

Case studies on renewable energy investments in unfavorable policy contexts

Background: This is a broad interest, which I am exploring for a future research agenda. Students are welcome to develop their own master thesis inspired by this problem, or along the outlined aims.

Short description: In parallel to countries, in which governments pursue energy transitions (a move away from conventional to a reliance on renewable energy sources), many remain focused on fossil fuels for electricity generation. In such settings, the deployment of renewable energy sources is often hampered by disadvantageous policies: renewable energy tariffs are not set, or the conditions of feeding electricity into the grid are unfavorable from a financial point of view. Master theses could explore case studies where a movement towards small-scale, off-grid renewable energy investments are occurring in defiance of unfavorable conditions. Such cases could provide insight not only on barriers to renewable energy development, but tentatively explore a different kind of energy transition from below, potentially one that is not primarily driven by sustainability objectives, but by other local concerns (e.g. access, prices, reliability etc.).

A potential master thesis could take a case study approach and focus, *inter alia*, on:

- Understanding key factors that (dis)incentivize renewable energy investment in general, or certain models in particular (e.g. off-grid vs. on-grid solar photovoltaics) in the selected setting;
- Identifying key actors that drive or enable renewable energy investments, e.g. energy entrepreneurs;
- Exploring business models and financing schemes enabling RE investments in contexts where government schemes are unfavorable or not available (e.g. private companies leasing solar panels and batteries for autarkic businesses and households);
- Identifying barriers to such emergent schemes and financing models;
- Outlining potential consequences of renewable energy diffusion in such contexts (see for example Turner, 2018);
- Analyzing the framings of the transition to renewable energy projects in such contexts (e.g. sustainability, affordability, reliability etc.).¹

Methods and theories: qualitative approaches based on document analysis and expert interviews. The analytical focus is open: students could draw from various policy analysis and transition theories.

Timeframe: for theses to be completed by the end of 2019

For how many students this topic is available: 1-2, depending on supervision capacities

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References:

Turner, Britta (2018) 'Diffusion on the ground: rethinking the logic of scale and access in off-grid solar in Sri Lanka.', *Energy Research & Social Science* (50), pp. 1-6.

¹ See a similar question on conceptualizations of 'sustainable energy transitions' in a master thesis topic offered by P.Späth and M.Pregernig: <https://www.meg.uni-freiburg.de/Filelist/Current%20Students/master-thesis-2019/8-sustainable-energy-transitions-in-west-african.pdf>