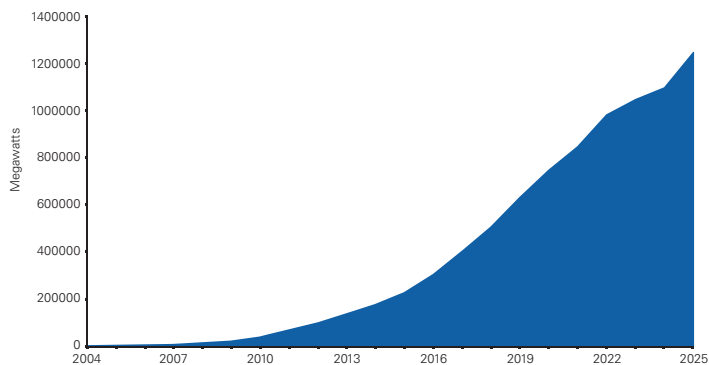


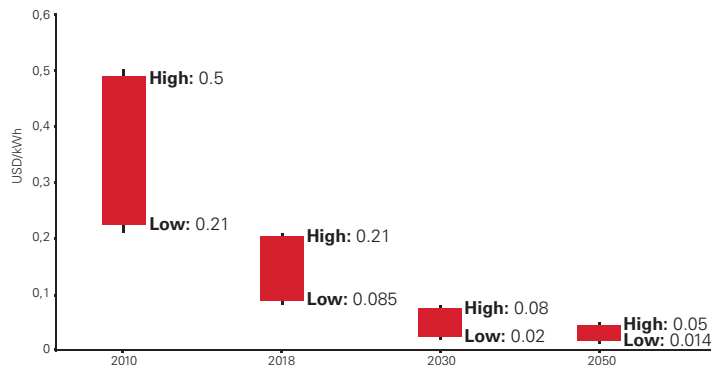
Safeguarding Solar PV Revenues



Bright solar PV future



Growing global installed capacity

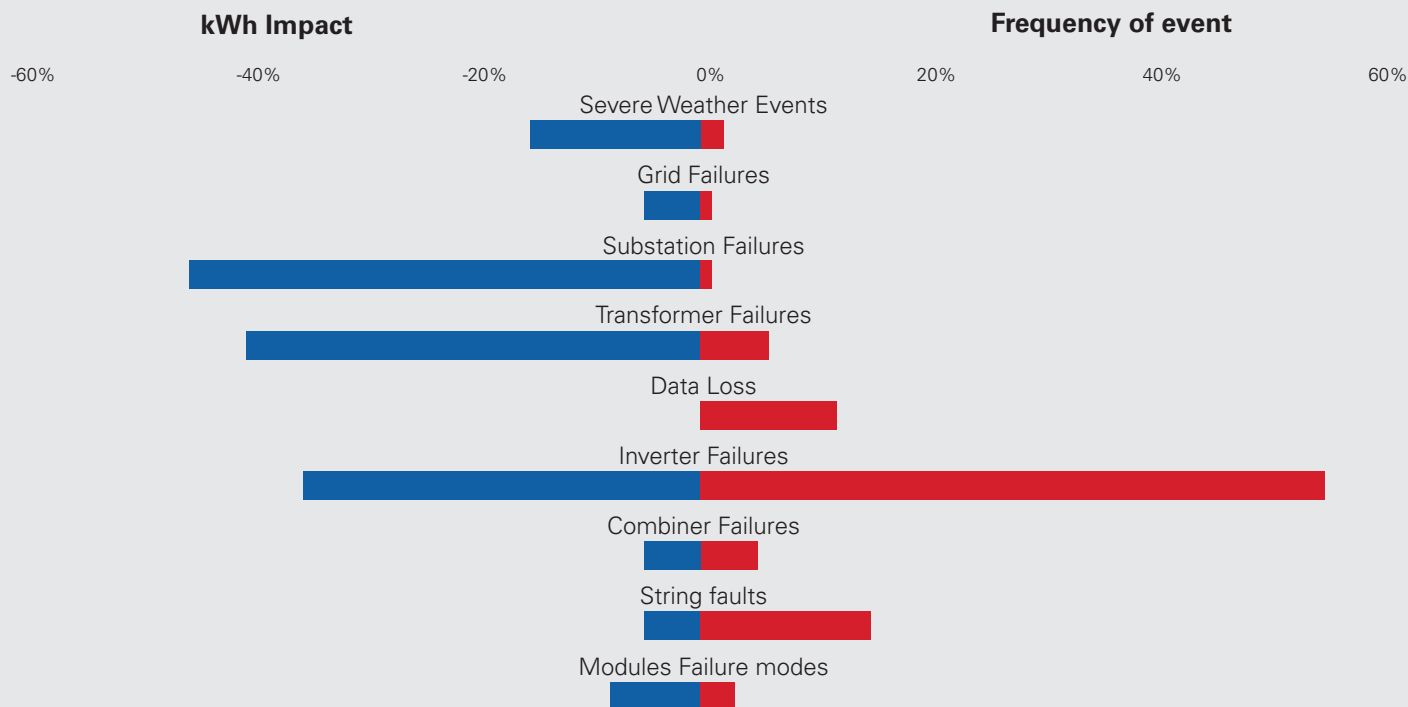


Dropping Levelized Cost of Electricity

Safeguarding Solar PV Revenues



To profit you must mitigate technical risks



Variations depending on climate, quality of engineering, component selection, workmanship, scope & level of maintenance, age of system

Safeguarding Solar PV Revenues



As it may result in extensive losses

No mitigation
measures means
more downtime
> 2%



Up to
5.4
EUR/kWp/year
LOSS

*Based on a high PPA (Power Purchase Agreement) of 0.10 EUR/kWh

Less cash flow & less IRR (Internal Rate of Return)

Safeguarding Solar PV Revenues



Case Study

**"20% of US solar fleet underperformed;
increasing likelihood of loan default by
70% at least once in a 7 year period"***

*Due to optimistic irradiance assumptions, no real time monitoring, underestimated O&M costs, misaligned scopes of contracts, component failures & weather adjustments bias

Safeguarding Solar PV Revenues



Mitigate these risks by:

- ★ Pre-shipment inspections of components
- ★ Design Review & Construction Monitoring
- ★ Qualification of O&M & EPC
- ★ Advanced Site Inspections
- ★ Review of contracts
- ★ Review of yield assumptions

Safeguarding Solar PV Revenues



Added value of mitigating risks

Up to
3.2
EUR/kWp/year
SAVED

Safeguarding Solar PV Revenues



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solar@kiwa.com



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Kiwa field & data experience & analytics



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