment tax credit and residential energy credit.

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1150 Connecticut Ave NW, Suite 401 · Washington, DC 20036 · www.acore.org

ACORE | Energy Storage Today

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Energy storage supports the grid in multiple ways

· Capacity reserves · Frequency regulation · Time-of-use shifting · Voltage support

Grid support from storage has broad consumer benefits

· Increased renewable penetration by solving resource intermittency and enhancing ramping
· Reduced need for expensive and polluting "peaker" power plants at times of high demand
· Elevated resilience, including better storm weathering and quicker bounce backs from blackouts

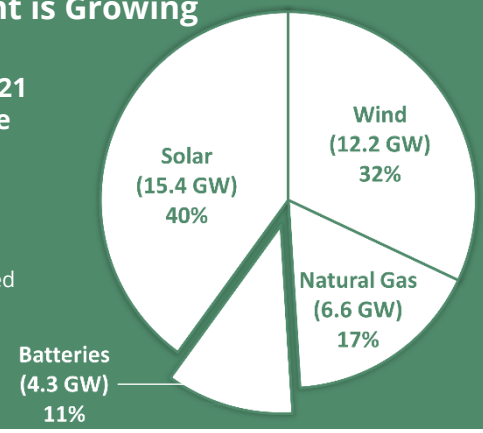
Energy storage takes many forms

Batteries | Pumped Hydro | Flywheels | Compressed Air | Thermal

Deployment is Growing

Planned 2021 Utility-Scale Generating Capacity Additions

Source: Adapted from U.S. EIA



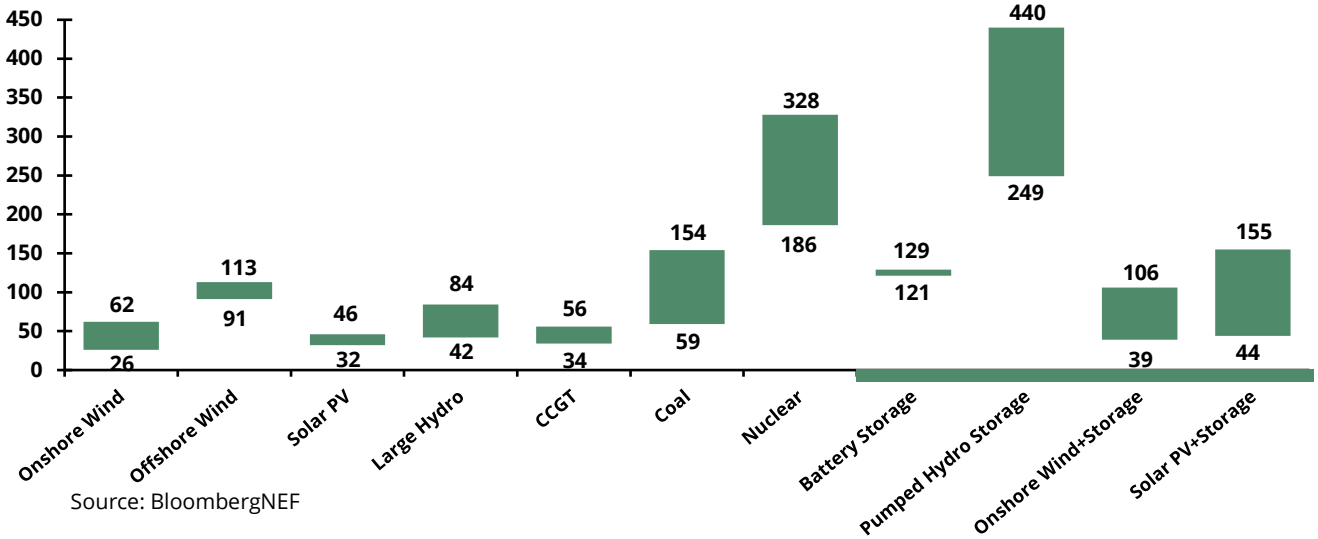
2020 Utility-Scale Storage Projects

· **86** new projects came online
· **21** have a capacity of **10 MWh** or greater
· **12** projects can output at **10 MW** or greater
· **23** projects, or **27%**, were paired with renewable generation
· **22** projects, or **26%,** were designed for frequency regulation

Source: BloombergNEF

Costs are declining, but storage is not yet competitive

Levelized Cost of Electricity by Resource in $/MWh, 2021



Source: BloombergNEF

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