

PERSONAL INFORMATION

Pierluigi Leone



- 📍 Via Borgone 50, Torino, 10139, Torino
- ☎ +390110904422 📠 +393925440939
- ✉ [pierluigi.leone@polito.it](mailto:pierluigi.leone@polito.it)
- 🌐 [https://www.denerg.polito.it/personale/scheda/\(nominativo\)/pierluigi.leone](https://www.denerg.polito.it/personale/scheda/(nominativo)/pierluigi.leone)
- 🗨 [Replace with type of IM service](#) +393925440939

Sex Male | Date of birth 22/07/1978 | Nationality Italian

Pierluigi LEONE was born in Syracuse on 22 July 1978 and is now resident in Turin. MSc in Mechanical Engineering and PhD in Energetics at Politecnico di Torino, Pierluigi Leone is now full professor at the Department of Energy of the same institution. He is part of the staff of the Interdepartmental Energy Center Lab.

He teaches in bachelor, master and PhD programs of Politecnico di Torino also promoting advanced learning approaches. Indeed, he is coordinator of two MOOC series dealing with sustainable energy and industry (<https://www.pok.polimi.it>). He was TEDx speaker in 2016 with a speech about energy transition.

He is expert in energy, working in the field of innovation in the gas sector and final energy use in hard-to-abate sectors in industry and transport (road and maritime). He does research in the field of renewable technology integration into the energy system that include major studies on infrastructure innovation, integration into final uses and study of regulatory and market barriers. Key research topics involve sector coupling of power and gas networks, hydrogen and renewable gases (biomethane) transport and final uses, decarbonization of industrial production. He is also very active in energy planning for energy access coordinating several initiatives with a focus on Africa.

He has been involved in the 'Uzbekistan Project' initiative since 2012 as a teacher and since 2021 is Operating Project Manager at the Turin Polytechnic University in Tashkent.

He has +100 publications in Scopus with more than 2,200 citations and H-Index 32.

WORK EXPERIENCE

29/12/2019 - Ongoing

**Full Professor – Department of Energy**

Politecnico di Torino, Torino, Corso Duca degli Abruzzi 24, [www.polito.it](http://www.polito.it)

- Teaching assignments, AA 2021-2022
  - Thermal Design and Optimization, Master Science Degree in Energy Engineering
  - Energy and Sustainability, Bachelor's Degree
  - Global Energy Trends and Outlook, Ph.D. in Energy
  - Fundamentals of engineering thermodynamic and heat transfer, Turin Polytechnic University in Tashkent
  - Energy Networks, Master Science Degree in Energy Engineering
  - Energy Transition and Society, Bachelor's Degree, Great Challenges Initiative
- Management assignments
  - Coordinator of internships for the Degree in Energy Engineering since 2017
  - Operating project manager, Turin Polytechnic University in Tashkent since 2021

EDUCATION AND TRAINING

01/07/2008

**PhD in Energetics**

Politecnico di Torino

- Hydrogen and Fuel Cells  
Marie Curie Early Stage Training
- IEn Warsaw
- TU Munich
- TU Delft

22/07/2004 **M.Sc. in Mechanical Engineering**

Politecnico di Torino

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	INDEPENDENT USER	INDEPENDENT USER	INDEPENDENT USER	INDEPENDENT USER	INDEPENDENT USER
B2 First   Cambridge English					

ADDITIONAL INFORMATION

## Publications

**Last three years publications****2019**

- Masciandaro, S; Torrell, M; Leone, P; Tarancón, A; Three-dimensional printed yttria-stabilized zirconia self-supported electrolytes for solid oxide fuel cell applications, *Journal of the European Ceramic Society*, 39,1,9-16, 2019.
- Cavana, Marco; Leone, Pierluigi; Biogas blending into the gas grid of a small municipality for the decarbonization of the heating sector, *Biomass and Bioenergy*, 127, 105295, 2019.
- Mazza, Andrea; Cavana, Marco; Medina, Edgardo Luis Mercado; Chicco, Gianfranco; Leone, Pierluigi; Creation of Representative Gas Distribution Networks for Multi-vector Energy System Studies, 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (EEEIC/I&CPS Europe),1-6,2019, IEEE.

**2020**

- Vaccariello, Enrico; Leone, Pierluigi; Stievano, Igor S; Generation of synthetic models of gas distribution networks with spatial and multi-level features, *International Journal of Electrical Power & Energy Systems*,117, 105656, 2020.
- Ugwoke, B; Gershon, O; Becchio, C; Corgnati, SP; Leone, P; A review of Nigerian energy access studies: The story told so far, *Renewable and Sustainable Energy Reviews*,120,109646, 2020.
- Vaccariello, Enrico; Leone, Pierluigi; Canavero, Flavio G; Stievano, Igor S; Topological modelling of gas networks for co-simulation applications in multi-energy systems, *Mathematics and Computers in Simulation*,183, 244-253, 2020.
- Rozzi, Elena; Minuto, Francesco Demetrio; Lanzini, Andrea; Leone, Pierluigi; Green synthetic fuels: renewable routes for the conversion of non-fossil feedstocks into gaseous fuels and their end uses, *Energies*,13, 2, 420, 2021.
- Bompard, E; Botterud, A; Corgnati, S; Huang, T; Jafari, M; Leone, P; Mauro, S; Montesano, G; Papa, C; Profumo, F; An electricity triangle for energy transition: Application to Italy, *Applied Energy*, 277, , 2020.
- Ugwoke, Blessing; Adeleke, Adedoyin; Corgnati, Stefano P; Pearce, Joshua M; Leone, Pierluigi; Decentralized renewable hybrid mini-grids for rural communities: Culmination of the IREP framework and scale up to urban communities, *Sustainability*,12,18, 7411, 2020.

**2021**

- Ugwoke, B; Corgnati, SP; Leone, P; Borchiellini, R; Pearce, JM; Low emissions analysis platform model for renewable energy: Community-scale case studies in Nigeria, *Sustainable Cities and Society*, 67, 2021.
- Cavana, Marco; Mazza, Andrea; Chicco, Gianfranco; Leone, Pierluigi; Electrical and gas networks coupling through hydrogen blending under increasing distributed photovoltaic generation, *Applied Energy* , 290, 2021.
- Ugwoke, Blessing; Sulemanu, S; Corgnati, SP; Leone, P; Pearce, JM; Demonstration of the integrated rural energy planning framework for sustainable energy development in low-income countries: Case studies of rural communities in Nigeria, *Renewable and Sustainable Energy Reviews*,144, 2021.
- Ugwoke, B; Sulemanu, S; Corgnati, S; Leone, P; Pearce, JM; The Integrated Rural Renewable and Sustainable Energy Planning Framework for Low-Income Countries, 2020, *Renewable and Sustainable Energy Reviews*.
- Cavana, Marco; Leone, Pierluigi; Solar hydrogen from North Africa to Europe through greenstream: A simulation-based analysis of blending scenarios and production plant sizing, *International Journal of Hydrogen Energy*, 2021.
- Vaccariello, Enrico; Trincherò, Riccardo; Leone, Pierluigi; Stievano, Igor S; Synthetic gas networks for the statistical assessment of low-carbon distribution systems, *Energies*, 2021.
- Vaccariello, Enrico; Trincherò, Riccardo; Stievano, Igor S; Leone, Pierluigi; A Statistical Assessment of Blending Hydrogen into Gas Networks, *Energies*,14,16,5055, 2021.

## Projects

**International project (on-going)**

- Coordination of the European Erasmus plus project, 'Enbrain' - Libya. Master Program in Renewable Energy
- Coordination of the European Erasmus plus project, 'Neprev' - Tunisia. Master Program in Industrial Manufacturing Innovation and Decarbonization.
- Project coordination funded by AICS (Italian Development Cooperation Agency) and promoted during the G7 in Taormina, 'African Innovation Leaders', - Nigeria, Niger, Tunisia, Mozambique, Kenya and Ethiopia. Capacity building for Industry 4.0 in Africa.
- Local coordination of the European Erasmus plus project, 'Heresas', - South Africa. Capacity building for Industrial Innovation and Decarbonization.

**Coordination of research and commercial projects (on-going)**

- Coordination of a pilot project on green hydrogen in Sardinia for use in public transport and industrial heat supply – Italgas spa
- Coordination of a pilot project on CCU system in hard-to-abate industrial sectors for production of LNG and use as transportation fuel in heavy duty road and maritime transport – Italgas spa
- Coordination of a project for the decarbonization of industry – Engie Italia B2B
- Coordination of a mini-grid project in Nigeria - Eni
- Local coordination of the project on energy planning for industrial production decarbonization - Enea / Mite

**Science diplomacy**

- Scientific coordination and preparation of the position paper of the Infrastructure Consortium for Africa - initiatives G7 Italy (2017) and African Development Bank, Ministry of Foreign Affairs and International Cooperation, 2017.
- Participation in the Summit of Heads of State High Level Forum Europe-Africa, Vienna 2018. Scientific delegation in support of the Italian Minister.

**Other international experience**

- Mission as an expert on behalf of the Italian Development Cooperation Agency in Vietnam, 2017
- Lecturer at the United Nations Economic Commission for Africa in Addis Ababa for training activities on renewable sources with a focus on the Horn of Africa
- Mission on behalf of the Community of Sant'Egidio as part of the Bukavu-Goma green energy project in the Democratic Republic of Congo funded by the Ministry of the Environment
- Tutor of two doctoral students in the context of the Eni Award for Africa – ENI
- Participation to expert panels of some leading international and national funding agencies.

According to law 679/2016 of the Regulation of the European Parliament of the 27<sup>th</sup> April 2016, I hereby express my consent to process and use my data provided in this cv.

Torino, May 16th, 2022  
Prof. Pierluigi Leone

