



NEFCO

Nordic Environment Finance Corporation

En finansiell partner i Öst

Ulf Bojö
Senior Investment Manager
NEFCO

NEFCO in brief

● Geographic mandate

- 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 549 million
- Headquartered in Helsinki with 32 employees
- Locally contracted staff in Russia and Ukraine



Gap filler. NEFCO fills financial gaps which are not covered by commercial banks.





Vladimir Deboj



Bogdan Dubas

Old Dimension

Donetsk

400 IHS, Pumps, pipes
Reduct. CO₂, 56 000 tons
Boiler house rehab
CHP
Corp Dev programme.

Horlivka

Street lighting.

Kramatorsk

EE in kindergardens.

Crimea

Replacement of agricultural equipment.

New Dimension

Donetsk

Donetsk People's
Republic. " All Russians should be
together!" A flag of Stalin.
Occupation of government
buildings

Horlivka

Deputy of city council kidnapped

Kramatorsk

Military recapture airport.

Crimea

De facto **Russia**

Despite difficulties we continue to work as possible with Green Growth.

NEFCO enables exports of Swedish green technology to the neighbouring region.

NEFCO meeting point in Stockholm.

Cooperation with:

- Swedish Cleantech,
- Cleantech Scandinavi
- Stockholm Cleantech
- Swedish Companies
- Swedish Authorities
- Sida TA support



Distribution by sector and country

INVESTMENT FUND

Distribution by sector



- Water 27 %
- Agriculture 1 %
- Waste 3 %
- Energy 33 %
- Industry 36 %

Distribution by country



- Estonia 9 %
- Latvia 11 %
- Lithuania 10 %
- Poland 11 %
- Russia 45 %
- Ukraine 11 %
- Belarus 2 %
- Slovakia & Czech Rep. 1 %

NORDIC ENVIRONMENTAL DEVELOPMENT FUND (NMF)

Distribution by sector



- Water 17 %
- Agriculture 10 %
- Waste 14 %
- Energy 33 %
- Industry 26 %

Distribution by country



- Estonia 5 %
- Latvia 8 %
- Lithuania 7 %
- Poland 2 %
- Russia 52 %
- Ukraine 23 %
- Belarus 1 %
- Other 2 %



Examples of emission reductions in 2012



CO₂
3,6 million tonnes

=

11.7 million persons
travelling by airplane,
back and forth, from
Helsinki to Paris



SO_x
4,212 tonnes

=

22 % of Norway's
total SO₂ emissions
in 2011



Electricity reduction
8,412 GWh

=

The annual electricity
consumption of
1.3 million people in
Denmark



P
1,206 tonnes

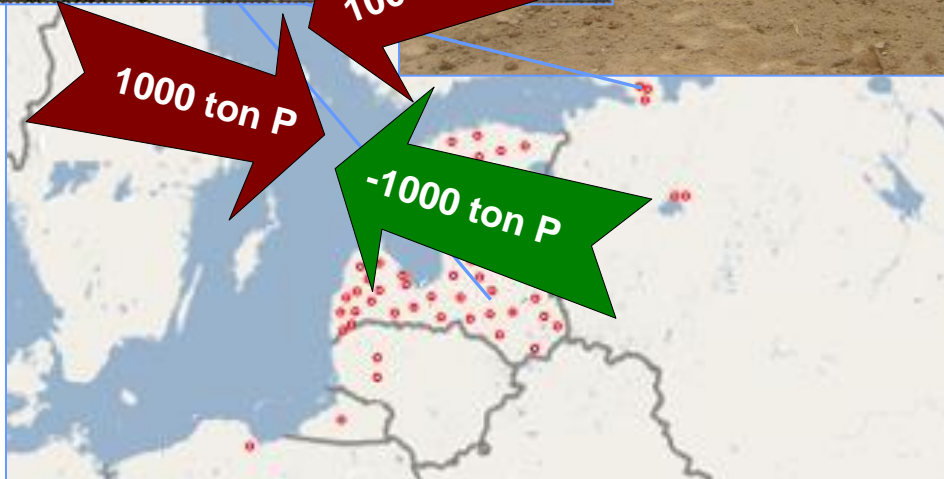
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Untreated waste-
water from 1.8
million people

Symbols: "Faucet" by Kenneth Von Alt, "Eiffel Tower" by Camila Bertoco, "Lightning" by Ryan Oksenhorn, from thenounproject.com collection.

NEFCO's Project Requirements

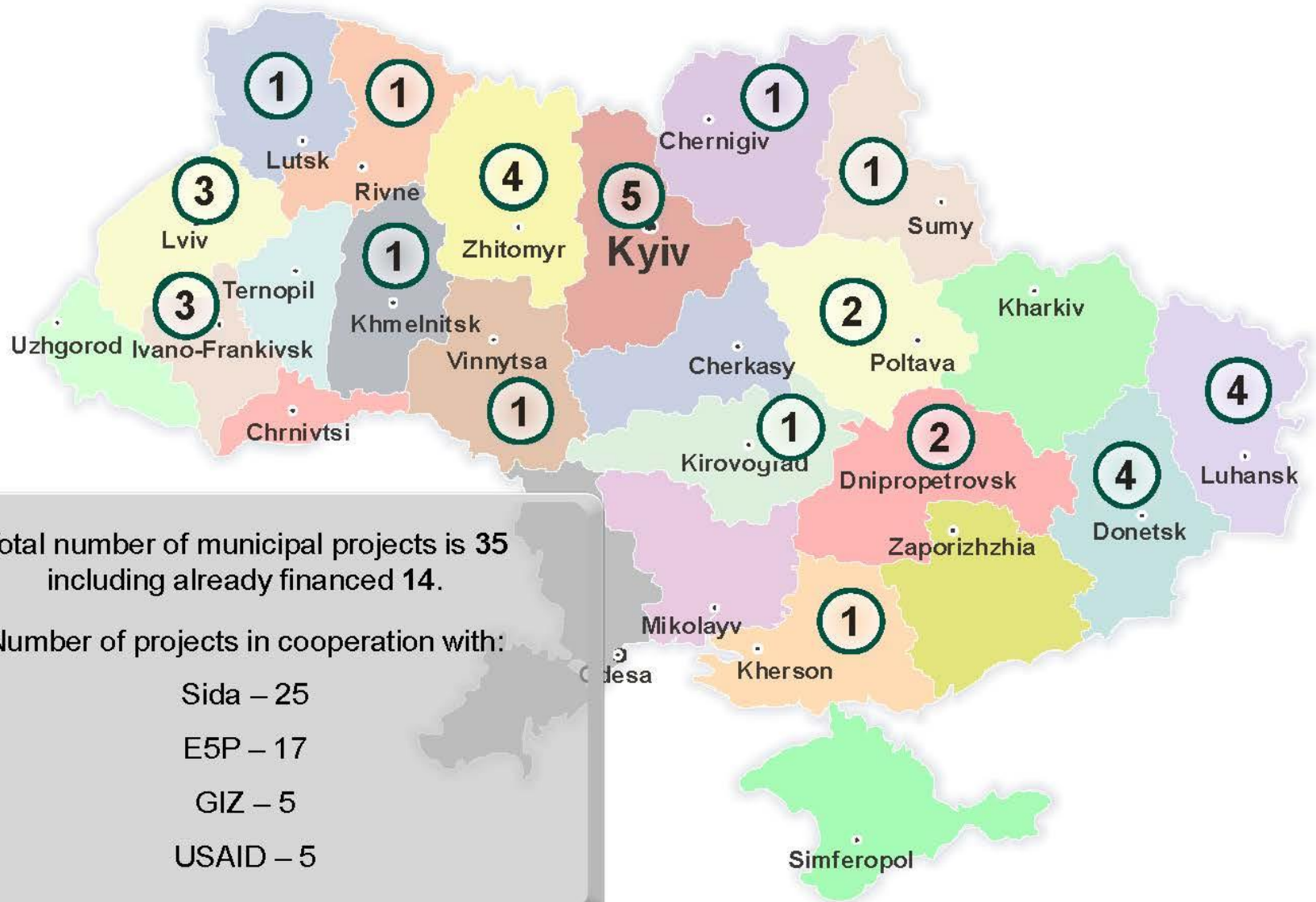
- The project has to be "bankable" – NEFCO funding 100'-5 000' EUR
- Financial Sustainability
- Environmental Sustainability
- Cost Efficiency/Unit Abatement Cost
- "Nordic interest" above 500 000 EUR Private/Public
- Geographic Mandate, Traditional project financing Ru, By, Ukr, (Ge, Mo, Arm).
- Carbon financing - "Worldwide"



District heating Ukraine - E5P

- **3-25 MEUR projects:** Kiev, Lugansk, Zhytomyr, Severodonetsk, Donetsk, Rivne, Lviv.
- **DemoUkraina** projects: Donetsk, Ivano-Frankivsk, Vinnytsia, Zhytomyr, Alexandria, Kiev, Kamyanets-Podilsky, Kriyviy Rig, Poltava and Severodonetsk
- **Eight** projects approved, remaining two underway
- **Three** sets of financing agreements signed (Zhytomyr, Vinnytsia, Oleksandria)
- Procurement ongoing in all approved projects except Severodonetsk.

NEFCO's municipal projects in Ukraine



Total number of municipal projects is 35 including already financed 14.

Number of projects in cooperation with:

Sida – 25

E5P – 17

GIZ – 5

USAID – 5

Case: Credit lines to Banks in NEFCO's Countries of Operation



- Credit programmes with:
- Bank Lviv
- Mega Bank
- MTB bank
- Prime Finance Bank
- BNB
- Bank Europejsky

Total 13,5 MEUR

In pipeline 7 Russian banks
approximately 30 MEUR

Fund for new sustainable technology – Nordic Reference Fund

- NEFCO and Private Equity Fund manager Maj Invest A/S (DK) to establish a closed-end investment fund, with up to MEUR 100 in committed capital. (NEFCO MEUR 5)
- Fund will invest in Nordic SME's ready for referencing of their technologies internationally in NEFCO's countries of operation + remaining BRICs.
- Environmental technology should be "best fit" to solve an existing or upcoming problem and "best in class" in the Nordics.
- Wide mandate enabling provision of financing for reference projects on commercial terms while solving environmental issues.
- Commercial terms, expected 15 % annual return

NEFCO's export credit financing



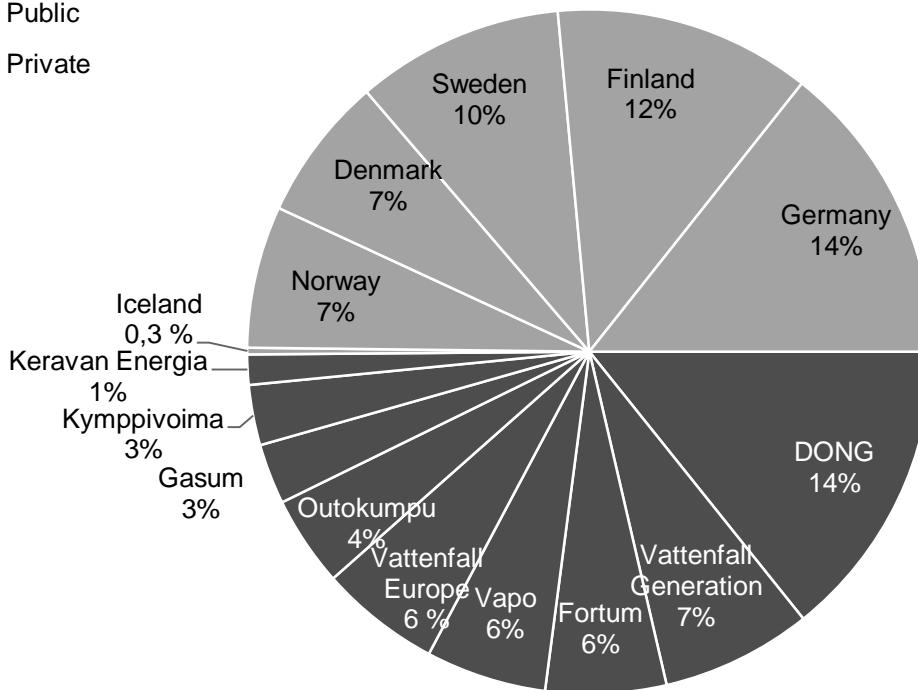
- Export credits can be provided in the range of EUR 500,000 to EUR 1,500,000
- Only environmentally sound investments eligible
- NEFCO can in co-operation with Nordic Export Credit Agencies finance up to 85 per cent of the total value of Nordic exports with a buyer credit
- Focus on cleantech and energy saving equipment

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

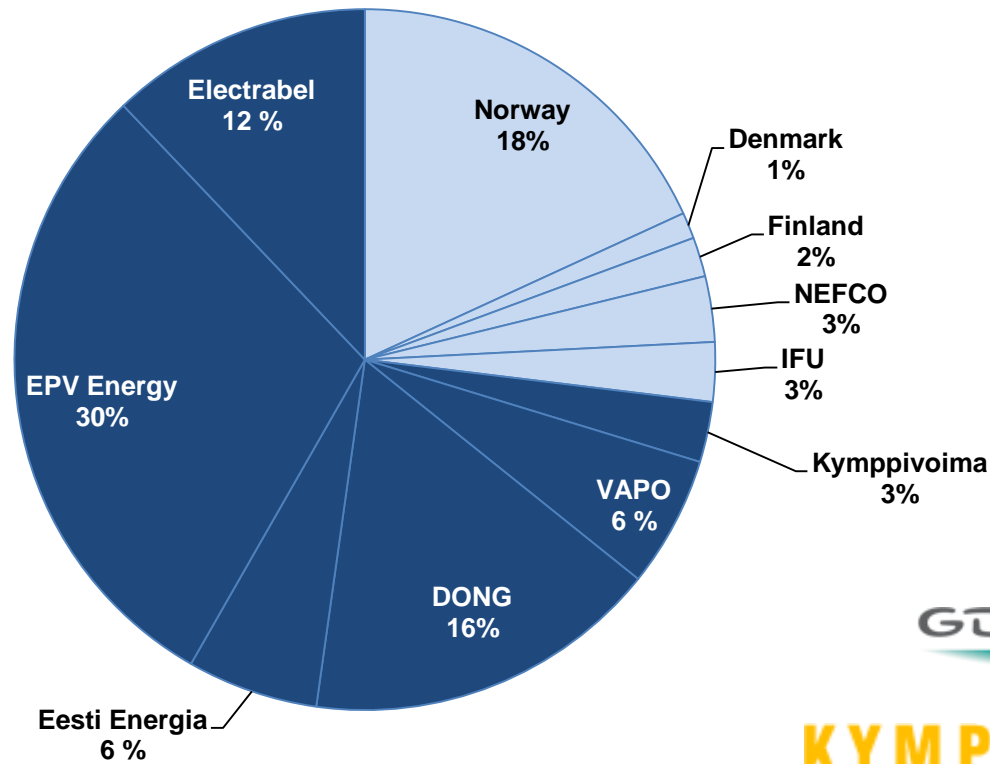
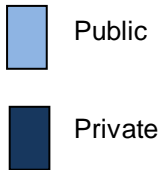
Testing Ground Facility (TGF) Investors

Total: 35 million euro

- Public
- Private



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



NEFCO Norwegian Carbon Procurement Facility for Vulnerable Projects

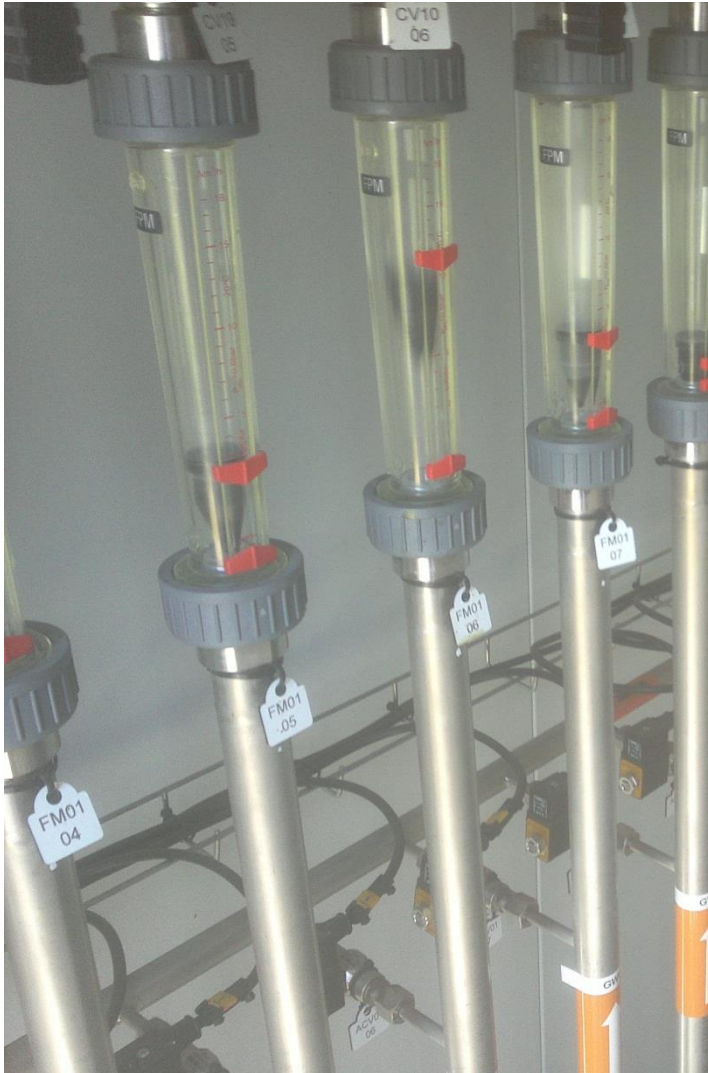


NORWEGIAN MINISTRY OF FINANCE

- Specialist CDM procurement facility to support vulnerable projects discontinued due to collapse in carbon market prices
- Facility to seek 30 million CERs over period to 2020 to meet Kyoto II compliance target for Norway
- Other sub-objectives include:
 - to ensure viability of existing projects
 - to preserve carbon market infrastructure
- Vulnerable projects to include *i.a.* methane projects
 - but not projects with existing income streams (wind, hydro) etc
- "Global focus".



Vireo (Kinnevik) Pioneering in Landfill Gas in Eastern Europe



- New landfill gas technology used in operational landfills,
- Electricity generated on the landfills and supplied to the grid,
- 3 landfills in operation and 2-3 more to come
- Satisfactory green tariff gives reasonable profit
- GHG reductions - methane and CO₂

Case: Production of waterborne paint in Odessa, Ukraine



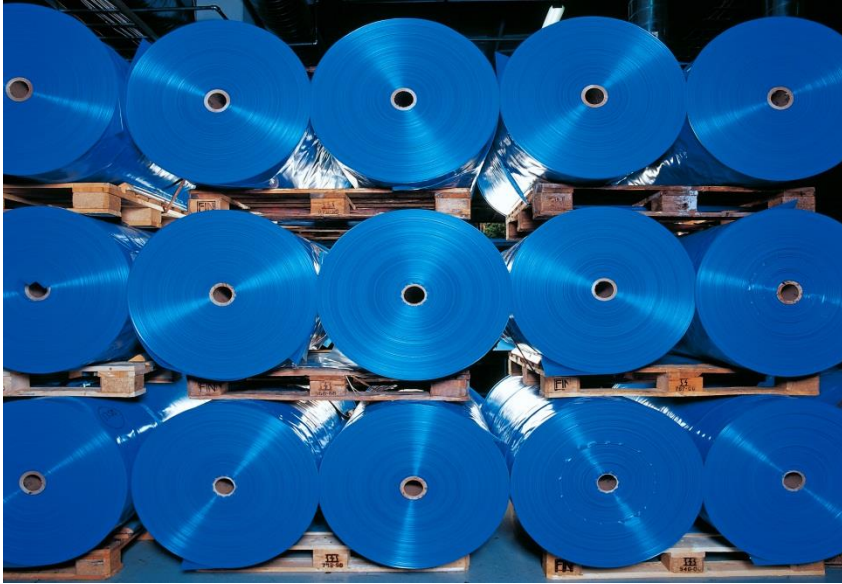
- Financiers: Eskaro, Swedfund and NEFCO
- NEFCO's financial share: EUR 2.2 million
- Production of waterborne paint reduce emissions of volatile organic compounds by 870 tonnes per year
- New production in Ukraine will substantially reduce the need for transportation.

Case: Promoting wind energy in Estonia and Lithuania



- Loans and equity investments for wind farms in Estonia and Lithuania
- Norwegian interest through the municipally owned company Vardar
- Nelja Energia in charge of the project management
- NEFCO has over the years invested over EUR 10 million in wind farms in the Baltic countries
- Sales of emission reductions

Case: Production of plastics in Kaluga



- Rani Plast's new factory in Kaluga produces plastics as packaging material for the Russian market.
- Financiers: Rani Plast, EBRD, Finnfund, NEFCO
- Environmental benefits: Closed loop saves raw material, polyethylen instead of PVC-plastics, energy efficient production
- CO₂-reduction: 10,750 tonnes per year

Case: Production of cereals in Russia



- Myllyn Paras' new mill in Domodedovo was financed by Nordea and Finnfund
- NEFCO financed the company's ecological no-till cultivation of grain in Kursk
- NEFCO's financial share: EUR 3 million
- Environmental benefits: Less discharges of nutrients and reduced CO₂-emissions due to shorter transport distances

Case: Biogas production in Estonia



- Manure treatment in Oisu and Vinni, Estonia
- Production of biogas by Biofund OÜ
- Project owners: Nelja Energia and Vardar Eurus
- Estimated reduction of phosphorus: 29.2 tonnes per year
- Estimated reduction of nitrogen: 27.5 tonnes per year

Case: Biogas production in Latvia



- Client: Baltic Pork – subsidiary of International Pork Investment
- Owners: Mørk Engebretsen Invest AS and Innovasjon Norge.
- Pig farms in Allazi and Laubere close to Riga
- Production of biogas reduces CO₂-emissions by 1,500 tonnes per year
- Discharges of phosphorus and nitrogen is reduced by 20 % annually

Case: Production of biofuel in Rivne, Ukraine



- Usage of rapeseed for producing bio-diesel
- One tonne of rapeseed → 350 kg of oil
- 150 tonnes of bio-diesel is produced annually
- NEFCO granted a loan from its Facility for cleaner production
- The client, Shevchenko Farmer Enterprise, saves EUR 30, 000 per year with renewable bio-diesel

Case: Renewable energy in Arkhangelsk, Russia



- Usage of sawdust and bark for energy production
- Customers: the local sawmills
- Prevention of methane emissions
- The heat is used for drying timber and heating the buildings in the area
- Two 2.5 MW boilers consume some 15,000 m³ of bark and 4,800 m³ of sawdust/year

Tack! Frågor?

Ulf Bojö, ulf.bojo@nefco.fi

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