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Increase the competitiveness of the EU PV manufacturing industry

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**High-performance low-cost modules with excellent environmental profiles
for a competitive EU PV manufacturing industry**



HighLite- Deliverable report

D6.1- Evaluation of outdoor monitoring procedures.

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About HighLite

The HighLite project aims to substantially improve the competitiveness of the EU PV manufacturing industry by developing knowledge-based manufacturing solutions for high-performance low-cost modules with excellent environmental profiles (low CO₂ footprint, enhanced durability, improved recyclability). In HighLite, a unique consortium of experienced industrial actors and leading institutes will work collectively to develop, optimize, and bring to high technology readiness levels (TRL 6-7) innovative solutions at both cell and module levels.

HighLite consortium members



Document information

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Document history

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Dissemination level²

PU	Public	
CO	Confidential, only for members of the consortium (including the Commission Services)	X

¹ Deliverable Type

Please indicate the type of the deliverable using one of the following codes:

R Document, report

DEM Demonstrator, pilot, prototype

DEC Websites, patent fillings, videos, etc.

OTHER

ETHICS Ethics requirement

ORDP Open Research Data Pilot

DATA data sets, microdata, etc.

² Dissemination level

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EU-RES Classified Information: RESTREINT UE (Commission Decision 2005/444/EC)

EU-CON Classified Information: CONFIDENTIEL UE (Commission Decision 2005/444/EC)

EU-SEC Classified Information: SECRET UE (Commission Decision 2005/444/EC)

Publishable summary

D6.1 – “Evaluation of outdoor monitoring procedures”, is confidential deliverable report related to the outdoor monitoring (WP6) of the HighLite project. It has been written between M16 and M18 based on previous discussions and meetings with WP6 members. This report was approved by the WP6 members and the Project Coordinator.

Concerning the outdoor monitoring procedure, the guideline is given by the standard IEC 61724-1 about Photovoltaic system performance – Part1: monitoring. The main difference between the work planned within WP6 of HighLite and the IEC 61724 standard is the size of the systems to be monitored. Most of the monitoring within HighLite will be done on single module but at least 4 systems within HighLite will have more than 3 kWp installed power.

The report includes an updated review of the modules fabricated within WP5 to be installed and monitored in WP6 as well as the list of the monitoring sites. The procedure of performance stabilization and indoor measurement before installation is specified as well as the list of the site sensors and module outputs to be monitored.

Centralization of the data storage, treatment and analysis will be done on a website specifically developed for the project. This approach enables to reduce the error of data cleaning and data treatment, and ensures to apply the exact calculation of the score card of the PV modules installed in different monitoring sites from the WP6 partners.

This report aims to make all data comparable to have the fairest ranking of the benchmarking technologies and the one developed within HighLite independently of the site monitoring.