Proposal for graduation project (2022-2023) Project Title: Hybrid PV based electric scooter charging stall.

Supervisor(s): -Prof. Ahmed Kadry Abdelsalam

-Dr. Nahla Zakzouk

Abstract: The charging station is the main infrastructure of electric vehicles, especially for long distances voyages. Commonly, electric scooters are charged at home or office for long times to be able to cruise for adequate distances. For a clean, economic and time-efficient solution, scooters' stalls featuring larger charging capacities should be implemented on a wide scale based on renewable energy sources. In this project, a charging station for electric scooters is designed and its prototype is developed. The station is derived using a hybrid PV/ grid system to reduce electric consumption, reduce environmental concerns and supports the sustainable developments goals.



Charging Stall for Electric Scooters.

Project details.

The project will focus on:

- A survey on EV charger voltage levels, port types, and systems' components and control.
- The study of the hybrid grid/solar mode for supplying the charging station.
- System design and components selection and purchase.
- Prototype implementation and testing.

Hybrid PV Based Electric Scooter Charging Stall.