https://www.businesstoday.in/amp/industry/energy/story/india-rolls-out-scheme-for-building-robust-battery-energy-storage-backbone-for-wind-solar-projects-397216-2023-09-06

India rolls out scheme for building robust battery energy storage backbone for wind, solar projects

A total of 4,000 MWh of energy storage projects will get rolled out by FY31 under a new scheme to build storage capacities for excess wind and solar energy produced



The selection of BESS developers for VGF grants will be carried out through a competitive bidding process involving both public and private sector entities

- An initial outlay of Rs 9,400 crore, including budgetary support of Rs 3,760 crore, has been provided under the scheme
- While energy storage projects be sanctioned during the initial three-year period, funds will be allocated based on milestones achieved till FY31
- The scheme also seeks to enhance the integration of renewable energy into the electricity grid and minimise wastage

The Union Cabinet Wednesday approved the scheme for viability gap funding (VGF) for the creation of a robust storage system for excess wind and solar power produced.

A total of 4,000 megawatt hours (MWh) of Battery Energy Storage System (BESS) projects will be developed by FY31 under the scheme. An initial outlay of Rs 9,400 crore, including budgetary support of Rs 3,760 crore, has been provided under the scheme.

The VGF will be provided over a three-year period from FY24 to FY26 and will be capped at 40 per cent of the capital cost. Simply put, while the BESS projects will be sanctioned during the initial three-year period, funds will be allocated based on milestones achieved till FY31.

The selection of BESS developers for VGF grants will be carried out through a competitive bidding process involving both public and private sector entities.

"If the production of electricity is more than the demand, then how do you store that since we presently don't have such facilities in the country? Therefore, we have introduced this scheme to develop capacities to store excess renewable energy produced in energy storage systems," Anurag Thakur, Union Minister for Information & Broadcasting, said at a briefing on the cabinet's decisions.

"The stored energy can be utilised to meet the supply gap during peak hours. This will also help in cutting down on carbon emissions as well as help further reduce the country's dependency on fossil fuels," he added.

Minimise wastage, optimise transmission network utilisation

The scheme not only seeks to enhance the integration of renewable energy into the electricity grid but also minimise wastage while optimising the utilisation of transmission networks. This will significantly obviate the need for costly infrastructure upgrades.

"An important aspect of the scheme is that consumers of distribution companies will be among its first beneficiaries. Companies availing VGF for setting up BESS infrastructure are required to give 85 per cent of the power to distribution companies. The rest can then be shared with other consumers," informed Thakur.

Earlier this year, the government introduced several initiatives to expedite the commissioning of pumped storage projects to expand India's renewable energy capacity.

"By introducing the energy storage scheme, the energy storage systems' capacity could be factored into such projects, whether through co-location or integration into a storage system already planned. The scheme could make such projects more compelling from an investment development perspective," Kartik Ganapathy, Founding Partner at the law firm IndusLaw.

"The uptake in the BESS is largely dependent on the projected price reduction and establishment of a global supply chain. Current costs have prohibited the Indian utilities and developers from scaling up BESS deployment. The VGF scheme for the development of BESS is a much-required intervention towards mobilising the first wave of BESS projects and enabling larger renewable installations for meeting the country's growing energy need," averred Anish Mandal, Partner at Deloitte India.

Besides, this scheme will not only help in developing a renewable energy storage system within India but also help in increasing the demand for renewable energy. The country has targeted to achieve 50 per cent of its energy requirements from renewable or non-fossil energy sources.