



**SOLAR GRID PARITY FOR MALAYSIA USING EXPERIENCE
CURVES ANALYSIS**

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ABSTRACT

This project aims to present experience curve analysis in forecasting future costs of photovoltaic (PV) and hence estimating the grid parity year for Malaysia. Based on the historical prices of the PV module and PV system from 2011-2013, the future PV module and system cost from 2013-2030 are extrapolated using experience curve with the help of forecasted future PV production growth rate in Malaysia obtained from Sustainable Energy Development Authority (SEDA). These results are then used to estimate the solar grid parity year in Malaysia. From the analysis, the solar grid parity for Malaysia considering the future PV system cost is found to be in year 2026 which is one year earlier than the projected solar grid parity (2027) determined by SEDA using FiT. Factors that influence the solar grid parity year are studied using sensitivity analysis i.e. 1) sensitivity to progress ratio and 2) sensitivity to cumulative PV production. Sensitivity to progress ratio shows that increasing the learning rate of the PV system cost would result in earlier solar grid parity. On the other hand, the sensitivity to cumulative PV production shows that, increasing the cumulative PV production in Malaysia will reduce the solar PV system cost and hence could help in achieving earlier solar grid parity.

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