

Risk Mitigation Models in Renewable Energies – Solar vs. Wind

Maria Nichifor, paper co-authored by Horațiu REGNEALĂ, and Eliza Laura PAICU (CORAȘ, Bucharest University of Economic Studies)

ABSTRACT of presentation held on 30 October 2014, Leeuwenborch, Wageningen

The solar energy and the wind energy business provide clear solutions to the challenges raised by the climate change and to the limitation of conventional sources of energy, given the unrestricted availability of sun and wind power. However, the extent and impact of the threats hampering these renewable energy businesses, as well as applicable models of risk mitigation, remain relatively unexplored. Based on the experience and knowledge of experts in the solar and wind energy field in Romania, gathered through questionnaires through Delphi method, our exploratory research highlights that both solar energy projects as well as wind projects share some common major risks: regulatory risk, financial constraints, political risk, technological threats, natural hazards or intermittency of primary resource. More frequent and/or detailed communication with media, consumers and environmental groups and improving environmental audits resulted as main factors driving both industries to risk mitigation.

Relying on intense efforts to expand industry expertise and product development, the risk mitigation efforts revolve around, counting on proven methods to reduce operational risks, insurance, developing a strong in-house risk management function, collaboration among firms, maintenance.

Furthermore, we present theoretical models of risk mitigation obtained through semi-structured interviews with the experts in both industries. By undertaking this study we aim to contribute to the scarce literature written on the background of Romanian business companies acting in the solar and wind energy industry and to increase awareness on the risk mitigation factors.

Further studies in the field will gather more interviews from experts in Romania, Germany and the Netherlands and will include a comparison of the risks in the wind energy field in the three countries.



WAGENINGEN UNIVERSITY

WAGENINGEN UR