Danish IFU financing of renewables in Ukraine: lessons learnt and further plans

Renewable energy and energy efficient modernization of industry

Kyiv, 23 November 2017
IFU IN BRIEF

Danish government-owned fund, operating on commercial terms

12.1% The average annual gross return on share capital (2009 - 2016)

Promotes economic and social progress in developing countries

Provides risk capital and advice for projects having a Danish interest

Established in 1967

Active portfolio of 212 projects
Average commitment of 7 - 10 years

146 investment countries
40 – 50 annual investments
New and additional financing

2.5 bn EUR invested in share capital and loans

23 bn EUR

Leverage/mobilisation of capital: factor 8-9

Total contracted investments of more than
IFU CONTRIBUTES TO THE 17 SUSTAINABLE DEVELOPMENT GOALS

General direct outcomes

- Jobs, taxes, female employment, youth employment, etc.

Sector-specific direct outcomes

- Limited CO2 emissions, number of assisted small farmers, etc.

Input and output

- Technology level, staff training, ESG assessment, etc.

Indirect contributions

- Limited CO2 emissions, number of assisted small farmers, etc.
### IFU'S INVESTMENTS

#### EUROPE (ex. Ukraine)
- Investments (no.): 379
- Total investments (DKKm): 41,652
- IFU investments (DKKm): 6,021
- Actual direct employment (people): 60,660

#### UKRAINE (since 2000)
- Investments (no.): 51 (21 active)
- Total investments (DKKm): 2,662
- IFU investments (DKKm): 663
- Actual direct employment (people): 4,597

#### ASIA
- Investments (no.): 385
- Total investments (DKKm): 46,720
- IFU investments (DKKm): 5,308
- Actual direct employment (people): 85,952

#### LATIN AMERICA
- Investments (no.): 111
- Total investments (DKKm): 8,274
- IFU investments (DKKm): 1,516
- Actual direct employment (people): 25,149

#### AFRICA
- Investments (no.): 243
- Total investments (DKKm): 54,616
- IFU investments (DKKm): 3,703
- Actual direct employment (people): 45,960

- Active minority investor
- Equity in the range of EUR 2m – EUR 15m
- Agreed exit strategy
Typical investment

**IFU**

Equity

Wind park

Loan/equity

**Danish interest**

Local bank

Loan

Local investor

Equity

Development bank

DFIs

* Danish investor
* Danish company supplying goods, technology, know-how, management or services;
* Indirect financial participation to the project company;
* Danish company sourcing products from the project company;
* Danish participation on the board or in the management team of the project company;
* Use of state-of-the-art Danish technology in the project;
* Direct or indirect job creation in Denmark;
* Etc.
CASE: Karpatskyi Wind, Ukraine

### KEY FACTS

<table>
<thead>
<tr>
<th>Project type</th>
<th>Wind farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Status</td>
<td>In operation</td>
</tr>
<tr>
<td>Fund participation</td>
<td>EUR 10.5m</td>
</tr>
<tr>
<td>Total investment</td>
<td>EUR 33.8m</td>
</tr>
</tbody>
</table>

- 6 x 3.45 MW Vestas turbines
- 10-year service and availability contract with Vestas
- Green tariff based PPA with Energorynok till YE2029
- Constructed during approx. 1 year
- Co-financed by EBRD and NEFCO
Pipeline: 2 x 30MW solar PV projects in Central & Western Ukraine

- Experienced Ukrainian sponsors
- Chinese panels and inverters
- Green tariff based PPA with Energorynok till YE2029 (est.)
- Secured grid connection
- Estimated construction period: 0.75 year
- To be co-financed by EBRD and NEFCO
- Paving the way for other investors
Lessons learnt and challenges

• Land allocation / Purpose of the land

• Location risks (Eastern Ukraine is more risky)

• Lack of available equity financing / Too much dependence on DFIs

• Reputation risks: who are the local partners?

• Who benefits the most from green tariffs? Who pays for these benefits?

• Whether green tariffs will survive till YE2029?

• Can Ukrainian judicial system protect asset owners?

• Is it safe to make direct equity investments to Ukraine, without going through foreign holding companies?

• Chronobyl solar? This should be extremely transparent to attract international finance

• Offshore wind?
IFU IN UKRAINE – INCREASING COMMITMENT

- Ukraine is ranked high for Denmark
- Investment development continues despite low economy
- Neighborhood Energy Investment Fund of DKK 130m for Ukraine and Georgia (2018-20)
- Danida Business Finance programs for public sector
- Grants for energy efficiency and Danish SMEs working in Ukraine
- Fruitful cooperation with EBRD, NEFCO, BSTDB
EUROPE AND MENA TEAM

In Copenhagen:
- Lisbeth Erlands, Vice President, Europe & MENA
- Klaus Prebensen, Investment Director
- Anders Paludan-Müller, Investment Director
- Anastasiia Erichsen, Investment and Administrative Supporter

In Kiev:
- Olexiy Parkhomchuk, Investment Director
- Lars Vestbjerg, Adviser

How to start? – Give us a call (ifu.dk) and be specific