

CV Mathilde Brix Pedersen

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Date of Birth: 22 June 1981

Nationality: Danish

Education

2017 PhD, UNEP DTU Partnership, Technical University of Denmark. Title: 'Rural electrification through private models: the case of solar-powered mini-grid development in Kenya'

2010 MSc, Human Geography, University of Copenhagen

Research Profile:

Mathilde's research focuses on institutional, policy- and socio-economic aspects of clean energy diffusion in developing countries including the role of private entrepreneurs in rural electrification. Her research is focused on Sub-Saharan Africa, particularly on Kenya. Her interests lie in the areas of 1) firm level and industry level process for diffusion, system building and upgrading 2) Effects of rural electrification at the end-user level in regards to productive use, poverty aspects, power relations and livelihoods. Her research draws on the analytical perspectives of sustainability transitions, innovation systems, niche development, global value chain analysis, hybrid organisations, institutional logics, and planned interventions.

Professional experience

2018-current Postdoc, UNEP DTU partnership, Dept. of Management Engineering, DTU

2013-2017 PhD Fellow, UNEP DTU partnership, Dept. of Management Engineering, DTU

- Qualitative data gathering and research methods, field work, case study design, survey and interview design, data processing and analysis (incl. NVivo software), firm level approaches to niche development, firm strategies for balancing social and economic aims.

2010-2012 Research Assistant, Department of Geography, University of Copenhagen, Denmark and UNEP DTU partnership, Dept. of Management Engineering, DTU

- Analytical work related to energy access, bioenergy, policy and the link to rural development.

2009 Intern, Care International, Hanoi, Vietnam

2006-2007 Associate Project Developer, Finavera Renewables Inc., Vancouver, Canada

- Project development of large scale wind power projects.

Research Projects

- 2017-22: Supporting sustainable mini-grid development and local production of wind turbines in Kenya, Danida funded (Researcher)
- 2019-2022: Increased local access to and private local production in clean energy value chains in Africa, Danida funded (Researcher)

Other projects

- 2002-2015: Global Network on Energy for Sustainable Development (GNESD) (Research assistant)

Publications

- Nygaard, I., Gichungi, H., Larsen, T.H., **Pedersen**, M.B., Cronin, T., Davis, N., Chitechi, E., Kago, E. & Højgaard, J.W. (2018): Market for the integration of smaller wind turbines in mini-grids in Kenya. Danida. Copenhagen
- **Pedersen**, M.B. and Nygaard, I. (2018): System building in the Kenyan electrification regime: The case of private solar mini-grid development. *Energy Research and Social Science*, 42, 211-223
- Nygaard, I., Hansen, U. E., Mackenzie, G. A., & **Pedersen**, M. B. (2017). Measures for diffusion of solar PV in selected African countries. *International Journal of Sustainable Energy*, 36(7), 707-721.
- **Pedersen**, M.B. (2016): Deconstructing the concept of renewable energy-based mini-grids for rural electrification in East Africa. *WIREs Energy and Environment*.
- Hansen, U. E., **Pedersen**, M. B., & Nygaard, I. (2015). Review of solar PV policies, interventions and diffusion in East Africa. *Renewable & Sustainable Energy Reviews*, 46, 236–248
- Christensen, J., Mackenzie, G. & **Pedersen**, M.B. (2015): Enhancing access to electricity for clean and efficient energy services in Africa. UNEP DTU Partnership, Denmark.
- Hansen, U.E., Nygaard, I & **Pedersen**, MB (2014): Prospects for investment in large-scale, grid-connected solar power in Africa. UNEP Risø Centre, DTU, Denmark
- Höhne, N., Kejun, J., Rogelj, J., Segafredo, L., da Motta, R. S., Shukla, P. R., Fenhann, J.V., Hansen, J.I., Olhoff, A., **Pedersen**, M.B. & Christensen, J. M. (2012). The Emissions Gap Report 2012: A UNEP Synthesis Report. United Nations Environment Programme.
- Ackom, E., **Pedersen**, M.B. & Christensen, J.M. (2011): Bioenergy: The potential for rural development and poverty alleviation. GNESD, UNEP Risø Centre, Denmark

Presentations and review

- 2nd International Conference on Solar Technologies & Hybrid Mini Grids to improve energy access Palma de Mallorca, Spain October 17 – 19, 2018. ‘Review of policies and market developments for small mini-grids in Uganda, Tanzania and Kenya.’
- Presentation at internal seminar for Innovation and Renewable Electrification in Kenya (IREK), AAU, April 2018. ‘Private solar mini-grid development in Kenya’
- 1st Africa PVSEC, Africa Photovoltaic Solar Energy Conference and Exhibition, March 27-29 2014, Durban, South Africa. ‘A Literature Review of Solar PV Market and Industry Development in Uganda, Kenya and Tanzania’
- Reviewer for academic journals: *World Development; Energy, Sustainability and Society and Renewable & Sustainable Energy Reviews*