Renewable Energy: KfW support in Vietnam

Asia-Europe Sustainable Development Goals and Financing: No Longer Business as Usual

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Introduction of KfW

KfW as German Development Bank

- Founded in 1948, KfW is the German Development Bank promoting growth in Germany and internationally on behalf of German Government.

KfW as Climate Bank

- KfW was the largest financier in the sector last year, with $34.1 billion in clean energy financing comprising 62% of clean energy funding worldwide (Bloomberg, 2017).

- As part of its development co-operation mandate, KfW supports Renewable Energy investments in developing countries.

KfW in Vietnam

- Total portfolio in energy sector (on behalf of German Government): Ca. 1 bn EUR with a focus on Energy Efficiency and Renewable Energy projects with Government utility EVN.

Additional annual Generation: 5,111 GWh

Equals the consumption of 1.5 million German households **
Renewable Energy in Viet Nam: High targets, regulatory challenges

**Political targets**
- Ambitious targets, set in March 2016 against background of Nationally Determined Contribution
- However: Energy demand is growing fast, and fossil fuels will continue to play important role

**Regulatory environment**
- In the past, only conventional Hydropower investment by state owned companies
- Energy sector in transition to more liberal market structure
- Feed- in tariffs for most RE technologies; Guaranteed fixed price for renewable energy over 20 years [between 5 – 9.3 USDc/kWh]
- Additional costs (over system marginal costs) born by utility
- No auctions yet, no guaranteed credible offtake obligations or renewable energy funds
- Low energy tariffs, power utility as offtaker not perceived as creditworthy

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**Vietnam Renewable Energy Targets (MW)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Bioenergy (estimate)</th>
<th>Solar power</th>
<th>Wind energy</th>
<th>Hydropower (inc. large)</th>
<th>Renewable Energy in %</th>
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<tbody>
<tr>
<td>2015</td>
<td>15,000</td>
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<tr>
<td>2020</td>
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<tr>
<td>2030</td>
<td>50,000</td>
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Project example from Viet Nam: Phu Lac Wind Park

Opportunities:
- Ambitious renewable energy targets adopted by Government of Viet Nam
- Good technical potential for wind power

Challenges
- Purely privately developed wind power projects not forthcoming:
- Feed-in tariff (7.8 USDc / kWh) too low in the Vietnamese financing and environment
- Power purchase agreement does not meet international standards
- Low experience with new technology

Project measures:
- Construction of 24 MW wind park in Binh Thuan Province as pilot and showcase project applying the new regulation and FiT

Cost and financing:
- 35 m EUR development (ODA) loan

Project Partner:
- Thuan Binh Wind Power (EVN subsidiary & private minority shareholder)