Supplementary Material

1. Weather data

The weather data was taken from the database of PVGIS (https://ec.europa.eu/jrc/en/PVGIS/tools/tmy) in the format of Typical Meteorological Year. The location for consideration is Bangkok, Thailand (Lat: 13.931 and Long: 100.47). The global irradiance (GHI) based on this location is shown in Figure S1 and Figure S2.

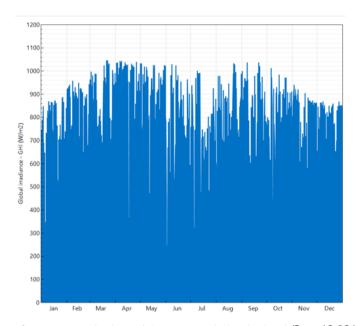


Figure 1. Hourly data of GHI in Bangkok, Thailand (Lat: 13.931 and Long: 100.47).

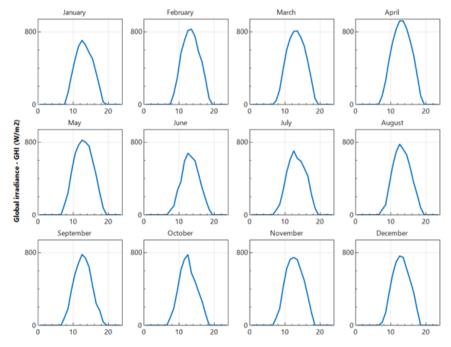


Figure 2. Hourly data of GHI by month in Bangkok, Thailand (Lat: 13.931 and Long: 100.47).

2. Electricity load

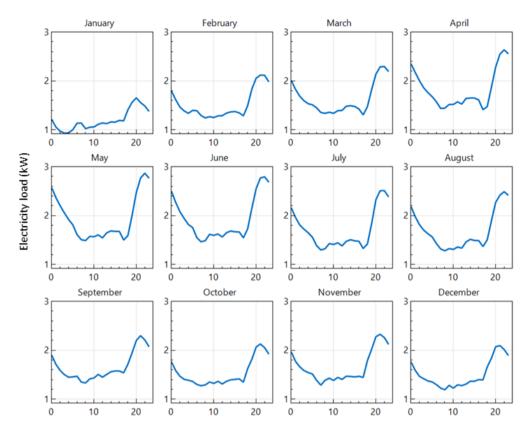


Figure 3. Electricity load profile by month.