



OPEN EVENT - 2<sup>nd</sup> JUNE - Evening - Alice Perry Engineering Building

## Smart Grid Technology underpinning Sustainable and Secure Energy in Europe

Sponsored by: Engineers Ireland (EI) - CIBSE Ireland - ASHRAE Ireland

According to the European Commission (EC-Directorate for Energy) a smart grid is the electricity network that integrates the behavior and actions of all users connected to it (generators, consumers and those that do both), in order to ensure economically efficient, sustainable power system with low losses and high levels of quality and security of supply and safety. As smart grids allow the integration of decentralized renewable energy resources as well as electric vehicle recharging services, they are essential to ensure energy security, economic development and climate change mitigation. The integration of energy production and consumption component through the smart grid concept enables increased demand response and energy efficiency.

16:00 h - Opening Remarks	<b>Dr. Marcus M. Keane</b> Assistant Professor - NUIG
16:15 h - Smart Grid Electronics HIL Validation and Certification for Large Infrastructures	<b>Dr. Johannes Stöck</b> Austrian Institute of Technology
16:35 h - Semantic Interoperability in Smart Grid Scenarios	<b>Dr. Valentina Janev</b> Institut Mihailo Pupin - Serbia
16:55 - Cybersecurity in Infrastructures and Smart Grid	<b>Dr. Michael Schukat</b> Associate Professor - Computer Science - NUIG
17:15 - Coffee Break - Alice Perry Ground Floor Atrium	
17:30 - Role of Hydrogen Storage GENNCOMM project	<b>Mr. Tadgh Cummins</b> Researcher - Energy Systems Engineering - NUIG
17:50 - Advances on Storage Technologies STEPS project	<b>Dr. Maeve Duffy</b> Assistant Professor - Electronic Engineering - NUIG
18:10 - Impact of Energy Crisis and on NUIG Sustainability Strategy	<b>Mr. John Gill</b> Chief Operating Officer - NUIG
18:30 - Smart Grid Roadmap for Ireland	<b>Mr. Declan Meally</b> Director of Business, Public Sector and Transport at Sustainable Energy Authority of Ireland (SEAI)
18:50 - Panel Discussion	Chair: Marcus M. Keane - NUIG
19:30 - Closure - Refreshments provided - Alice Perry Building - Atrium	



This event brings the latest experience from different perspectives on the developments needed for the efficient implementation of the smart grid. International and Irish experts will illustrate how diverse enabling technologies and resources can facilitate smart grid adoption, such as Hardware in the Loop Validation and Certification for Large Infrastructures, Semantic Interoperability and the Cybersecurity requirements. Secondly, NUIG scholars will present the latest advances on EU funded projects Gencomm and STEPS regarding hydrogen energy and storage technologies, key to ensure effective renewable energy generation and orchestration. Lastly, public sector (NUIG) and policy roadmap (SEAI) are brought to the discussion given the impact of the current energy crisis and the regulatory challenges ahead.

A final panel discussion moderated by Dr. Marcus M. Keane will spark conversation with the speakers bringing different insights and perspectives to shed light into the opportunities the deployment of the smart grid brings to the EU and Irish sustainable and secure energy supply.

ONLINE - <https://meet.goto.com/467690293>