

PERSONAL INFORMATION

Family name, First name: **Fuso Nerini, Francesco**

Researcher unique identifier: <https://orcid.org/0000-0002-4770-4051>

Nationality: **Italian & Swedish**



EDUCATION

- 2020** **Docent degree** in Energy and Environment Systems (Habilitation)
Division of Energy Systems, Royal Institute of Technology, Sweden
- 2016** **PhD** in Energy and Environment Systems Analysis, division of Energy Systems
Royal Institute of Technology, Sweden (Supervisor: Prof. Mark Howells)
- 2012** **Double Master of Science (M.Sc)** degree in Sustainable Energy Engineering
Royal Institute of Technology, Sweden & Universitat Politecnica de Catalunya, Spain
- 2008, 2010** **Master of Science (B.Sc + M.Sc)** in Environmental and Land Planning Engineering
Politecnico di Milano, Italy

CURRENT POSITIONS

- 2021- **Director of the KTH Climate Action Centre, Royal Institute of Technology, Sweden**
2017 – **Associate Professor in Energy Systems for Sustainable Development** (Assist. till 2019)
Division of Energy Systems, Royal Institute of Technology, Sweden
- 2021 – **Affiliated Scientist, European Institute on Economics and the Environment, CMCC, Italy**
2017 – **Research Affiliate, Payne Institute for Public Policy, Colorado School of Mines, US**
2016 – **Affiliated member, University College London (UCL), Energy and Development Group, UK**

PREVIOUS POSITIONS

- 2018 – 2018 **Guest researcher, International Centre for Theoretical Physics (ICTP), Trieste, Italy**
- 2016 – 2017 **Energy Analyst, World Energy Outlook (WEO), International Energy Agency, France**
- 2015 – 2017 **Post-doctoral research associate, Energy Institute, University College London(UCL), UK**
- 2012 – 2015 **PhD candidate, energy access lead, Energy Systems, Royal Institute of Technology, Sweden**
- 2013 – 2013 **Guest researcher, Melbourne Energy Institute, Melbourne University (MEI), Australia**
- 2012 – 2012 **Guest researcher, Universidade Federal do Pará (UFPA), Brazil**
- 2010 – 2010 **Trainee, Italian National Agency for New Technologies, Energy and the Environment, Italy**

SELECTED FELLOWSHIPS AND AWARDS

- 2021 – 2022 **Digital Futures**, grants for collaborative research projects on AI and Climate (800k Eur)
- 2018 – 2021 **Formas Swedish Research Agency**, grant for excellent researchers (300k Eur)
- 2021 - 2022 **Clean Cooking Alliance**, awarded research on cooking energy access (100k Eur)
- 2017 – 2021 **UN-FAO**, awarded research on the Nexus in NENA region (500k Eur)
- 2020 – 2021 **UNECE**, awarded research on transboundary nexus (100k Eur)
- 2020 – 2022 **World Bank**, awarded research on energy access in Somalia, Somaliland, Benin (600k Eur)
- 2020 – 2021 **KTH sustainability office**, various grants for sustainability at KTH (70k Eur)
- 2019 **International Energy Agency**, awarded research for World Energy Outlook (30k Eur)
- 2018 **Swedish Energy Agency**, awarded support grant for H2020 calls
- 2012 – 2015 **Åf, Sweco Foundation, KTH**, awarded various scholarships for PhD studies (40k Eur)
- 2012 **Hult Global Case Challenge**, Runner-up, among 5000+ teams, adoption of Solar in SSA

SELCTED TEACHING ACTIVITIES

- 2019 – **MSc Programme Director: Innovative Sustainable Energy Engineering MSc programme**
Nordic5tech international Master
- 2020 – **KTH, coordinator PhD course: Sustainability Perspectives for Assessing and Designing**
Research, Projects and Policies, 6 ECTS
- 2017 – **KTH, coordinator MSc/PhD course: Energy Data, Balances and Projections**, 6 ECTS
- 2018 – **KTH, Course coordinator BSc course: Energy Systems**, 1.5 ECTS
- 2014 – **Capacity building**, e.g. for ministerial audiences in Jordan, Morocco, Bolivia and Ethiopia,
at the UK parliamentary office and for other UN & WB workshops
- 2019 **KTH, Course coordinator MSc course MJ2413: Energy and Environment**, 6 ECTS
- 2012 – 2015: **Teacher in course modules in several energy and sustainability courses** at KTH & UCL

ORGANISATION OF SCIENTIFIC MEETINGS

- 2018 – 2022 **Invited guest lecturer** on sustainability topics at various universities, including Oxford University, Cambridge University, Boston University, Uppsala University and others
- 2020 **Co-organizer for a KTH-MIT workshop** on the future of AI
- 2018, 2019 **Organizer and moderator** for the Swedish launch of the IEA World Energy Outlook
- 2018- **Organizer of 4 workshops** on the Nexus for UN-FAO in Jordan and Morocco
- 2018 **Co-organization, UN-WB Summer School** on Modelling Tools for Sustainable Dev.
- 2019 **Co-organization for workshop** on how to decarbonize cities at the European Commission
- 2019 **Keynote** on nexus research at the CGIR Science Forum in Cape Town, South Africa
- 2016 **Organizer of energy modelling workshop** at UCL with 50 participants from several teams

INSTITUTIONAL RESPONSIBILITIES & SCIENTIFIC SOCIETIES

- 2021 – **Director of the KTH Climate Action Centre**, encompassing 60+ researchers at KTH
- 2021 – **Board member**, KTH Global Development Hub
- 2019 – **Board member**, KTH-Stockholm Environmental Institute Strategic Partnership
- 2021 – 2022 **Opponent for PhD dissertations** of two student at Politecnico di Milano
- 2018 – **Internal reviewer and opponent for 3 PhD** dissertation at KTH
- 2017 – **Affiliated** to Payne Institute, US; CMCC, Italy & UCL Energy and Development group, UK

MAJOR COLLABORATIONS

Due to my multidisciplinary research work and projects, I have an extended international network of collaborators. For instance, in recent published research I led, I had co-authors from Oxford University, MIT, Duke, UNOPS, UCL, UBC, Sussex University, the IEA, PoliMI, UNSW, and others. My work has been funded not only by research agencies, but in applied collaborative work with international institutions such as the World Bank, various UN offices, the IEA and the Clean Cooking Alliance.

Publications

I have led many high profile publications including in top-journals (e.g. Nature, Nature Energy), and policy reports, such as contributions to IEA and World Bank reports. A shortlist of relevant publications is reported below:

1. Khavari, B.; Gomez, C.; Jeuland, M.; Fuso Nerini, F. The Benefits and Costs of Adopting Clean Cooking in Sub-Saharan Africa. *Accepted in Nature Sustainability* **2022**.
2. Nerini, F.F.; Broad, O.; Mentis, D.; Welsch, M.; Bazilian, M.; Howells, M. A Cost Comparison of Technology Approaches for Improving Access to Electricity Services. *Energy* **2016**, doi:10.1016/j.energy.2015.11.068.
3. Nerini, F.F.; Andreoni, A.; Bauner, D.; Howells, M. Powering Production. The Case of the Sisal Fibre Production in the Tanga Region, Tanzania. *Energy Policy* **2016**, doi:10.1016/j.enpol.2016.09.029.
4. Castor, J.; Bacha, K.; Fuso Nerini, F. SDGs in Action: A Novel Framework for Assessing Energy Projects against the Sustainable Development Goals. *Energy Res Soc Sci* **2020**, *68*, 101556, doi:10.1016/j.erss.2020.101556.
5. Fuso Nerini, F.; Tomei, J.; To, L.S.; Bisaga, I.; Parikh, P.; Black, M.; Borrion, A.; Spataru, C.; Castán Broto, V.; Anandarajah, G.; et al. Mapping Synergies and Trade-Offs between Energy and the Sustainable Development Goals. *Nature Energy* **2018**, *3*, 10–15, doi:10.1038/s41560-017-0036-5.
6. Fuso Nerini, F.; Sovacool, B.; Hughes, N.; Cozzi, L.; Cosgrave, E.; Howells, M.; Tavoni, M.; Tomei, J.; Zerriffi, H.; Milligan, B. Connecting Climate Action with Other Sustainable Development Goals. *Nature Sustain* **2019**, *2*, 1, doi:10.1038/s41893-019-0334-y.
7. Dobbins, A.; Fuso Nerini, F.; Deane, P.; Pye, S. Strengthening the EU Response to Energy Poverty. *Nature Energy* **2019**, *4*, 2–5, doi:10.1038/s41560-018-0316-8.
8. Fuso Nerini, F.; Dargaville, R.; Howells, M.; Bazilian, M. Estimating the Cost of Energy Access: The Case of the Village of Suro Craic in Timor Leste. *Energy* **2015**, *79*, 385–397, doi:10.1016/j.energy.2014.11.025.
9. Nerini, F.F.; Ray, C.; Boulkaid, Y. The Cost of Cooking a Meal. the Case of Nyeri County, Kenya. *Environmental Research Letters* **2017**, *12*, doi:10.1088/1748-9326/aa6fd0.
10. Leite de Almeida, C.M.; Bergqvist, E.; Thacker, S.; Fuso Nerini, F. Actions to Align Energy Projects With the Sustainable Development Goals. *Discover Sustainability* **2021**, *2*, 16, doi:10.1007/s43621-021-00020-3.
11. Vinuesa, R.; Azizpour, H.; Leite, I.; Balaam, M.; Dignum, V.; Domisch, S.; Felländer, A.; Langhans, S.; Tegmark, M.; Nerini, F.F. The Role of Artificial Intelligence in Achieving the Sustainable Development Goals. *Nature Commun* **2020**, *11*, 1–10, doi:10.1038/s41467-019-14108-y.

Full list at: <https://scholar.google.se/citations?user=Bblxl3AAAAAJ&hl=en>