



In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Sushil Rajagopalan

Will defend his prospectus

Justice and Energy Transitions: Decentralized Renewables in India

Abstract

Decentralized Renewable Energy (DRE) has emerged as a viable alternative to grid-based electrification, especially in rural parts of the global south where energy poverty remains a major impediment to development. While there is an opportunity for DRE to contribute to human well-being, the literature subsequently identifies considerable challenges around it. One emerging area of the scholarship is the justice and governance of socio-energy transitions which cuts through different scales; speaking right from the process of energy production to its end use and waste disposal. Traditionally, justice has been predominantly explored for large-scale energy assemblages like nuclear power, hydropower or more recently renewables. However, the evolving nature of the socio-technical design of DREs raises a different set of justice concerns, as it localizes both the benefits and associated risks.

This research explores the implication of DRE transitions on the justice principles – namely distribution, procedure and recognition. The empirical case for this thesis is India, where DRE for rural electrification started-off as an experimental design in early 1980s. Today, four states in India have established dedicated DRE policies, and an effort to establish a national policy is underway.

This thesis will pursue three strands of research related to DRE, energy justice, and capabilities. The first paper will explore the distributive impact of electrification on rural household capabilities. The second paper will look at the implication of DRE on procedural justice and justice as recognition. Drawing from theories of energy justice and capabilities, both of these papers will employ case study methods. Data will be collected primarily through semi-structured interviews with stakeholders ranging from

the local communities, non-governmental organizations, policy think tanks and social enterprises, along with secondary literature such as published articles, policy documents and government reports. The findings will suggest pathways for facilitating DRE transitions at multiple governance levels by identifying the critical concerns surrounding it.

Lastly, the third paper in this dissertation will connect these issues of energy justice and capabilities to the discourse of Sustainable Development Goals (SDGs), which has become one of the important global policy actions in addressing the trilemma of social, economic and environmental concerns. Specifically, the findings from the first two papers will facilitate a meaningful discussion on the role of DREs within SDGs and its subsequent framing to establish a relationship within policy discussions.

Tuesday, November 20, 2018

1:00 PM

Wrigley Hall, Room 323

Faculty, students, and the public are invited.

Supervisory Committee:

Dr. Hanna Breetz, Co-chair

Dr. Sonja Klinsky, Co-chair

Dr. Kartikeya Singh, Member