



Financing Renewable Energy Projects in Vietnam

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Asia/Europe

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DEG – Part of KfW Group

DEG provides private sector financing in developing and emerging economies

DEG – A subsidiary of KfW

- Headquartered in Cologne, Germany
- 100% subsidiary of German KfW
- KfW AAA-rated institution owned by the Federal Republic of Germany
- Strong local presence: 19 offices globally, 80+ within KfW



DEG offerings

- Long-term funding (> 4 years) across equity, mezzanine, senior loan funding solutions, and cornerstone anchor investor in private and public placement of bonds
- Size: Debt up to USD 60mm on own books + arranging facilities up to USD 150-200mm, and Equity up to USD 30mm

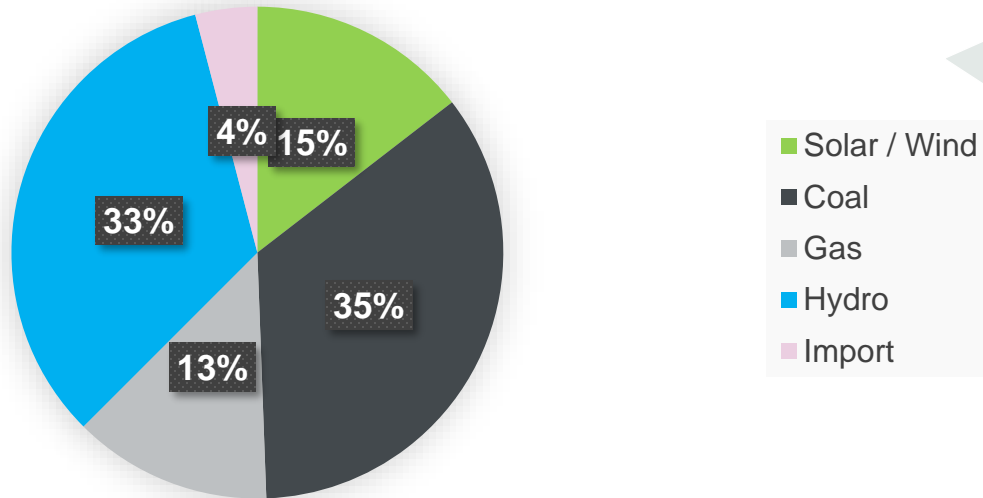
EUR 1.5bn
new commitments 2021

EUR 9.2bn
portfolio across 90+ countries

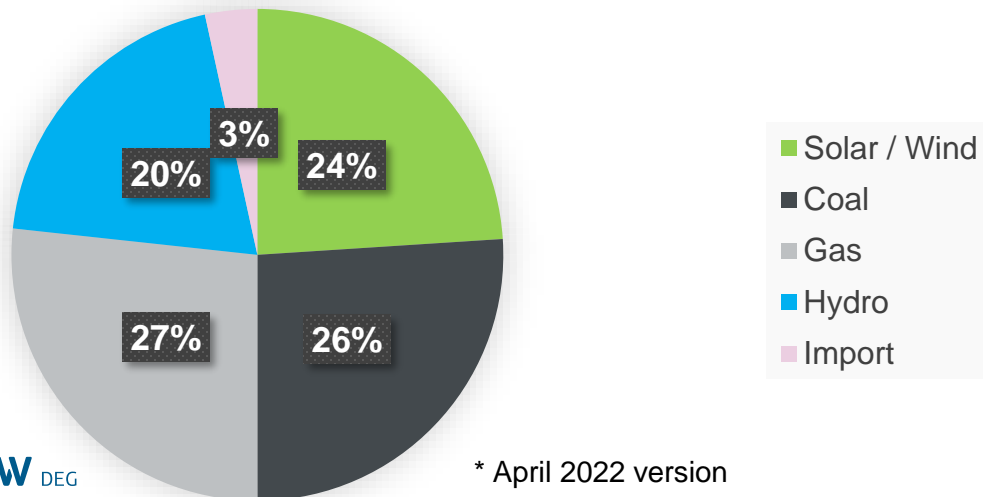
»»» Vietnam Power Sector

Power Sector in Vietnam

Energy Mix 2020 = 69GW



Energy Mix 2030 per draft PDP8* = 146GW



* April 2022 version

➤➤➤ Rapid RE expansion over last 3yrs:
18 GW solar / 4 GW wind capacity

➤➤➤ Electricity demand in Vietnam
projected to grow by 8% annually
through to 2030

➤➤➤ Meeting this power demand will
require an expansion in generation
capacity to approximately 77 gigawatts
(GW) and to enhance electricity grid
substantially (13.000km transmission
line, USD 32bn invest) by 2030.

➤➤➤ Envisaged key changes in new RE
regime / PDP8:

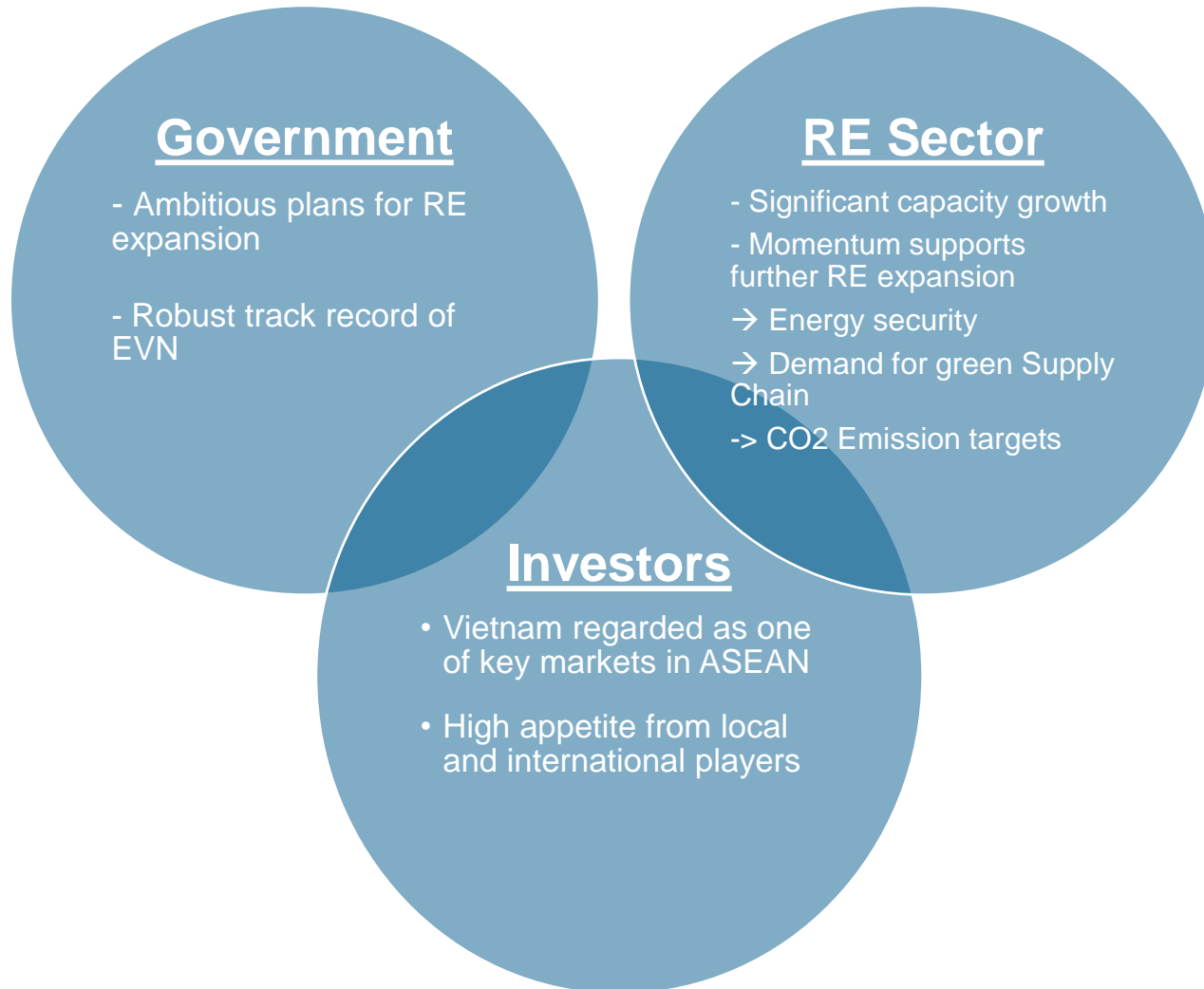
- ❖ 7 GW of offshore wind
- ❖ 1 GW pilot corporate PPA
- ❖ PPA not linked to USD?
- ❖ Auction price for onshore RE?



Renewable Energy Vietnam

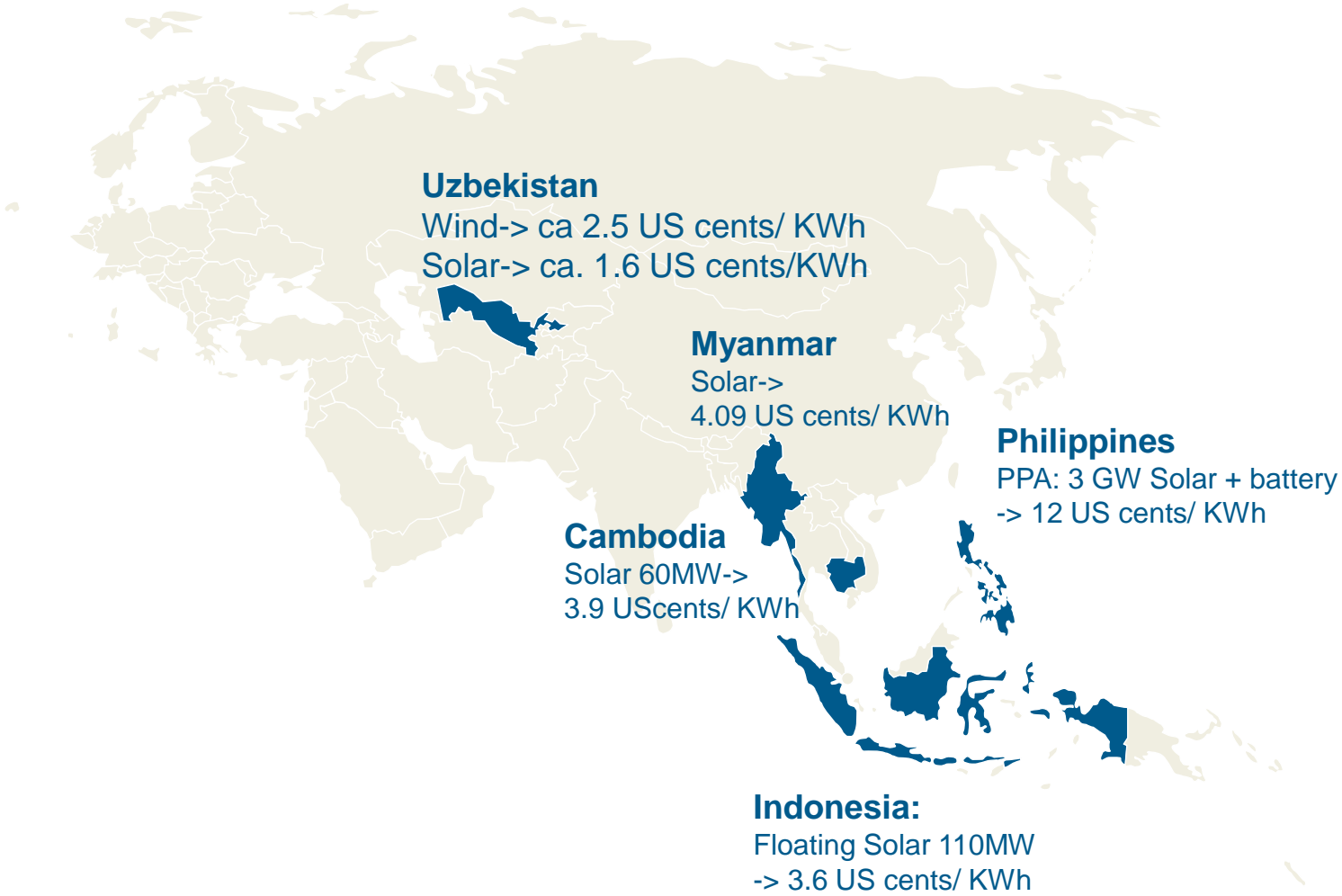
Opportunities and Challenges

Renewable Energy - Opportunities



How Competitive RE has become

Renewable tenders - low bid levels reported across Asia



Renewable Energy - Challenges

Renewable Energy Projects

- Grid Congestion and Curtailment
- Rising EPC Cost
- Supply Chain Challenges (e.g. Inverters)
- Environmental & Social Impact

Bankability of PPA

- Curtailment Risk
- Change of Law / Tariff
- Termination Risk

Financing

- Non bankable PPA hinders international non-recourse long tenor Project Financing
- Local banks: interest rate risks
- Increasing interest rate environment



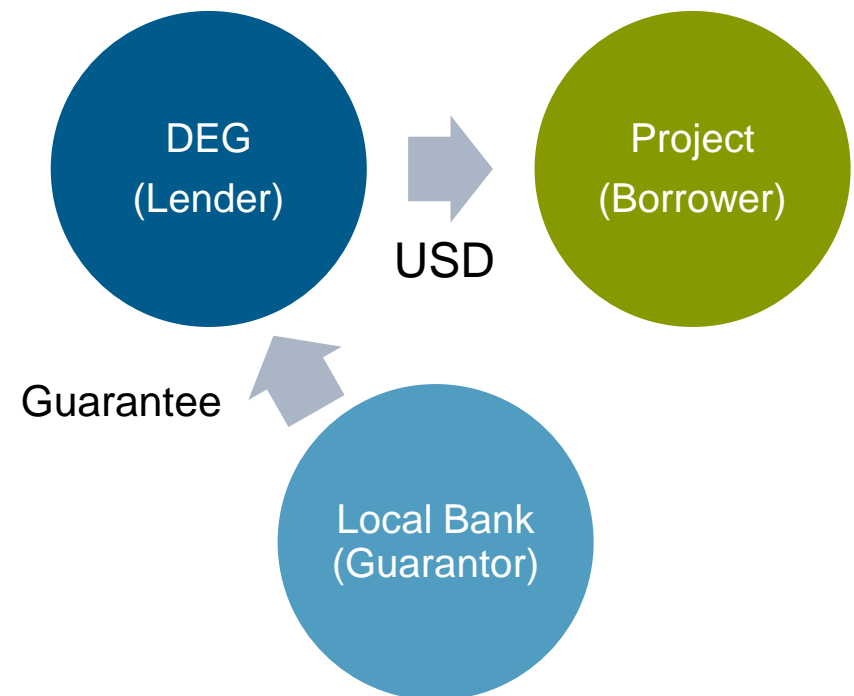
Picture: AdobeStock.com/Cavan

»»» Financing Solutions

IPP / Solar PV Power Plant

50 MW Solar PV Power Plant

- Key challenge: Vietnamese PPA considered weak
- Our Structures:
 - Embedded local bank guarantee to cover PPA risks
 - Included curtailment assumption based on grid study
 - Built in curtailment reserve account
- Benefits
 - Long loan tenor (USD)
 - Long term fixed rate loan
 - DEG BSS support to bring international E&S standard and operations improvement



Business Support Services (BSS), technical assistance

BSS helps clients elevate their business to the next level through targeted initiatives.

Bankability


- **Business plan** development and feasibility studies e.g. **Battery Storage Feasibility Study**
- Organizational **analysis** and **recommendations**
- Improvement of financial **transparency**, e.g. in case of complex intercompany relations

Risk mitigation

- Implementation of environmental and social management system (**ESMS**), selective **E&S advisory**,
- Design & implementation of Management Information System **MIS/ERP** (e.g. SAP/Oracle)
- development of **CSR** programs, stakeholder engagement programs, mediation, etc
- Specific **risk advisory services** (e.g. FX)

Performance

- Resource and energy **efficiency checks**, **supply chain** optimization, introduction of **management systems** (e.g. ISO 9001)
- Development of **HR programme** (recruiting, training, incentive schemes)

 **DEG supports up to 50% of the costs (capped at EUR 200,000 over 3 years) to underline our commitment to your success.**

»»» Thank you for your attention!

Your contact for Asia at DEG

We invest in emerging markets worldwide.

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