



Workshop on Performance and Potential of Wind Energy Systems in India



**Divecha Centre for Climate Change, Indian Institute of Science,
Bangalore - 560012, India**

Date: August 22 and 23, 2017

Day 1: Tuesday, August 22

Inaugural Session

0900-0930 Hrs Registration/Tea

0930-0940 Hrs Welcome

Prof. S.K. Satheesh

Divecha Centre for Climate Change

0940-0950 Hrs Introduction to the Workshop

Dr. V. Rao Kotamarthi

Argonne National Laboratory, U.S.

0950-1005 Hrs **Photo session/ Tea Break**

Session I

1005-1030 Hrs Policy Brief on Wind in India

Mr. Jeevan Kumar Jethani

Ministry of New and Renewable Energy

1030-1055 Hrs Offshore Wind Development in India- Feasibility Studies

Dr. M.V. Ramana Murthy

National Institute of Ocean Technology, Chennai

1055-1120 Hrs Offshore Wind Power Development in India - Quo Vadis?

Mr. Harsh Pandit and Mr. Bimlesh Shah

Suzlon Energy (Offshore), Ahmedabad

Session II

1120-1145 Hrs Grid Integration of Renewables

Smt. Jane Jose

Southern Regional Load Dispatch Centre



Image : Windmills near Chitradurga, Karnataka, India.
Image Source : MNRE and Manohar Chhapolia



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- 1145-1210 Hrs "Challenges in Managing Grid with More RE Penetration"
a case study of Karnataka
Mr. Chandrashekharaiiah S.B.
State Load Dispatch Centre, Karnataka
- 1210-1235 Hrs Wind Energy Integration in Indian Grid-challenges and Potential Opportunities
Dr. Zakir Rather
Indian Institute of Technology, Bombay
- 1235-1300 Hrs Performance of Wind Power Plants in India-plant Owner's Perspective
Mr. Vitor Antao
Orange Renewable
- 1300-1400 Hrs **Lunch**
- Session III**
1400-1500 Hrs Panel Discussion : Wind Potential, Performance and Policy
Mr. Jeevan Kumar Jethani, Ministry of New and Renewable Energy
Dr. Jim Wilczak, National Oceanic and Atmospheric Administration
Mr. Chandrashekharaiiah S.B. State Load Dispatch Centre, Karnataka
Dr. M.V. Ramana Murthy, National Institute of Ocean Technology
Mr. Bimlesh Shah, Suzlon Energy
Mr. Vitor Antao, Orange Renewable
Dr. Zakir Rather, IIT, Bombay (Moderator)
- 1500-1530 Hrs **Tea Break**
- Session IV**
1530-1555 Hrs Forecast Products for Renewable Energy Applications
Dr. Raghavendra Ashrit,
National Centre for Medium Range Weather Forecasting, Noida
- 1555-1620 Hrs Wind Energy Forecast
Mr. Amresh Khosla
Manikaran Power Limited



Image : Windmills near Chitradurga, Karnataka, India.
Image Source : MNRE and Manohar Chhapolia



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1620-1700 Hrs

Panel Discussion : Wind Forecasting

Dr. Sue Haupt, University of Colorado, Boulder

Dr. P. Mukhopadhyay, Indian Institute of Tropical Meteorology

Dr. Raghavendra Ashrit,

National Centre for Medium Range Weather Forecasting

Mr. Krishna Kumar Swaminathan, GE Wind

Dr. V. Rao Kotamarthi, Argonne National Laboratory (Moderator)

1900 Hrs

Dinner

Day 2: Wednesday, August 23

Session V

0930-0955 Hrs

Catching the wind: pathways to realising India's wind targets

Mr. Neeraj Kuldeep

Council On Energy, Environment and Water, Delhi

0955-1020 Hrs

Short Range Wind Power Forecasting

Dr. Sue Haupt

University of Colorado, Boulder

1020-1045 Hrs

Forecasting and Resource Characterization: Short-term Uncertainty and Inter-Annual Variations

Dr. V. Rao Kotamarthi

Argonne National Laboratory, U.S.

1045-1100 Hrs

Tea Break

Session VI

1100-1125 Hrs

Wind Forecasting Research at NOAA :

Results from Recent On-shore and Off-shore Field Programs

Dr. Jim Wilczak

National Oceanic and Atmospheric Administration, Boulder, U.S.

1125-1150 Hrs

Recent initiatives of high resolution forecasting wind and solar energy generation

Dr. P. Mukhopadhyay

Indian Institute of Tropical Meteorology, Pune



Image : Windmills near Chitradurga, Karnataka, India.
Image Source : MNRE and Manohar Chhapolia



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1150-1200 Hrs

Session Break

Session VII

1200-1225 Hrs

Wind Potential and Offshore wind

Mr. J. Bastin

National Institute of Wind Energy

1225-1250 Hrs

Grid integration of vRE under Green Energy Corridors initiative in India

Dr. Indradip Mitra

Indo-German Energy Program

1250-1400 Hrs

Lunch

Session VIII

1400-1425 Hrs

Wind Forecasting Digital Twin

Mr. Krishna Kumar Swaminathan

GE Global Research

1425-1450 Hrs

Impact of spatial variation in wind generation of Karnataka

Ms. Anasuya Gangopadhyay

Divecha Centre for Climate Change

1450-1530 Hrs

Concluding Session



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Image Source : MNRE and Manohar Chhapolia