

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 one in the foreground and others receding into the distance.

Financing environmentally sustainable solutions in Karelia

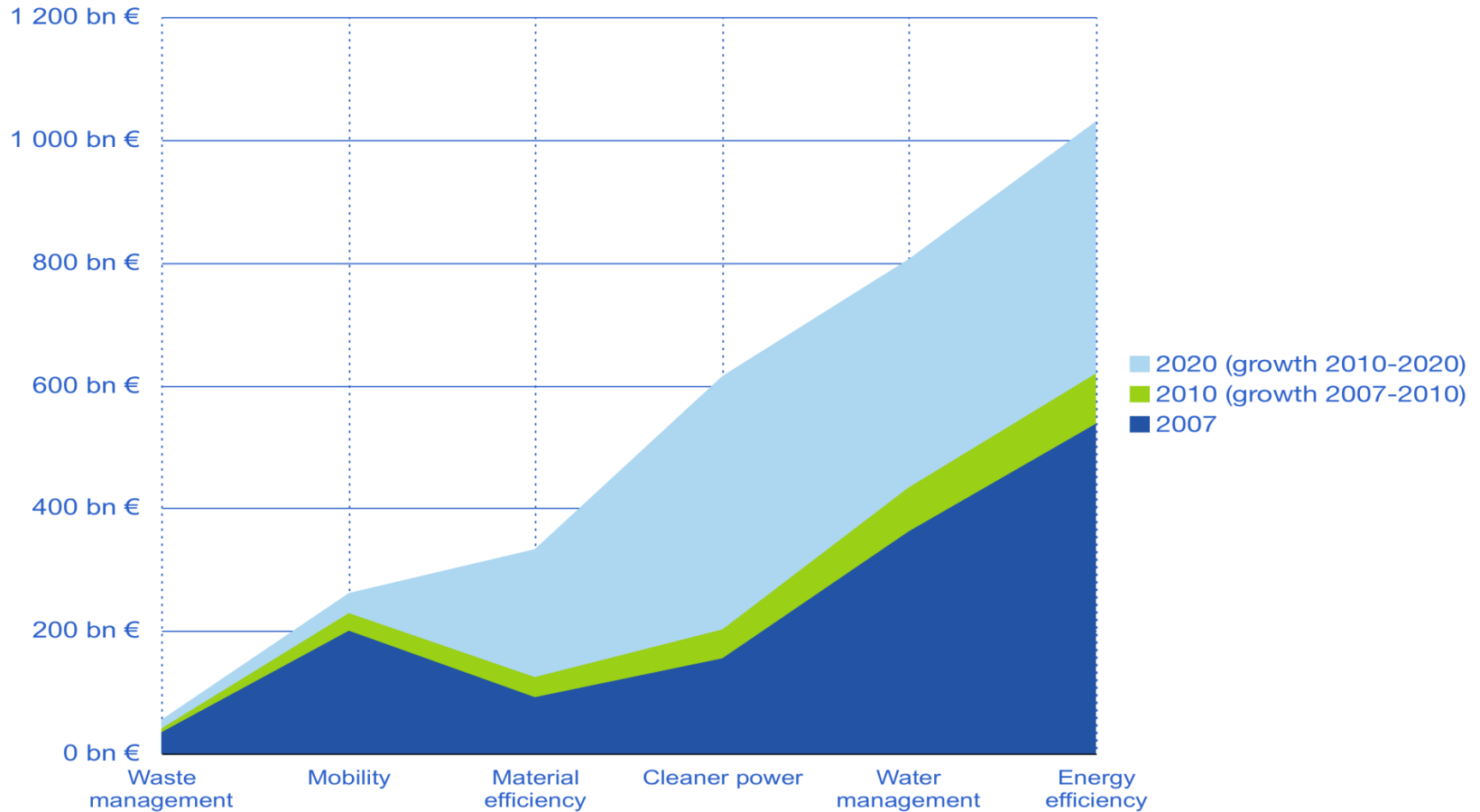
Mikael Sjövall, Communications Manager
Nordic Environment Finance Corporation
Petrozavodsk, 31 May 2011

Tracking environmental investments

- environmental investments in Eastern Europe have an annual growth rate of approximately 6.6 %
- the total turnover for environmental investments in Eastern Europe is valued at EUR 12 billion
- the global market for cleantech business is valued at EUR 600 billion and the annual growth rate is estimated at 10 %
- the international financial institutions important players in environmental lending



The global cleantech market



NEFCO in brief

- International financial institution established by the Nordic countries
- Loans and equity investments for environmental projects in Eastern Europe
- Funds to a total value of EUR 440 million
- Headquartered in Helsinki with 27 employees
- Locally contracted consultants in Russia and Ukraine

 Geographic mandate



Our journey so far

1990 – NEFCO is established, first six projects financed in 1991

1995 – The Nordic Environmental Development Fund

1996 – NEFCO's capital is doubled from €40 to 80 million

2000 – 122 projects financed in Eastern Europe

2008–2009 NEFCO Carbon Fund, Nordic Climate Facility and BSAP Fund

2010 – Over 400 projects financed

1990

2010

Financial criteria for projects

- The project has to be implemented within NEFCO's geographic mandate
- The project has to deliver measurable reductions of environmentally harmful emissions
- Only financially viable, bankable investments
- Tested technology must be applied
- Ecological cost efficiency and Nordic interest



Focus on climate issues, curbing eutrophication in the Baltic Sea as well as mitigation of toxic discharges in the Arctic region.



Verksamhetsland

Distribution by country



- Estland Estonia 9,8 %
- Lettland Latvia 12,1 %
- Litauen Lithuania 10,3 %
- Polen Poland 11,3 %
- Slovakien / Tjeckien
Slovakia / Czech Rep. 1,1 %
- Ryssland Russia 48,7 %
- Ukraina Ukraine 6,8 %
- Vitryssland Belarus 0,1 %

The Baltics

~160 projects

Main sectors: water,
cleaner production,
energy, agriculture

Russia

~150 projects

Main sectors:
energy, water,
cleaner production

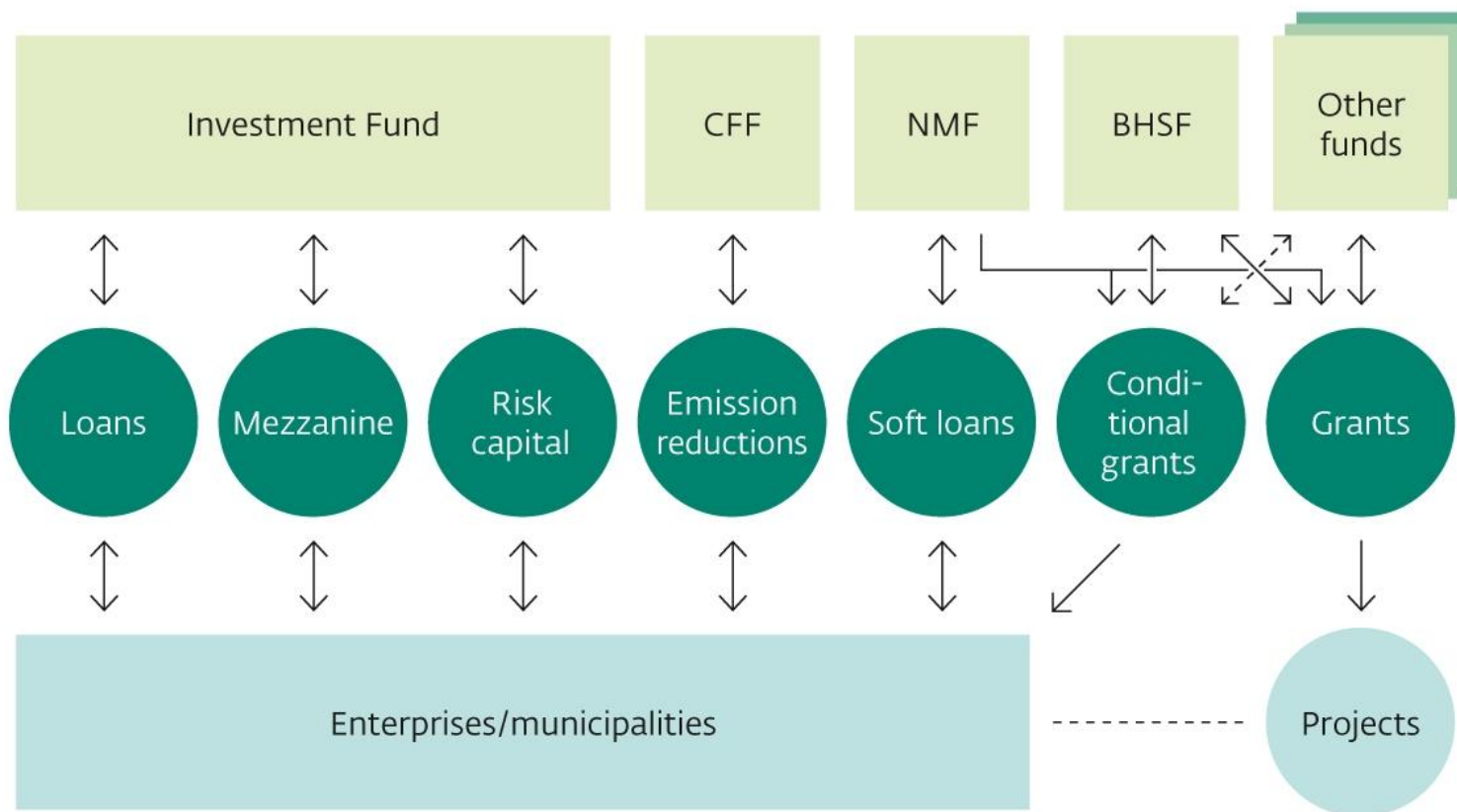
Ukraine

~85 projects

Main sectors:
energy, cleaner
production,
agriculture



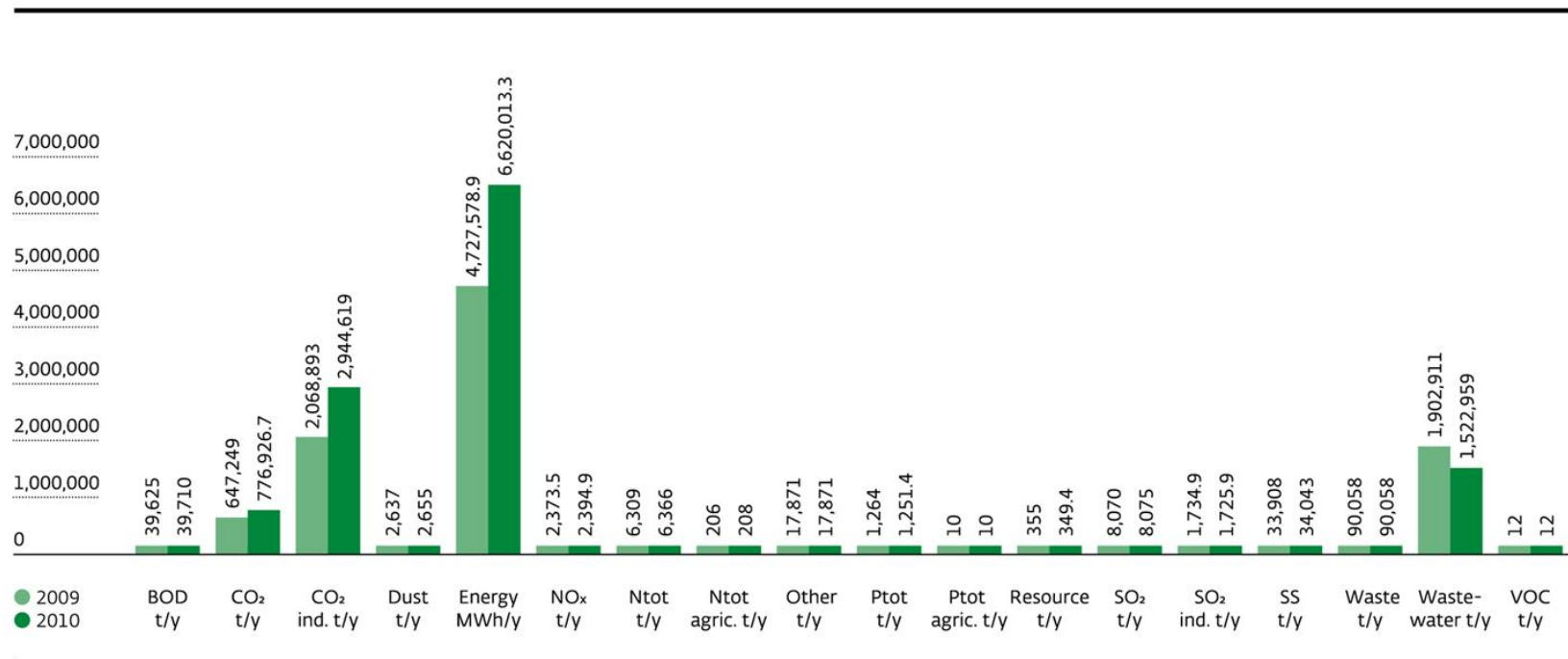
NEFCO's funding resources



NEFCO's emission reductions 09/10

Figur 1 NEFCO — Totala reduktioner

Figure 1 NEFCO — Total reductions





Results of our work in 2010:

CO₂: 3 million tonnes



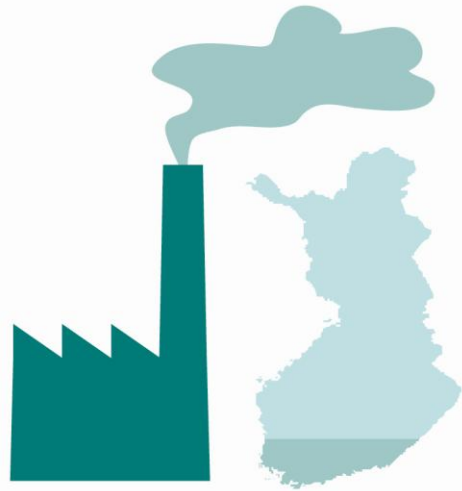
= 6.2 million people flying from Helsinki to New York

P: 1,251 tonnes



= untreated wastewater from 1.7 million people

SO_x: 8,075 tonnes



= 1/10 of the total SO₂ - emissions in Finland in 2007



**Baltic
Sea**



Background

- Concern for emissions of toxic substances and eutrophication
- Environmental hot spots identified by the Helsinki Commission
- The need for clean drinking water
- The implications of intensified agriculture



NEFCO

- Finance for wastewater treatment plants
- Small scale credits to agriculture
- Projects related to manure management
- Northern Dimension Environmental Partnership (NDEP)

Case: Wastewater treatment in Petrozavodsk



- The insufficient sewage treatment in Petrozavodsk identified as an environmental hot spot
- Negotiations underway with Petrozavodsk Utilities System
- Upgrades of both the water supply and the wastewater treatment
- Financiers: PKS, NEFCO, NIB, NDEP
- Expected costs: EUR 28 million



Case results:
an annual reduction of 75 tonnes of phosphorus...

...which
corresponds to the
discharges of
untreated
wastewater from
150,000 persons
per year





Climate



Background

EU: 20% reduction until 2020

Norway: carbon neutral by 2050

Iceland: 50–75% reduction by 2050

Kyoto Protocol until 2012

EU Trading System (ETS)

Uncertain condition post 2012



NEFCO

Investments in energy efficiency and renewable energy

Two carbon funds

Cooperation with NDF on Nordic Climate Facility and ProClimate

Active Nordic work related to climate change

Case: Methane capture from the waste dump in Petrozavodsk



- Some 590,000 cubic metres of waste is brought to the tip every year
- Project proposal for extracting methane and removing hazardous waste
- Possible financiers: Autospetsrans, NEFCO, NDEP, the Finnish MoE
- Recycling of paper and cardboard

Case results:
reduced emissions of carbon dioxide by 27,000 tonnes...

...which
corresponds to the
emissions from
28,000 flight trips
from Helsinki to
New York (back
and forth)



Case: Promoting energy efficiency in Novodvinsk



- The project covered refurbishment of municipally owned buildings in Novodvinsk
- Measures: upgraded boilers, heat exchangers, new thermostats, thermally insulated windows
- savings: 300,000 RUB/year
- The school's energy consumption fell by 59% per year



Case results:
Reduced CO2 emissions by 218 tonnes/year...

...which
corresponds to
travelling
30 times around
the earth by car



Why does it pay off to co-operate with NEFCO?

- NEFCO's financing reduces the project risks
- NEFCO has long and solid experience of financing projects in Russia
- we offer a wide range of different financial instruments
- environmental and financial expertise, local presence in Northwest Russia
- useful networks to environmental players in the Nordic region and Russia

Thank you for your time!

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