

A photograph of several white wind turbines against a blue sky with scattered white clouds. The turbines are positioned on the left side of the slide, with the largest one in the foreground and others receding into the distance.

Climate Financing for a Low Carbon Tomorrow

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Workshop on Energy Union implications and
implementation in the Nordic countries and Baltic
States

Tallinn, 12 May 2016

NEFCO in brief

- International financial institution established by the Nordic countries
- Loans and equity investments for environmental projects
- Operating in Eastern Europe, around the Baltic Sea as well as globally – Fund specific mandates
- Funds to a total value of EUR 501 million
- Headquartered in Helsinki with 34 employees
- Locally contracted staff in Russia and Ukraine

● Current
Geographic
mandate

Helsinki



The future we want : a low carbon tomorrow

- Climate change is happening, and demands a response, a transition to a low carbon tomorrow
- The next 15 years will be an era of great progress and growth, in which we harness technological, financial and human resources
- Emissions need to peak and then reduce dramatically – we need to act quickly to avoid "lock-in"
- Effective adaptation is critical to deal with climate effects (climate resilience) but is not enough, near term mitigation is required
- Climate change therefore offers great risks to our society and economy – but also great opportunity
- Public climate finance has a key role to play

Drivers of change

- Business as usual is not an option as there will be structural changes in the global economy
- The Paris Agreement provides a framework for climate action, but is only a starting point for progressively stronger commitments over time
- Populations across the world are demanding that politicians act decisively, i.a. for environmental, social and health reasons
- Demand for clean technology is growing, risks associated with fossil fuel generation & other stranded assets are increasing
- The financial markets are starting to price-in this risk, Nordic organisations are leading the decarbonisation movement

Nordic/Baltic areas of opportunity

- Nordic/Baltic countries, regions, companies and consumers are already at the forefront of low carbon development
- Working with developing countries to leapfrog directly to a low carbon path, with tech-transfer but also knowhow (innovative climate finance, new business models, policy development etc)
- Using public finance to catalyse, mobilise and scale up private sector investment – directly and through multilateral channels
- Small and medium sized projects (SMPs) as engines of growth, demonstration, dissemination and scaling up
- NEFCO's experience shows significant benefits in terms of policy development, capacity building & technology transfer – to mutual benefit of Nordic and developing countries

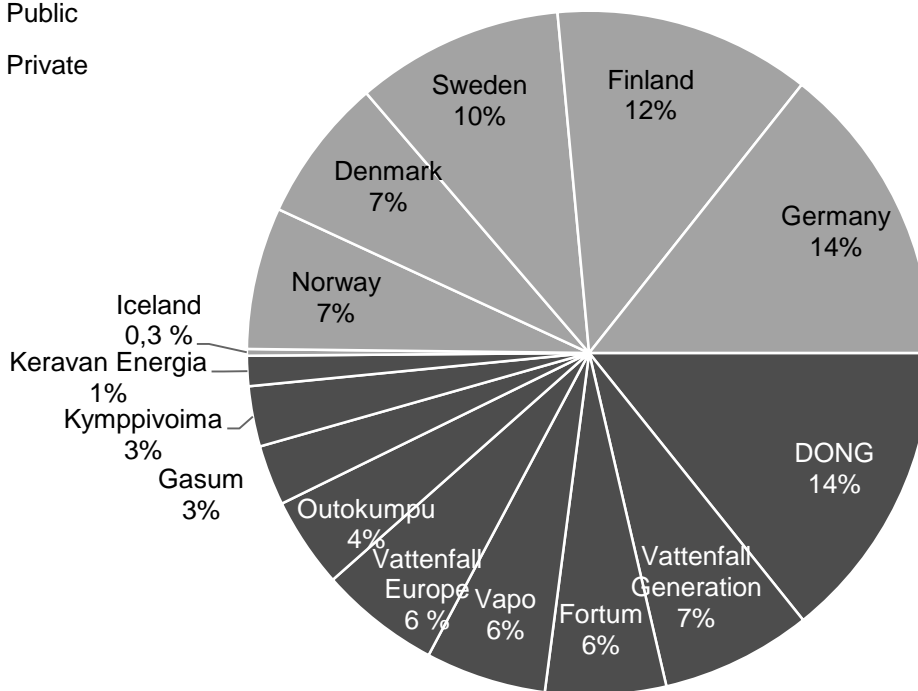
Examples of Financial Interventions from NEFCO

TGF Fund Participants (JI, EUR 35 million) 2004 - 2013

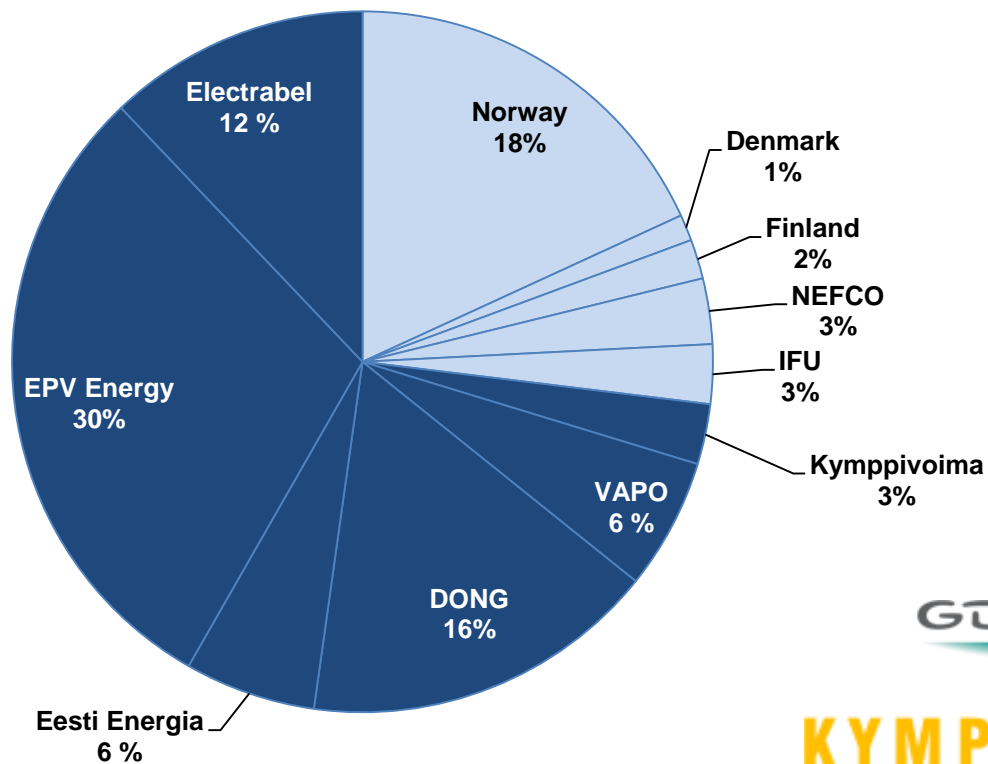
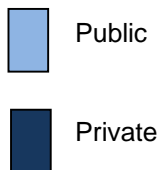
Testing Ground Facility (TGF) Investors

Total: 35 million euro

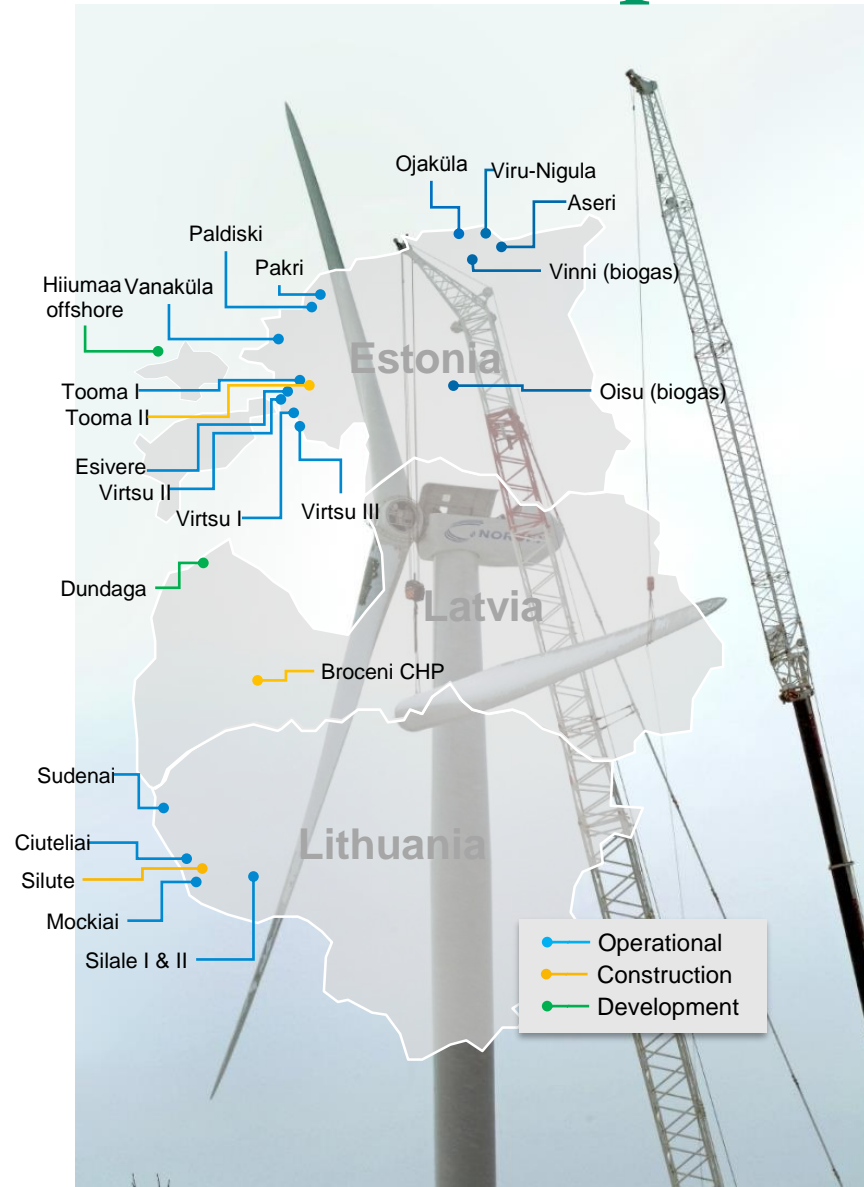
- Public
- Private



NeCF Fund Participants (CDM,JI EUR 165m) 2008 - 2020



Case: Wind power in Baltic Countries



- Nelja Energia – 4Energy
- from pioneering wind venture to leading renewable IPP in the Baltic states
- Vardar Eurus (77%) Joint-Venture Vardar AS of Norway and NEFCO, cofinancing with Estonian Investors
- 233 MW Installed capacity, 66% Estonia, 33% Lithuania
- 70 MW under construction
- from project financing to bonds listed at Oslo stock exchange

Case: Biogas in Baltic Countries



- Biogas CHP in Oisu and Vinni settlements in Estonia
- Heat sold to local network, electricity to grid with feed-in tariff
- Biofond OÜ – investment fund for biogas in all Baltic Countries.
- NEFCO owns 30%, Nelja Energia 70%
- Project companies co-owned with local stake holders
- 20% equity, 20% EU- support
60% bank financing

Case: Production of bioenergy in Grodno, Belarus



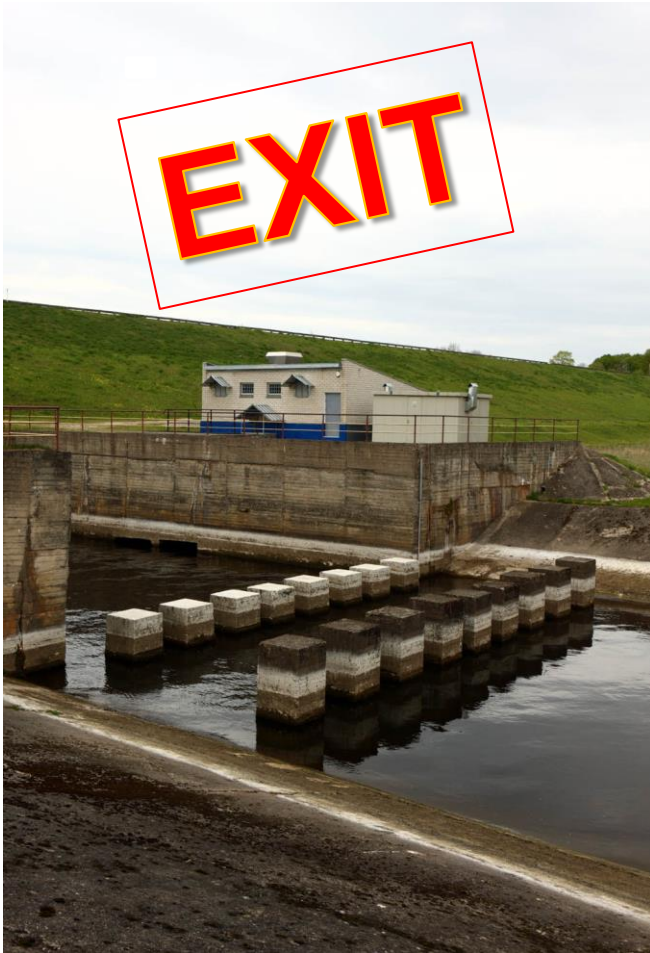
- Rindibel was established in 2008 as a joint venture between Rindi Energi, Volkovysk LesHos, Grodno State Industrial Forestry Association and NEFCO
- The business concept is to turn currently unutilized forestry waste into marketable bio-fuel and to provide modern forestry services to local forestry associations.

Case: Production of bioenergy in Grodno, Belarus



- Rindibel operates two harvesting lines (harvester - forwarder) and a mobile chipping machine.
- Monthly harvesting volumes 7,500 cubic metres per month
- The company is profitable
- NEFCO owns 35% of the shares in Rindibel
- The biomass is mainly delivered to Poland

Case: Baltic Hydro Energy



- Holding company established 2001
- 9 SHPP with total capacity 4,1MW and 14,1 GWh average output
- Irrigation dams and water reservoirs
- modernizing and upgrading of turbines and generators

Case: Ekoresursai – Lapes Landfill, Kaunas, Lt



Project: Landfill gas collection and utilisation for heat (1.4 MW) and power (1.1 MW) generation

Category: Waste-to-energy

Baseline: Methane emissions from landfill until 1.1.2012, and heat and power generation with natural gas and mazut

Emission reductions: 152,000 tCO₂e (2008-12)

Financing: Own equity, NEFCO's subordinated loan, Carbon Credits (JI ERU)

Carbon finance: >25% of total, 40% advance payment

Project status: Operational, NEFCO exit in 2013

Sustainable development benefits:

- ⌘ Increased safety and less local pollution
- ⌘ Energy security and demonstration of technology
- ⌘ Local employment opportunities

Energy savings loans in Ukraine



- The Energy Savings Credits Programme is a small loan programme which has been operational in Ukraine since 2011.
- The ESC focuses on energy efficiency measures such as insulation and temperature controls in municipal buildings including schools and hospitals, and offer loans up to EUR 400.000, including local currency.
- The dimensions and outcomes of the programme are illustrated in the figure.
- The ESC is an example of aggregating small scale, replicable actions

Success factors and lessons learned

- Predictable framework and credible support regime
- Industrial investor with competence and solid financial resources – strong local team
- Quality in procurement contracts and suppliers



Conclusions

Building bridges to the future –1

- Transitioning to a low carbon tomorrow will require the harnessing of markets, with an enhanced role for carbon pricing
- Short lived climate pollutants and the Arctic region will be key policy imperatives for the Nordic countries
 - leadership is already been shown through the CCAC and the Arctic Council PSI
- Public finance can catalyse ever larger flows of private investment through *inter alia*
 - improving the investment climate (e.g targeted technical assistance in areas such as fossil fuel subsidy reform and renewable energy policy);
 - de-risking scaled-up financial interventions; and
 - by encouraging behavioural change such as decarbonisation of portfolios.

Building bridges to the future – Conclusions 2

- In all of these areas, the Nordic governments are leading by example, through their financial and technical support, channelled through both multilateral and bilateral means.
- NEFCO's experience of the past 25 years has also illustrated the benefits of small and medium sized projects
 - achieving favourable and cost effective environmental and climatic outcomes; and
 - as “engines of growth” - driving innovation, investment and job creation
- In the journey to a low carbon tomorrow, there are significant opportunities for replicating these success stories and business models in the developing and industrialising world

Contact

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