COP31 Electrification Pledge Draws Attention to Clean Power Gap

A new International Energy Agency (IEA) report released at the United Nations General Assembly has highlighted the potential for faster global electrification, while raising questions about the need to ensure that growing electricity demand is met with cleaner power.

The IEA released its **Special Report on Global Electrification** on Wednesday after it was requested by Türkiye and Australia to inform discussions ahead of COP31. The report examines how electrification can contribute to energy security, affordability and emissions reductions.

The COP31 Presidency has set a goal of increasing electricity's share of global final energy consumption from around **23% currently to 35% by 2035**. The IEA analysis finds that fully exploiting existing cost-competitive opportunities for electrification could increase the global electrification rate to about **33%**.

Dr Nick Wayth CEng FEI, Global Director of the WRI Polsky Center for the Global Energy Transition, said recent disruptions around the Strait of Hormuz and higher energy prices had highlighted the risks associated with dependence on fossil fuels.

"People need energy that is affordable, reliable and secure. Electrification can help deliver all three," Wayth said.

He said countries could reduce their exposure to volatile fossil-fuel markets by increasing the use of electricity in transport, industry and buildings, particularly when that electricity comes from cleaner sources.

According to Wayth, electric technologies can provide services such as transportation and heating more efficiently than many fossil-fuel alternatives. He said combining electrification with cleaner power generation, efficient technologies and well-designed electricity markets could help reduce emissions while improving economic competitiveness and protecting households and businesses from fossil-fuel price shocks.

The IEA report also points to the need for electricity systems to expand and adapt as more parts of the economy become electrified. This includes increasing generation and grid capacity, while making greater use of storage, energy efficiency and flexible electricity demand.

Wayth said governments would also need appropriate planning frameworks, tariffs and market rules to encourage consumers and businesses to shift electricity use away from periods of peak demand. He emphasized that finance would be necessary to implement these measures at scale.

The debate comes as the COP31 Presidency promotes the **35-by-35 Global Electrification Pledge**, which aims to raise electricity's share of final energy consumption to 35% globally by 2035.

The pledge focuses on accelerating electrification across sectors, strengthening electricity grids and storage, and mobilizing investment, particularly in developing economies. However, its stated objective does not itself establish a specific global target for the share of electricity that must come from clean or renewable sources.

Wayth said the success of the electrification effort should ultimately be assessed not only by the growth of electricity use, but also by whether it reduces energy costs, improves access to essential services and creates economic opportunities for workers and communities.

The findings are expected to contribute to discussions on

energy systems, investment and climate action ahead of COP31, which will be held in Antalya, Türkiye, in November.