

# Portugal Porto energy storage participates in peak-shaving prices





## Overview

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Does energy storage ramping reduce peak demand shave potential?

We observe energy storage ramping capability decides peak shaving potential, fast ramping batteries can significantly reduce peak demand charge. The numerical experiment indicates that storage providing backup does not significantly reduce gains performing arbitrage and peak demand shaving.

What is energy arbitrage & peak shaving?

Here, we give you a rundown of everything you need to know about energy arbitrage and peak shaving within the storage market. What is energy arbitrage?

Energy arbitrage entails the purchasing of energy commodities at times of low pricing and selling it during periods of high pricing, aiming to yield profits.

Does the correction of es power increase operating costs?

The correction of the ES operating power increases operating costs. However, the OCGR indicator limits the increase in operating costs to an appropriate range (no more than a 1% increase in operating costs for six typical days). A method for determining the ES capacity demand for high-penetration RE systems is presented in this study.

What is the power and capacity of Es peaking demand?

Taking the 49.5% RE penetration system as an example, the power and capacity of the ES peaking demand at a 90% confidence level are 1358 MW and 4122 MWh, respectively, while the power and capacity of the ES frequency regulation demand are 478 MW and 47 MWh, respectively.



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