



Indian Institute of Technology Kanpur

INSTITUTE LECTURE SERIES

April 07 (Thursday), 2022 | 5.30 pm |

Speaker: Prof. Rangan Banerjee

India's Energy Transition: Challenges and Opportunities



About the Talk

India's energy supply has been predominantly based on fossil fuel with a strong dependence on coal. Over the last few decades a significant progress has been made in expanding our energy system including providing access to electricity to almost all households and rapidly spreading the usage of LPG for cooking. As a part of our Paris commitments we have agreed to reduce our emission intensity and expand our non-fossil power generation installed capacity. We have seen rapid investments in solar and wind. In COP26 our Prime Minister has set a 500 GW non fossil target.

We are at a cusp of a transition from a fossil based energy system to a predominantly renewable based system in the future. What will this transition entail? Will it result in disruptions? How will the nature of our energy systems change? What will be the need for storage? What is the role for advanced materials and new energy technologies? In this talk the speaker will present some of the trends, discuss some possibilities and illustrate the challenges and opportunities.

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 The talk will be held online

Webinar link will be shared in a separate mail.

About the Speaker

Rangan Banerjee, currently the Director of IIT Delhi, is a Professor in the Dept Of Energy Science and Engineering at IIT Delhi. Till February 2022 he was the Forbes Marshall Chair Professor in the Dept. of Energy Science and Engineering at IIT Bombay. His areas of interest include energy management, modelling of energy systems, energy planning and policy, hydrogen energy and fuel cells. Professor Banerjee has been involved in setting up a Megawattscale Solar Thermal Power Testing, Simulation, Research Facility sponsored by the Ministry of New and Renewable Energy. He is the faculty Advisor for Team Shunya - India's first student team in Solar Decathlon Europe, China and US finals. He has been involved in advising the city, state regulatory commission and energy agency, Niti Aayog, Planning commission MNRE on energy issues. Professor Banerjee is an Adjunct Professor (Honorary) in the Department of Engineering & Public Policy, Carnegie Mellon University and is a Fellow of the Indian National Academy of Engineering.

All are cordially invited to attend

Chandrakanta Kesavan Center for Energy Policy and Climate Solutions
Department of Sustainable Energy Engineering

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Office of Dean Research & Development