

# Solar Bankability Europe Workshop

## Managing Financial Risks in PV Assets during Project Development and Operation

Cologne, 9 – 10 May 2016

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# Project Development Risks

- **Greenfield inspection to identify services, use of area, shading, flooding, contamination**
- **Grid Feasibility Analysis**
- **Planning Feasibility and early contacts with planning authorities**
- **Detailed technical specifications and testing/commissioning protocol**
- **Best practices installation guide as part of the EPC Contract**
- **Procurement: factory audits, quality inspection, testing, certification**
- **Construction Monitoring and key construction phases supervision/witness**
- **Thorough Commissioning and Testing Process**
- **Identify Acceptance Criteria**
- **Exhaustive and Complete Documentation Package**
- **Follow recommendations of local and international standards**
- **Health & Safety**

# Financial Risks

- **Risks relating to counterparty risk: Developer, EPC Contractor, O&M Contractor, Property owners or tenants, Off-takers, Banks, Financial Institutions, Insurance Companies**
- **Payments: Advance, Milestones, Services Fees**
- **EPC Contractors obligations: price, delays, insolvency, warranty**
- **Incentives risks: loosing incentives, reduction**
- **Financial Return: liquidated damages (for delay, underperformances – actual and futures), warranties, rejection rights, termination rights, insurance**
- **Components: warranties, insurers backed warranties, parent company backed warranties**
- **Plants Performances: performance ratio, availability**
- **Other risks: thefts, vandalism, terrorism**
- **Change of laws**

# Risks during Operation

- **O&M: services, performances**
- **O&M Contractor performances: MTTD, MTTR, MTBF, losses reduction, availability, generation**
- **Monitoring PV plants operations**
- **Monitored Data Analysis**
- **Maintenance Plan**
- **Effective Asset Management**

# Contact

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