

***Performance Analysis of 91 kWp On-Grid Type Solar Power Plant on Rooftop  
Ground Mount Admin Building PT POMI***  
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***ABSTRACT***

*Power plants in Indonesia, generally still rely on coal as the main fuel to generate electricity, while it is estimated that by 2040 coal will run out along with the soaring prices. Solar energy is included in the renewable energy category, because it is unlimited in quantity and does not cause harmful emissions. PT POMI (Paiton Operation Maintenance Indonesia) is one of the companies that utilize solar energy. This research focuses on the PLTS on the rooftop of the admin building which was built in January 2019, aiming to evaluate the performance of the PLTS system, find out what obstacles occur during PLTS operation and what can be done to improve PLTS performance so that it can work optimally. This research uses quantitative methods, where the data obtained is in the form of numbers and then processed and analyzed.. The on-grid PLTS in the admin building of PT POMI has an average performance ratio of 51.1%, and the overall efficiency of the inverter is 75.22%. The inverter performance can be concluded to be quite good because the efficiency value is above 70%, but the performance ratio and panel efficiency value are low.*

*Keywords: PLTS, on-grid, performance ratio.*