

Prof. Emanuela Colombo

Politecnico di Milano – Department of Energy

Rector's Delegate to Science Diplomacy - UNESCO chair in Energy for Sustainable Development

CV - SHORT VERSION IN ENGLISH

Emanuela Colombo has achieved both a **PhD in Energy Engineering and a Nuclear Engineering MSc at Politecnico di Milano** in Italy where she is currently **Full Professor at the Department of Energy**. At the same university, She served as **Rector's Delegate to Cooperation and Development** from 2005 to 2022, now appointed as **Rector's Delegate to Science Diplomacy**. In 2012 she has been named **Chair holder of the UNESCO CHAIR in Energy for Sustainable Development** and **adjunct professor** at the **Nelson Mandela African Institute of Science and Technology** in Arusha (Tanzania).



She has been appointed by the **Italian Conference of the Rector (CRUI)** as the representative of the national academic system within the **National Council for Cooperation and Development at the Ministry of Foreign Affairs and International Cooperation (MAECI)**. She is also serving as the **national representative in the AU-EU High level Policy Dialogue** appointed by the Italian Ministry of Higher Education and Research (MUR).

She is member of the **Royal Academy of Overseas Science (Belgium)** since 2019. She is in the board of the **Italian Higher Education with Africa Foundation (IHEA Foundation)** supported by the Italian Ministry of Higher Education and Research (MUR). She has been recently nominated in **the working group on Science Diplomacy (DGRTD of the EU commission)**.

Emanuela Colombo worked for Ansaldo Energia, ABB Research, Fluent France and Fluent Italia branches of Fluent Inc. (now ANSYS-FLUENT). **In 2001 she moved to an academic career** where she is actively working on the Energy-Environment-Development nexus, **access to energy in developing countries, energy planning and integrated modelling assessment**. She is author of more than **250 scientific papers**, 144 of which are ISI or Scopus¹ and co-author of the book "Renewable Energy for Unleashing Sustainable Development" by Springer.

She was the scientific coordinator of **4 European projects** and one international tender on Green Innovation (**Egypt**), Sustainable Energy Engineering (**Kenya, Tanzania and Ethiopia**), Water Energy and Food nexus (**Egypt**), Modern Energy services in refugee camps (**Lebanon, Somalia, RCA and Colombia**) and Capacity Building in Engineering (**Tanzania**). She managed the **Africa Innovation Leaders Programme** funded by the Italian Agency of Cooperation (Kenya, Ethiopia, Niger, Nigeria, Mozambique and Tunisia) and linked to the G7 Presidency of Italy in 2017. She is scientific leader for Polimi and the scientific coordinator of Pillar 2 within the **LEAP-RE HORIZON** project which is considered a flagship of the **Climate Change and Sustainable Energy (CCSE) partnership** with the AU-EU HLPD

She is also working on consultancy and advocacy projects on energy modelling, scenario and impact assessments for different **Italian private players and NGOs** active in Italy, Africa and at global level. In line with this interest in 2004 she was **one of the founders of Engineers Without Border in Milan**. She was the first coordinator of the **Italian Network of Universities focus on Cooperation and Development (CUCS) and now is a member of the extended board**. In 2009 she has been awarded by the Club Mille Miglia Foundation in Italy as "**courageous intelligence**" for her research interest and social commitment in developing country.

In 2011, She introduced a new track in the **MSc in Energy Engineering focus on "Energy for Development"** at Politecnico di Milano and she launched an honours programme for the Schools of Engineering focus on "**Engineering for Sustainable development**" to promote global dimensions within engineering education. This programme was revamped in 2023 with the support of **COLOMBA (the regional network of NGO)** for contributing to SDG education.

For her experience on energy for sustainable development, she worked as international expert for the United Nation Industrial Development Organisation (**UNIDO**) and served in the Scientific Committee of **UNIDO-ICS** (Trieste). She was also Custodian of the Workstream on Efficiency of the **Africa Europe Energy Partnership (AEEP)** and she is working closely with the International Energy Agency (**IEA**) and the World Bank (**ESMAP**).

She was member of the **Sustainable Development panel of Electricité De France (EDF) from 2012 to 2016** and between **2018-2020** she was scientific coordinator for a research line dedicated to Africa in **Fondazione Eni Enrico Mattei (FEEM)** and member of the **Sustainable Committee of Edison spa**. From January 2020 to December 2022 she was an elected member of the **Academic Senate of Politecnico di Milano**.

¹ [Colombo, Emanuela - Author details - Scopus Preview](#)