

CURRICULUM VITAE – PROF. EMANUELA COLOMBO

Emanuela Colombo has achieved both a **PhD in Energetic and a Nuclear Engineering MSc at Politecnico di Milano** in Italy where she is currently **Full Professor in “Engineering for Cooperation and Development” and “Advanced Thermodynamics and Thermoconomics”** and serve at the **Department of Energy**. She has also been covering the role of **Rector’s Delegate to Cooperation and Development** since 2005

She gained a considerable working experience in different industrial energy sectors working for Ansaldo Energia”, “ABB Research”, Fluent France and Fluent Italia branches of Fluent Inc. (now ANSYS-FLUENT).

In 2001 she has moved to an academic career where her interest was originally focused on heat transfer devices and processes for power generation, turbulence phenomenology and modelling.

Over the last decade she has been developing a strong interest in the **interrelations between Energy, Environment and Sustainable Development, access to energy in developing countries and advanced exergy methodologies** for performance and impact evaluation of energy systems are other topics of high interest.

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 is currently managing the **Africa Innovation Leaders Programme** funded by the Italian Agency of Cooperation in Kenya, Ethiopia, Niger, Nigeria, Mozambique and Tunisia) and she is also working on consultancy and advocacy projects on access to energy for different Italian private players and NGOs active in **Mozambique, Malawi, Congo, Angola**. She is author of more than **150 scientific papers**, 82 of which are ISI or Scopus¹ with more than 600 citations and co-author of the book “*Renewable Energy for Unleashing Sustainable Development*” by Springer.

In line with this interest in 2004 she was **one of the founders of Engineers Without Border in Milan**. In 2005 she was named **Rector’s Delegate to Cooperation and Development at Politecnico di Milano, position still covered** for promoting the role of the academic education and research in coping the complex challenges of global development and human promotion.

Since 2007 she is coordinator of a **Network of Universities focus on Cooperation and Development (CUCS)** which includes more than 30 Universities. 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 MSd in **Energy Engineering focus on “Energy for Development”** at Politecnico di Milano and she promoted an honours programme for the Schools of Engineering focus on “**Engineering for Sustainable development**” to promote global dimensions within engineering education launched in 2015.

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). In 2012 she has been named Chair holder of the **UNESCO CHAIR on Energy for Sustainable Development** assigned to the Department of Energy and **adjunct professor at the Nelson Mandela African Institute of Science and Technology in Arusha (Tanzania)**. Since 2016 she is 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 has been appointed by the Italian Conference of the Rector (CRUI) as the nominated representative of the academic system within the “National Council for Cooperation and Development”. She was member of the **Sustainable Development panel of Electricité De France (EDF) from 2012 to 2016** and she is currently member of the **Sustainable Committee of Edison spa**.



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¹ <https://www.scopus.com/authid/detail.uri?authorId=36180684100>

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