Curriculum Vitae_ Francesco Reda

PERSONAL DETAILS

Full name Francesco Reda

Date and place of birth

Address

Email

Current Occupation from 10/2021

Research Manager / Principal Scientist Hydrogen and Industrial Energy business area.
VTT Oy (Technical Research Centre of Finland)

Education and tittles

2013 **Doctor of Science**
Department of Mechanical Engineering UNICAL (University of Calabria), Italy

2010 **Master of Energy Engineering**
UNICAL (University of Calabria), Italy

2007 **Bachelor of Mechanical Engineering**
UNICAL (University of Calabria), Italy

Work Experiences

11/2013 – 04/ 2021 **Senior Scientist**
VTT Oy (Technical Research Centre of Finland)

04/2021 – 10/ 2021 **Principal Scientist**
VTT Oy (Technical Research Centre of Finland)

09/2016 –so far **Member**
European Energy Research Alliance Joint Programme

09/2016 –so far **Member**
A.SPIRE Association.Sustainable process industry through resource and energy efficiency

10/2021 – so far **Executive Committee Member, Finland Representative**
Technology Collaboration Programme on Greenhouse Gas R&D of International Energy Agency (IEAGHG)

Visiting fellowships and internships

07/2011 - 02/2012 **Visiting Researcher,** BERC, Building Energy Research Centre, Tsinghua University; Beijing, China;

03/2013 - 10/2013 **Visiting Researcher,** VTT (Technical Research Centre of Finland), Espoo, Finland;

Main grants and AWARDS

Involved in more than 20 R&D projects in the capacity of project coordinator, scientist with a key contribution to establishing consortia, formulating conceptual frameworks, and supporting the preparation of the application. Below the most recent grants:

2023 CLEANHYPRO, Open Innovation Test Bed (OITB) in the field of hydrogen funded by the European Commission under Horizon Europe programme. The initiative will support companies in their development, characterization, modelling, regulation and business model activities. Grant agreement ID:101091777. Leading VTT preparation team. (499 175 € VTT Grant / Total consortium Grant 13,77 M€)

2023 BalticSeaH2, First, large scale interregional hydrogen valley in Europe. BalticSeaH2 builds a main cross-border Hydrogen Valley between Finland and Estonia and connects it with local valleys in different countries surrounding the Baltic Sea. Grant agreement ID: 101112047 Leading VTT preparation team, WP leader Vision and Social Transformation and engagement. VTT Project Manager. (2 533 125 € VTT Grant / Total consortium Budget € 33 235 406,25)

2023 AMON, Development of a next generation AMmONia FC system, the project develops an innovative system to convert ammonia into electric power using a solid oxide fuel cell. The project's key focus is on designing the critical components, such as the fuel cell, ammonia cracker, ammonia burner, and anode gas recirculation. Additionally, the project will engineer the balance of plant, validate compliance with ammonia use, and manufacture an overall ammonia fuel cell system. VTT strategic support (599 243,75 € VTT Grant / Total consortium Budget 4M€ about)

2023 OUTFOX, Optimized Up-scaled Technology for next-generation solid OXide electrolysis, the project paves the way to solid oxide electrolysers for industrial-scale systems that cost-effectively produce green H2 and are compatible with mass manufacturing lines. Innovations will be tested in two campaigns with two different cell stack configurations over a total of more

than 4 000 hours. VTT strategic support (426 993,00 € VTT Grant / Total consortium Budget 3M€ about)

2024 H2MARINE , Hydrogen PEM fuel cell stack for marine applications, the project designs, builds, tests and validates two (2) PEM stacks generating 250 - 300 kW electric power designed for marine applications. The H2MARINE project takes a top-down approach, building on a proof of concept of two PEM stacks that are developed in the EU and Switzerland and identifies the requirements for the tests and conditions as well as load curves that the FC stacks will have to be tested against with the integrated knowledge of a major ship building industry (ThyssenKrupp Marine Systems) and ship owners (Cleos) representing Gaslog, Drylog Ltd. And Olympic Shipping (totaling more than 100 large ships).VTT strategic support (629 256,50 € VTT Grant / Total consortium Budget 7,5M€ about)

Language skills

Native	Italian
Other languages	English (fluent)

Leadership and experience

Since - 2016 **Business and joint venture developer, developing network of contacts for attracting new customers, scouting for research new market opportunities, forecasting revenue, making sales projections and oversee internal growth projects**

Since - 2018 **Coordinator/ Technical-scientific responsible of R&D project, leading multidisciplinary research team for developing clean tech solutions for buildings, districts and cities.**

Since - 2019 **Evaluator of R&D projects for EU Commission and national R&D programme.**

Since - 2020 **Leading business area by setting strategic growth goals, planning and supervising research projects, monitoring goal, revenue and project progress, supporting business are members, executing new methodologies, and interacting with executive management.**

Since 2014 Supervisor of over 9 MSc theses and 2 PhD thesis, mentoring younger and experienced researchers

Publications

39 peer-reviewed scientific publications with 672 citations (scopus) and 2 monography. **Hirsch-index** according to **Scopus**: 15, **Google Scholar (i10-index)**: 23.