

Energy storage research and development turkey

The approach taken by Turkey's government and regulatory authorities to adapt energy market rules will create "exciting" opportunities for energy storage and renewables.

According to Can Tokcan, a managing partner at Inovat, a Turkey-headquartered energy storage EPC and solutions manufacturer, new legislation is expected to be adopted soon that will drive a major uptick in energy storage capacity.

Back in March, Energy-Storage.news heard from Tokcan that the energy storage market in Turkey was "fully open". That came after the country's Energy Market Regulatory Authority (EMRA) ruled in 2021 that energy companies should be permitted to develop energy storage facilities, whether standalone, paired with grid-tied energy generation or for integration with energy consumption - such as at large industrial facilities.

Now, energy laws are being adapted further to accommodate energy storage applications that enable the management and addition of new renewable energy capacity, while mitigating grid capacity constraints.

Energy storage is needed to smooth the generation profile of variable solar PV and wind generation, "otherwise, it's always natural gas or coal fired power plants that are actually accommodating for these fluctuations between supply and demand".

Developers, investors, or power producers will be able to deploy additional renewable energy capacity, if energy storage with the same nameplate output as the renewable energy facility's capacity in megawatts is installed.

"As an example, if say you have a storage facility of 10MW electrical on the AC side and you guarantee that you will be installing 10MW of storage, they will be increasing your capacity to 20MW. So, an additional 10MW will be added without any sort of competition for the license," Tokcan said.

Where those previous legislative changes opened up the Turkish market, the newest changes will likely lead to significant development of new renewable energy projects in 2023, Tokcan's company Inovat believes.

Instead of the government needing to invest in infrastructure to accommodate that additional capacity, it is giving that role to private companies in the form of energy storage deployments that can prevent transformers on the electrical grid from becoming overloaded.

As of July this year, Turkey had 100GW of installed power generation capacity. According to official figures, this included about 31.5GW of hydroelectric power, 25.75GW of natural gas, 20GW of coal with about 11GW

of wind and 8GW of solar PV respectively and the remainder comprising geothermal and biomass power.

The main route for adding large-scale renewable energy is through tenders for feed-in tariff (FiT) licenses, through which the government wants to add 10GW of solar and 10GW of wind over 10 years through reverse auctions in which the lowest-cost bids win.

With the country targeting net zero emissions by 2053, those new rule changes for front-of-meter energy storage with renewables could enable quicker and greater progress.

Contact us for free full report

Web: <https://www.hollanddutchtours.nl/contact-us/>

Email: energystorage2000@gmail.com

WhatsApp: 8613816583346

