Accepted Manuscript

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PII: S0360-5442(18)31390-2

DOI: 10.1016/j.energy.2018.07.093

Reference: EGY 13358

To appear in: Energy

Received Date: 27 December 2017

Revised Date: 18 June 2018

Accepted Date: 14 July 2018

Please cite this article as: Bhowmik C, Bhowmik S, Ray A, Social acceptance of green energy determinants using principal component analysis, *Energy* (2018), doi: 10.1016/j.energy.2018.07.093.

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Social acceptance of green energy determinants using principal component analysis

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Abstract

This research aims to explore the social acceptability of green energy determinants in a specific region to push forward the community acceptance. None of the previously cited research work dealt with the green energy determinants acceptance using principal component analysis for a particular area. A face to face interview and a randomized survey is conducted to show the community acceptance of green energy. This research led a survey (n=482) among various government and non-government organizations, universities, colleges, schools, offices and some door to door visits. This study assumes that these stakeholders would play a vital role in the deployment of green energy. Results also show that land requirement, share of dirty fuels, consumption of commercial energies, income inequality, depletion of local resources, foreign direct investment, and technology transfer are the most influencing parameters identified by principal component analysis. This research also divulges some policies for future energy sources adoption with the support of local participation.

Keywords: Social acceptance; green energy determinants; green sources; principal component analysis; policy.

Nomenclature	
n	Number of respondents
NIMBY	Not-in-my back-yard
ORWARE	ORganic WAste REsearch
CDA	Critical Discourse Analysis
PV	Photovoltaic
MRE	Marine renewable energy
CCS	Carbon capture and storage

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