

Innovative Solutions for Expanding and Optimizing District Heating Infrastructures



Exploring Cutting-Edge Tools and Real-World Applications in sector-coupled District Heating at Envipark

Dr. Nicola Zaccarelli



Dr. Nicola Zaccarelli obtained a degree in Environmental Science from the University of Parma (Italy) and a Ph.D. in Fundamental Ecology from the University of Salento (Italy). Before joining encoord GmbH, Dr. Zaccarelli worked as Adjoint Professor of Numerical Ecology and Geographic Information Systems at the University of Salento. He joined the Joint Research Centre of the European Commission in the Netherlands working on security of gas supply issues, risk assessments and hydraulic modelling of gas infrastructures. At encoord GmbH, Dr. Zaccarelli covers the role of lead support for gas modelling and planning, GIS and statistical analysis, and hydraulic modeling. Dr. Zaccarelli co-authored 20 scientific papers and 4 books.

Jorge Leão



Jorge Leão is a Civil Engineering graduate from the University of Florida (USA) and holds a Master's degree in Advanced Building Construction from the Universitat Politècnica de Catalunya (Spain). Since 2021, he has been an integral part of IDP, contributing his expertise as an I+D New Business Technician. His focus lies in spearheading the development of the DTwin BIM+GIS platform across various European Horizon (H2020) and national projects.

Agenda

09:15 - 09:30

Registration

09:30 - 09:45

Introduction of HYPERGRYD project
(David Verez, HYPERGRYD Coordinator, ARC BCN)

09:45 - 10:15

Presentation of the HYPERGRYD Platform
(Jorge Leao, IDP)

- Introducing platform
- Showing main functionalities/ benefits
- HyperGryd tools that feed into the platform to show how the integration works
- Case study
- 5' Q&A (but open to questions during the presentation, also in the chat of the webinar platform)

10:15 - 11:00

Presentation of SAInt tool
(Nicola Zaccarelli, Encoord)

- Introducing the company and role of encoord within HG project
- Introduce SAInt as integrated platform for energy planning
- Main functionalities
- Example linked to HG with thermal network
- If data available, example with ENVI electric network – to show functionalities for this grid
- Example of co-simulation (coupling thermal + electric network)
- 5' Q&A (but open to questions during the presentation, also in the chat of the webinar platform)

11:00 - 11:15

Wrap up
(Marco Calderoni, R2M)

11:15 - 11:30

Coffee break

11:30 - 12:30

Envipark tour

