



# PV System Performance and PV Module Reliability

## WRAP-UP & CLOSING SESSION

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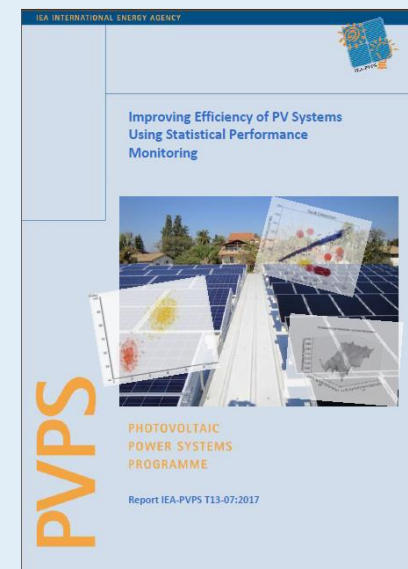
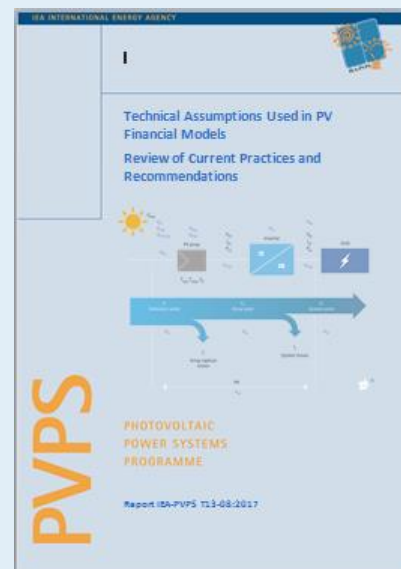
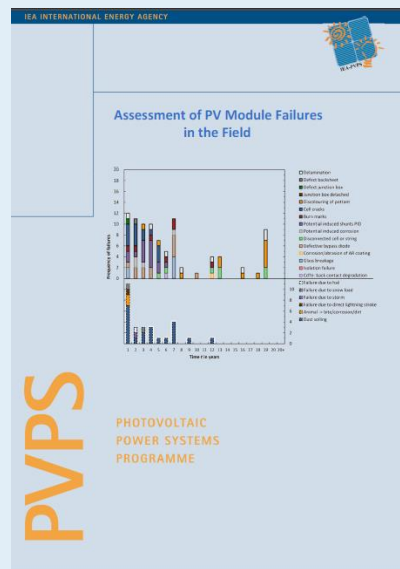
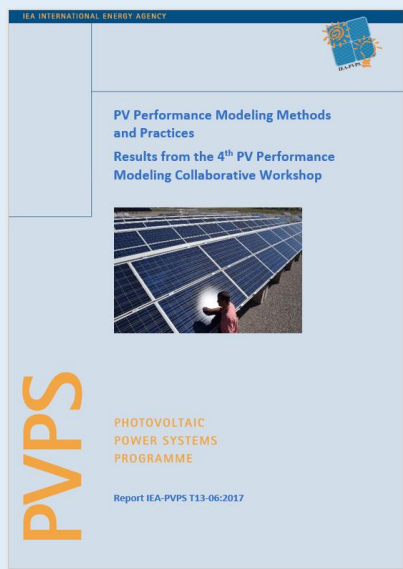
EU PVSEC, Amsterdam, 26 September 2017

PVPS





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## 7 Technical Reports

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# Lessons Learnt

- Global network required to improve the quality and reliability of PV systems and subsystems by collecting, analyzing and disseminating information on their technical and financial performance.
- A growing number of PV installations world-wide fail to fulfil quality and safety standards. There is little knowledge on the extent of bad installations, failure mechanisms and failure statistics.
- Improved methods to detect failures in the field and modeling of PV module power degradation will lead to more qualified assessments of PV systems and thus lower risk in PV investments.



# Task 13 Extension – 2018 - 2021

<b>Performance, Operation &amp; Reliability of PV Modules and Power Plants</b>
<b>Topic / Activity</b>
<b>Topic 1: New Module and System Concepts and Designs</b>
1.1 New Module-Concepts, -Designs and -Materials
1.2 Bifacial PV Modules
1.3 New System Concepts and Designs
1.4 Service Life Prediction
<b>Topic 2: Performance of PV Systems</b>
2.1 Methodology to prevent the occurrence of failures in PV plants through the use of predictive monitoring
2.2 Uncertainty in yield assessments and PV LCOE
2.3 Modelling of performance loss rate
2.4 Climatic rating of different technologies for different countries
2.5 Impact of soiling on performance of PV systems
<b>Topic 3: Monitoring - O&amp;M</b>
3.1 Quantification of technical risks during O&M
3.2 Characterization of PV power plants using mobile devices
3.3 Guidelines for O&M procedures in different climates/countries
3.4 Assessment of Soiling Losses during O&M
<b>Dissemination / Outreach</b>





# Thank You for Your Attention!

