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Risk Management in Clean Energy Projects

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GIBSON DUNN

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Overview

- Why is it important?
- How are the risks in renewable energy projects different?
- Ways to deal with project risks
- Risk management instruments
- Risk management providers

Types of Risk

- Generic v specific risks
- Generic
 - Fuel supply risk
 - Performance risk
 - Demand risk
 - Macro-economic risks
 - Environmental risk
 - Regulatory risk
 - Political risk
 - Nature
 - Other risks
- Specific
 - Biomass
 - Biogas
 - Geothermal
 - Small hydro
 - Solar PV
 - Solar thermal
 - Tidal/wave
 - wind

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Source: *Financing Renewable Energy, Discussion Paper*, KFW Entwicklungsbank, 2005




Risk Management Mechanisms

- Insurance coverage
- Private credit insurance
- Political risk insurance

Risk Management Mechanisms (contd)

- Use of financial instruments:
 - weather hedges / derivatives
 - Pledge of shares and assets
 - Exchange risk instruments
- Securitization
- Contingent Capital



Risk Strategy: Prevention, mitigation and allocation

- Identify, quantify and assess the consequences
- Determine risk tolerance limits of all parties
- Mitigate
- Allocate
- Risk management is not an after-thought, but an integral part of the financing strategy

Risk Management Providers

- **Multilateral agencies**
- **World Bank Group**
ASTAE, MIGA, GEF, UNEP
- **Government sponsored**
OPIC
- **Development Banks**
ADB, IDB

- **Large Insurance companies**
 - **AIG**
 - **Allianz**
 - **Lloyds of London**
 - **Willis Holdings**