**Product:** Vertical Powered Solar System integrating an electromagnetic engine

## **Technical Assistance Required**

The technical assistance required to effectively design, develop and deploy this product will require several interdisciplinary skills. Below is a summary of each major discipline required:

## 1. Multi-Disciplinary Engineering

- a) Photovoltaic Engineering This discipline will guide the choice of the most efficient solar cells, their configuration, and the best practices for their installation.
- b) **Electromagnetic Engineer -** Essential for designing and optimizing the electromagnetic engine.
- c) **Mechanical Engineer** This discipline is crucial for designing the piston-driven engine, interconnecting of moving parts and the mounting structures.
- d) **Civil & Structural Engineer** Design a support tower with stability and environmental sustainability as driving factors. of the tower or pole on which the system will be installed.
- e) **Electrical/Control Engineer** Provide design for all electrical aspects of the system to include the control apparatus for tracking the sun.

## 2. Product Engineering Requirements

- a) **Energy Storage & Battery Technology -** Essential for the selection, integration, management, and maintenance of the battery system
- b) **Material Science**: To select the best materials that offer durability, efficiency, and cost-effectiveness.
- c) **Systems Integration** This is an overarching skill required to bring together all the different components into one cohesive, functional, and efficient system.
- 3. **Project Management**: Given the interdisciplinary nature of the project, strong project management skills are essential to coordinate various experts, ensure timelines are met, and manage resources efficiently.
- 4. **Economic & Financial Analysis**: To evaluate the cost-effectiveness, return on investment, and feasibility of the project from a financial perspective.

Given the complexity of the described system, a collaborative approach involving experts from all the aforementioned disciplines would be ideal to bring this innovative idea to fruition.