

Wednesday Lunch Talk

20th of November 2019

Barrows 310, Reading Room, UC Berkeley

Global Electrification Scenarios and Current Research Needs

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More than 1.2 billion people need access to electricity until 2030 to achieve SDG7 considering current population growth. Grid extension as conventional solution for electrification will fail to supply all these people until 2030. Sustainable Energy for All can only be achieved with a mix of grid extension, mini-grids, and solar-home-systems. We modelled different global scenarios, investment needs and related GHG emissions, which are presented in this lecture. In addition, current research work on electrification planning of RLI is presented and further research needs are discussed.

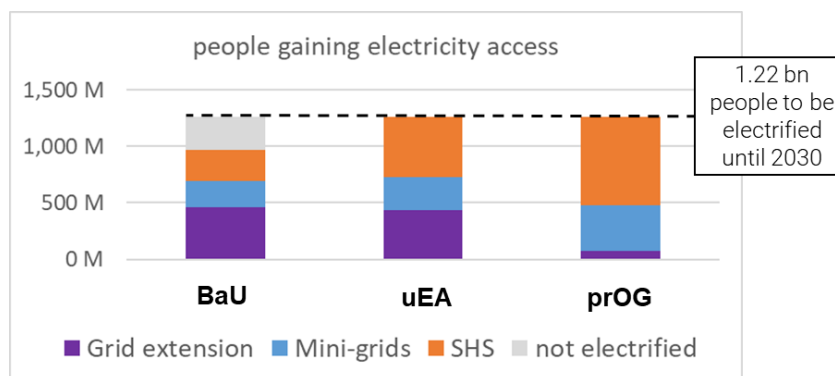


Figure 1: Scenario results of global energy access modelling using GIS and regulatory framework analysis.



Philipp is an international expert in renewable energies and rural electrification. He holds a PhD in engineering from the TU Berlin. Currently he is head of unit Off-Grid Systems at Reiner Lemoine Institut. Here he managed and conducted a wide range of international projects on energy access and island energy supply. Examples include the rural electrification planning for Nigeria and the support to the Department of Energy of the Philippines to improve electrification efforts.

Apart from that he continuously publishes and shares research results on conferences and in scientific journals (>50) acting as reviewer and co-editor as well. He is also selected member of the Arab-German Young Academy of Sciences and Humanities (AGYA). During his fieldwork, he visited many Caribbean countries: Barbados, Grenada, Jamaica, St. Kitts & Nevis, St. Vincent & the Grenadines, and Trinidad & Tobago. In addition, he worked on the Cook Islands, the Philippines, in Tanzania, Nigeria, and Zambia.

This lecture is presented in the framework of the California-Berlin Exchange and Research+(C-BEAR+) - an exchange program for researchers working on energy access and renewable energy topics.