



## **Subject Expert Biographies – Roundtable Discussions**

### Operations and Maintenance

#### **Mark Dunk, Energy Networks Association**

I am a multi-disciplinary Engineer with 25 years' experience, the last 18 in the Electricity distribution industry. My current role is the Head of Engineering and Resilience for Energy Networks Association (ENA), who represent the UK and Ireland gas electricity distribution and transmission network operators. At ENA I am responsible for the electricity engineering standards, operational telecommunications, plant and equipment assessments and, most relevantly, industry emergency response planning and climate change adaptation; including winter preparedness planning, adaptation reporting, resilience metrics (early days) and physical adaptation and protection of the electricity network assets.

#### **Emma Patmore, Lake Street Consulting**

Emma Patmore has worked at Lake Street Consulting Ltd since the summer of 2021. Lake Street is a company which aims to help clients (including some in the renewable energy industry) interpret weather forecasts and their associated uncertainties, to allow them to work with the weather and improve their business. Prior to joining Lake Street, Emma completed her Master's degree at the University of Reading in Applied Meteorology and has just started a part-time PhD.

Emma is a member of the Royal Meteorological Society, based near Oxford.

#### **Dr John Zack, International Energy Agency Taskforce 51**

Dr. John W Zack is the President, Chief Scientist and co-founder of MESO, Inc., a 38-year-old small business that specializes in the development and application of physics-based and statistical geophysical models in a wide range of industries.

He was one of the founding partners of AWS Truepower, a global leader in renewable energy consulting services, and served on its Board of Directors until its acquisition by UL, Inc in 2016. He also was one of the founding partners of Meteosim, SL, a meteorological services company based in Barcelona, Spain. He currently serves on its Board of Directors.

Dr. Zack is currently the co-chair of the American Meteorological Society's Renewable Energy Committee and a task leader in IEA Wind TCP Task 51 (Forecasting for the Weather-driven Energy System). He earned a BS degree in meteorology and oceanography from New York University and a Ph.D. in atmospheric sciences from Cornell University.

### Trading and Medium-term Planning

#### **Philip Bett, UK Met Office**

Dr Philip Bett is a senior climate scientist in the Monthly to Decadal Predictability & Impacts team of the Met Office Hadley Centre. His research focuses on developing new ways of using seasonal forecasts, often with applications in the energy sectors in the UK, Europe and China. This involves understanding the capabilities and limitations of seasonal forecasting systems, as well as the requirements of potential forecast users, and ensuring that these are communicated well in both directions. He has also worked on climate change projects such as the UK's national climate projections UKCP, and projects assessing historical climate variability.



**Christian Gramms, Karlsruhe Institute of Technology, MeteoSwiss**

Christian Grams is an atmospheric scientist with expertise in large-scale dynamics, weather regimes, and their role in surface weather. He received a PhD in Meteorology from the Karlsruhe Institute of Technology (KIT), Germany in 2011 for his thesis on the remote impact of tropical cyclones on extratropical weather. He then joined ETH Zurich, Switzerland. Working initially on extratropical weather systems and extreme weather, his research focus shifted towards weather regimes in the Atlantic-European region. In 2017 Christian established the “Large-scale dynamics and Predictability” Group at KIT (#LSDPatKIT) pioneering a process-oriented understanding of sub-seasonal prediction and the use of weather regimes in the context of energy meteorology. Thereby he worked closely with ECMWF as one of their fellows. Recently, Christian joined MeteoSwiss as Head of the Team “Climate Basics”.

**David Martin, Department for Energy Security and Net Zero**

Not submitted at time of print.

**Frederic Vitart, European Centre for Medium Range Weather Forecast**

Frédéric Vitart is a Senior Research Scientist at the European Centre for Medium-range Weather Forecasts (ECMWF). After graduating with a PhD in atmospheric and oceanic sciences from Princeton University, he joined ECMWF in 1998, where he leads the research on ensemble sub-seasonal forecasts. He has over 20 years of experience in sub-seasonal and seasonal prediction, couple ocean-atmosphere modeling, tropical and mid-latitude meteorology, tropical cyclone prediction. He is also co-chair of a WMO project on sub-seasonal to seasonal prediction (S2S).

Long-term Planning, Climate Change Adaptation

**Hannah Bloomfield, University of Newcastle**

Hannah is a Newcastle University Academic Track fellow in climate resilient energy systems. She gained her PhD from the University of Reading in 2017 and has since worked on five climate services projects with relevance to the energy, transport and finance sectors. Hannah specialises in modelling UK and European electricity demand and renewable generation. She has also worked on developing these tools for Mexico, India and multiple regions of Africa. A key outcome of her work has been to improve the accessibility of large meteorological datasets to non-specialists.

**David Brayshaw, University of Reading**

[David Brayshaw](#) is the Professor of Climate Science and [Energy-Meteorology](#), and a joint Head of the [Department of Meteorology](#) at the University of Reading. His interests span fundamental and applied climate science with a focus on applications in the energy sector. He has led research contributions to two prototype “climate services for energy” ([ECEM](#) & [S2S4E](#)) and he works closely with many different industry partners. Brayshaw founded and chairs the interdisciplinary [“Next Generation Challenges in Energy-Climate Modelling” workshop](#) series, and delivers academic and professional courses on [“Climate Impact Modelling”](#). He is a Fellow of the Royal Meteorological Society and co-chairs the “Energy” special interest group.



**Chiara Cagnazzo, Copernicus Climate Change Service**

Chiara Cagnazzo currently serves as the Sectoral Information System Manager at Copernicus Climate Change Service (C3S) ECMWF. In this role, she focuses on translating diverse user requirements from various sectors into practical climate-derived information. In her earlier scientific career, her research was primarily centred on comprehending the impact of atmospheric variability and its representation in climate models, particularly in relation to climate predictability across sub-seasonal to decadal timeframes and long-term projections.

**Dafni Sifnioti, EDF**

Dafni is the Senior Manager of the Natural Hazards and Environment Research and Development team in EDF UK.

She is responsible for key assessments for EDF on external hazards and climate change. Over the last 3 years, Dafni has grown the team's capabilities and opportunities relevant to nuclear (AMRs, current, new build fleet and decommissioned) and renewables. Dafni's background is on coastal oceanography and marine climatology, previously working as a senior coastal scientist for CEFAS and as a project manager for coastal monitoring programmes (in the UK and Greece). Dafni is a Fellow and a Chartered Meteorologist of the Royal Meteorological Society and the industry co-chair in RMetS's SIG on Energy, with 10+years of experience in the field.