

PGES Energy Bulletin

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During the CoVid19 lockdown, PGES aims to keep you up to date with energy issues.

New Power Report looked at lockdown's impact on energy demand.

CV-19 'fast-forwarding power by a decade'

Reductions in electricity use in countries that have 'locked down' society to manage the Coronavirus pandemic have "fast forwarded some power systems 10 years into the future", Fatih Birol, executive director of the International Energy Agency, said on 22 March.

Lockdown cuts consumption

Birol said that economies that have taken strong confinement measures had seen electricity demand decline by around 15%, largely as a result of factories and businesses halting operations.

The IEA's assumptions on falling demand were borne out by analysis from climate group Ember (previously Sandbag). Using data from European transmission operators' group Entso-e, weather-corrected, it

said every country in Europe saw electricity demand fall in the week to 22 March. "These are very significant falls in the context of electricity demand, where temperature-adjusted changes are normally small". Impacts were highest in Italy, Spain and France.

Ember estimated the impact in Italy at of 20% over the last two weeks and it expected more reductions with more industry and services shut this week. The figures pre-dated the UK lockdown, but recent analysis from Electrlink suggests a 15% reduction in the UK. Ember thought the experience from China indicated that the falls might be deep and long-lasting.

Managing the variability

For countries such as Spain and California, with high wind and solar generation, traditional generators are likely to close, so weather-dependent generators will represent a larger proportion of supply, Birol said. This has, "Fast forwarded some power systems 10 years into the future, suddenly giving them levels of wind and solar power that they wouldn't have had otherwise without another decade of investment in renewables."

As people are working from home, the main reductions come from closing industrial operations and centralised business. But such users are also a major source of flexibility, adjusting usage (or using onsite generation) to help balance the system. "That option is hardly open today," said Birol.

He added, "This is an important moment for our understanding of cleaner energy systems, including some of the operational challenges that policy makers and regulators need to address to ensure electricity security." Long term, "This highlights the need for policy makers to carefully assess the potential availability of flexibility resources under extreme conditions". Birol said that in time, electricity generation from renewables should not simply follow the weather, "but will have to be managed in an intelligent way in order to reduce costs and improve electricity security". PGES



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