

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

Renewable energy and energy efficient modernization of industry Kyiv, 23 November 2017





VESTMENT FUND FOR VELOPING COUNTRIES

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



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









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

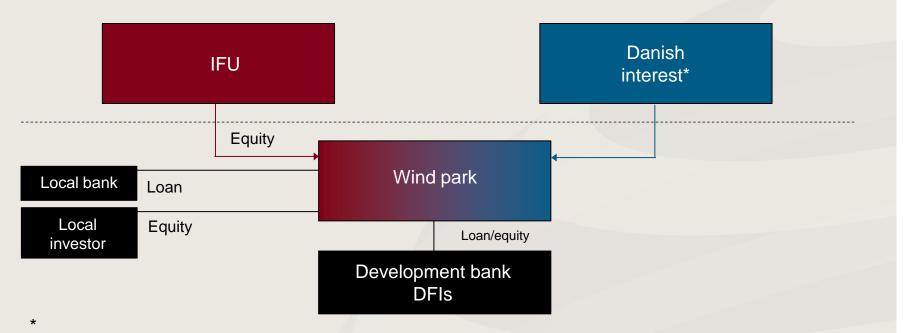
| Investments (no.): | 243 |
|------------------------------------|--------|
| Total investments (DKKm): | 54,616 |
| IFU investments (DKKm): | 3,703 |
| Actual direct employment (people): | 45,960 |

• Active minority investor

- Equity in the range of EUR 2m EUR 15m
- Agreed exit strategy



Typical investment



- 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

| Project type | Wind farm |
|--------------------|--------------|
| Country | Ukraine |
| Status | In operation |
| Fund participation | EUR 10.5m |
| Total investment | EUR 33.8m |

- 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



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

