A NOVEL TOOL FOR SUSTAINABILITY ASSESSMENT OF ENERGY PROJECTS

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BACKGROUND & PROBLEM STATEMENT



NOVELTY & INVENTIVENESS

ITRex 2021

- A single sustainable performance index to measure the holistic performance of energy system has been formulated
- This product is capable to overcome the drawbacks in performance assessment method of the available products
- Technical elements in the tool have null upfront cost

MARKETABILITY & COMMUNITY BENEFITS

- An effective tool to exploit the huge market potential of renewable energy systems
- Developed technological framework is transferable to any energy system irrespective of location
- Communities will be benefited from appropriate selection of locations for energy projects

SIGNIFICANCE

- This tool is useful to reduce the time and cost involved in site selection process
- Custom-made product for application in project feasibility studies conducted by energy firms
- Aid the investors to shortlist the best locations for implementing energy projects accurately





STATUS OF INNOVATION

- Applicable to any energy system
- Developed tool has been validated in relevant environment - TRL 5

RELEVANCE TO GOVERNMENT POLICY

- Supports the development of digital infrastructure in Malaysia according to the Shared Prosperity Vision 2030 (WKB2030)
- In line with the target to have 20% Renewable Energy (RE) capacity mix by 2025

RELEVANT PUBLICATION

 S. Sreenath, K. Sudhakar, Yusop AF. "7E analysis of a conceptual utility-scale land-based solar photovoltaic power plant". *Energy. Vol.* 219, 2021, 119610. (Published, SCI indexed)