

FINAL CONFERENCE PRELIMINARY PROGRAMME

Next-generation Forecasting of Renewable Generation for Large-scale Integration in Energy Systems and Markets

14 April 2023 Paris (in person)

General Theme

Smart4RES is a multi-disciplinary Horizon 2020 research project (11/2019-4/2023) that aims to significantly improve short-term forecasting of renewable energy sources (RES) production. It develops research on the whole model and value chain of RES forecasting with the objective to improve forecast accuracy and increase the resilience, robustness and simplicity of the model chain. The focus was on maximizing the value that can be extracted from available data and from the use of forecasts in applications for power system management and RES markets trading. This final conference will present in detail the results obtained as well as future R&D directions for RES forecasting. It targets in particular academics and industrials that deal with RES integration challenges in future energy systems.

Topics

- Weather modelling adapted to the energy sector
- Advances in RES forecasting
- Collaborative forecasting & data markets
- Optimal use of forecasts for power systems management & markets
- Challenges and R&D priorities for the future

Registration

The event is free of charge but registration is mandatory. Places are limited, please register before 05th April 2023

REGISTER HERE

Sponsors





Preliminary agenda

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08:45-9:15	Registration and welcome coffee
09:15 -10:00	Session 1: General overview
	 Welcoming words, Y. Vimont (Director of Research of Mines Paris and Director of Carnot M.I.N.E.S)
	 Keynote speech 'EU's research and innovation priorities on renewable
	energy', Matthjis Soede (DG Research and Innovation, European Commission)
	• Evolution of the state of the art and The Smart4RES project in a nutshell, G. Kariniotakis (MINES Paris)
10:00-11:00	Session 2: Advances in weather modelling
	RES-dedicated weather forecasting models, Q. Libois (Météo France)
	 High-resolution weather models - Large Eddy Simulation (LES): the future R. Verzijlbergh (Whiffle)
	Multi-source observations to improve solar forecasting, J. Lecaza (DLR)
11:00-11:25	Coffee break
11:25-12:25	Session 3: Next-generation RES forecasting
	 Improved RES models in particular weather conditions, M. Lange (EMSYS)
	 Data driven methods for minute-scale wind power and structural load forecasts using Lidars, T. Göçmen (DTU)
	 Development of a seamless RES forecasting approach, D. van der Meer (MINES Paris)
12:25-13:30	Lunch break
13:30-15:20	Session 4: Forecasting services and applications
	 Towards data markets, P. Pinson (DTU/ Imperial College of London)
	 Privacy-preserving data-sharing for energy forecasting, C. Gonçalves (INESC TEC)
	Uncertainty-aware booking of flexibilities in electrical grids, R. Bessa (INESC TEC)
	 Optimisation of operation and security assessment of isolated power systems with high RES penetration, D. Lagos (NTUA)
	 Trading strategies for RES production, S. Camal (MINES Paris)
	 Resilient energy forecasting and prescriptive analytics, A. Stratigakos (MINES Paris)
15:20-15:35	Coffee break
15:35-16:30	PANEL – Future challenges in RES forecasting - Conclusions
16:30	End of the conference



Consortium partners





Venue details

The event will take place on 14th April 2023 at COMET Meetings-BOURSE, 35 rue Saint-Marc, 75002 Paris

Access plan



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More info at <u>smart4res.eu</u> Follow us on <u>Linkedin</u>