National Institute of Technology Rourkela

Progress Seminar

Seminar Title	: Asset Pricing and Spillover Dynamics: A Study of Renewable Energy Stocks in India
Speaker	: Praveen Kumar Sahoo (Rollno : 522sm2015)
Supervisor	: Dr. Dushyant Ashok Mahadik
Venue	: SM302
Date and Time	: 16 Jan 2025 (15:30)
Abstract	: Given the growing seriousness of climate change, sustainable development, and rising energy security issues, the international community is redirecting its attention from carbon-based fossil fuels to Renewable Energy sources. In light of increasing global efforts to mitigate climate change, the role of renewable energy in the financial markets has gained prominence. The renewable energy market has grown substantially over the previous decade, offering a significant investment opportunity. However, the securities market is vulnerable to substantial economic and geopolitical developments. Different factors contribute to the generation of returns and fluctuation in renewable energy stocks meanwhile, risk-return behaviour also varies in different market conditions. The proposed research aims to determine the key factors influencing the pricing of RE stocks, compare their risk-adjusted returns with other asset classes, and investigate the volatility spillovers between RE and global markets under different economic conditions. The ongoing investigation discovered that oil price change and return from technology equity index are positively associated with return from RE stocks. Secondly, RE stocks yield more returns than the benchmark equity index and the traditional energy index during the highly volatile periods in the Indian capital market. Understanding these dynamics is crucial for identifying the drivers of investment performance in the renewable energy sector and how they differ from traditional assets. By integrating theories of climate finance, financial contagion, efficient market hypothesis, and modern portfolio theory, the study aims to address the above objectives. Through the application of econometric modelling and using time series analysis, the study expects to provide empirical evidence on the intricacies of pricing of renewable energy equities. The study will also evaluate hedging strategies and portfolio diversification techniques to provide insights for investors seeking to minimize risks using this growing but volatile asset class. These findings are expected to offer valuable guidance for policymakers and investors looking to promote sustainable finance in emerging economies like India.