

India's transition to a high share of renewables: Next steps for policy and research

The thematic track on 'India's transition to a high share of renewables: Next step for policy and research' was held at Indian Habitat Centre, New Delhi as a part of World Sustainable Development Summit (WSDS).

The distinguished panellists were, Mr. AK Saxena, Director, Electricity & Fuels Division, TERI, Mr. Mohit Bhargava, Deputy General Manager, NTPC, Mr. David Nelson, Director Energy Finance, Climate Policy Initiative, Mr. Abhishek Ranjan, Assistant Vice President BSES, Delhi and Mr. David Palchak, Grid Systems Analysis Group, National Renewable Energy Laboratory (NREL).

The thematic session started with the introduction and welcome address by Mr. AK Saxena. He presented the rationale of the theme, an overview of the ETC India project, the interim results of the supply and demand side analysis, and the emerging findings on the share of renewables by 2030. Subsequently, the session on "Power Market Reform for Renewables Integration: What's the Agenda?" was presented by Mr. David Nelson, Director, Energy Finance, Climate Policy Initiative (CPI). "Can we integrate renewables? And if yes, at what cost? The answer is 'Yes' and the cost will come down along with the flexibility solutions by 2030", he said. He also emphasized the need of flexibility options in the grid, strengthening the transmission systems to utilize the full potential of renewables in the country. In the session on "Policy frameworks for flexibility in thermal power plants", Mr Mohit Bhargava, Deputy General Manager, NTPC, has highlighted the importance of thermal power plants as a potential flexibility option considering the limitations in demand side management and lithium reserves for grid storage. He stated, "Even though the share of coal will come down over the years, it will remain in the mix for the next 20 to 30 years". He also pointed out the need of scheduling renewable energy in order to bring down the grid uncertainty.

Mr. Abhishek Ranjan, Assistant Vice President, BSES, Delhi shared the experiences and success stories in adopting demand side management measures by DISCOMs in the session "Unlocking Demand side flexibility across all sectors: Experience, Outlook and Policy". He said that the Demand side Management is going to be a game changer in shifting the peak demand but it should catalyst through regulatory frameworks and incentives which empowers the DISCOMs. Mr. David Palchak, Grid System Analysis Group, National Renewable Energy Laboratory (NREL) presented the experiences of the study with Ministry of Power "Greening the Grid" in the session "A high Renewables System by 2030: Insights from hourly Dispatch Modelling". He highlighted that Renewable Energy (RE) is changing the power systems across the world – for instance in Gujarat, the 36% penetration of renewable energy penetrations converted to 81% instantaneous peak, which lead to a curtailment of RE.

This was further followed by a question and answer session. The concluding remarks were given by Mr A K Saxena. Mr. Thomas spencer, Associate Fellow, TERI gave the vote of thanks to the distinguished speakers for enriching the session.