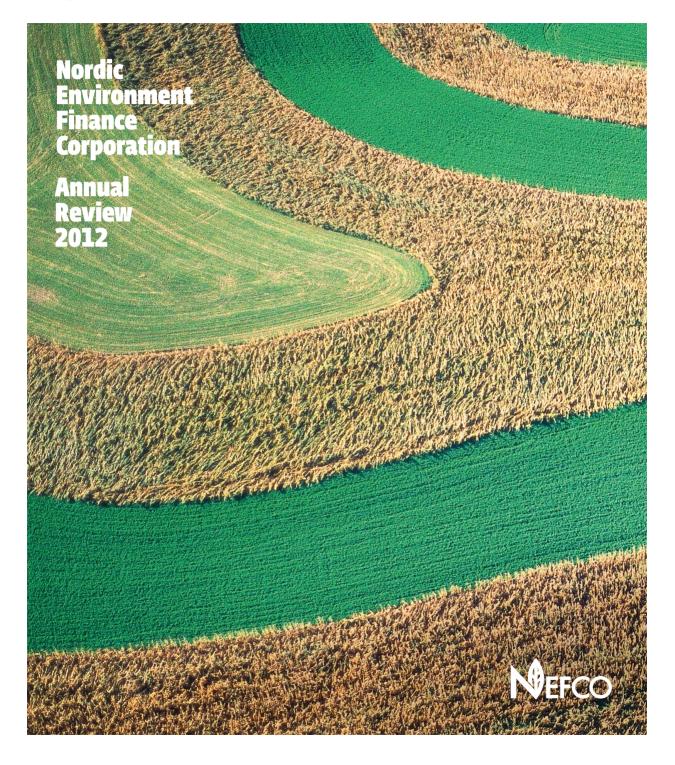
Miljøudvalget 2012-13 MIU Alm.del Bilag 283 Offentligt



NEFCO 2012 Contents

• Case study I: Russia. Wastewater treatment

- Highlights of the year
- **3** NEFCO in brief
- 4 Interview with Magnus Rystedt
- **6** Energy investments
- 8 Case study II: Russia, A cleaner future for Lake Onega
- **9** Working for a healthier Baltic Sea
- **11** Case Study III: Lithuania/Latvia, Treatment of contaminated soil
- **12** Mitigating environmental toxins
- **14** Environmental initiatives in the Arctic
- **16** Environmental status report
- **19** Examples of emission reductions in 2012
- 20 Case Study IV: Ukraine, Lighting up Zhytomyr
- **21** Report of the Board of Directors
- **24** Financial statement
- **28** Independent Auditors' Report
- **29** Statement by the Control Committee
- **30** Approved projects
- 32 Case study V: Ukraine, Fair winds for Ukraine
- **34** Five year comparison
- Personnel 2012

NEFCO in brief

The Nordic Environment Finance Corporation (NEFCO) is an international financial institution, which was established in 1990 by the five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden. NEFCO's primary purpose is to finance cost-effective environmental projects in the neighbouring regions of Eastern Europe. The Corporation's headquarters are in Helsinki, Finland.

Currently, NEFCO manages a number of funds aimed at financing environmental projects in Russia, Ukraine, Belarus and Moldova as well as, for a limited period, in Estonia, Latvia and Lithuania. The corporation has also launched environmental pilot programmes in China and Peru. NEFCO is heavily engaged in climate financing and the Corporation's carbon fund NeCF purchases emission reduction units across the world.

NEFCO finances projects aimed at reducing environmentally harmful emissions, such as greenhouse gases, toxic pollutants and nutrients fuelling eutrophication in the Baltic Sea. NEFCO offers loans and subordinated loans to businesses and municipalities that invest in environmental projects in the regions in which it operates. In some cases the corporation may invest share capital in businesses that have projects in the countries mentioned above.

In St. Petersburg and Kiev, the corporation relies on local consultants to identify new partners and investors in Russia and Ukraine. Only projects that satisfy strict environmental criteria and offer quantifiable reductions in emissions are eligible for NEFCO's financing. NEFCO's Board of Directors, which comprises members from each of the Nordic countries, gives the final decision on all investments.



NEFCO's primary purpose is to finance cost-effective environmental projects in the neighbouring regions of Eastern Europe.

JANUARY

The Third Call for Proposals for the Nordic Climate Facility (NCF) generated altogether some 130 applications.

NEFCO and Vitebsk Meat Packing Plant signed a loan agreement for the modernisation of meat production facilities in Vitebsk, Belarus.

FEBRUARY

NEFCO joins a fact-finding mission to Kingisepp, Russia, to gather information on the high nutrient load found in the River Luga.

The Operational Review of NEFCO's Carbon Finance and Funds for 2011 showed that NEFCO managed to acquire over 2.3 million carbon credits for its investors during the period.

MARCH

According to the financial accounts for 2011, NEFCO approved 66 new projects during the year.



Highlights of the year 2012

NEFCO and the municipality of Kingisepp in Northwest Russia signed a Memorandum of Understanding to finance the modernisation of Kingisepp's water distribution and wastewater treatment facilities.

MAY

APRIL

NEFCO and the water company OKOS signed a loan agreement to rehabilitate wastewater treatment facilities serving the towns of Svetlogorsk, Pionersk and Zelenogradsk in Russia. The project is also financed by the EU.

NEFCO, together with Finnfund and Nordea Bank, signed a loan agreement to finance the construction of Myllyn Paras' new milling and cereal production facilities in Russia.

JUNE

The U.S. Government decided to allocate funds to the Arctic Council's Project Support Instrument (PSI), which is administered by NEFCO.

NEFCO's Board of Directors decided to boost financial support for municipal energy efficiency measures by raising the maximum loan amount per project from EUR 260,000 to EUR 400,000.

JULY

The Finnish and Russian governments, together with the Petrozavodsk Communal Utilities Systems and a group of international financial institutions, signed an

investment package aimed at improving drinking water quality and the wastewater treatment facilities in Petrozavodsk, Russia. NEFCO provides a EUR 4 million loan for the project.

NEFCO assumed the chairmanship of the Steering Group of the Eastern Europe Energy Efficiency and Environment Partnership (E5P).

AUGUST

NEFCO signed loan agreements to finance municipal energy efficiency measures in the Ukrainian cities of Berezan and Zhytomyr.

SEPTEMBER

NEFCO signed a Memorandum of Understanding (MoU) with the Peruvian Ministry of Environment to cover technical cooperation in the solid waste sector under the Nordic Partnership Initiative.

OCTOBER

NEFCO hosted an international expert event on the emerging climate finance instruments, the so-called Nationally Appropriate Mitigation Actions (NAMAs).

NOVEMBER

NEFCO's Carbon Finance and Funds Unit signed an Emission Reductions Purchase Agreement with CFP Energy Limited to obtain emission reductions from a wind power project in Kretinga, Lithuania.

DECEMBER

NEFCO decided to expand its area of operation to Moldova.

Russia Wastewater treatment

is also financed by the EU.





01

NEFCO, together with

Finnfund and Nordea

agreement to finance

lyn Paras' new milling

and cereal production

facilities in Russia.

the construction of Myl-

Bank, signed a loan

Can you describe NEFCO's competitive advantages in a few words?

NEFCO is an international financial institution specialised in financing projects with environmental benefits. We can offer financing for cost-effective green projects implemented by Nordic companies and local stakeholders in countries in which we operate. As an international financial institution owned by the Nordic governments, we are a solid financing partner and our profound expertise in environmental, financial and legal issues is a true competitive advantage and asset to our clients.

How would you like to describe NEFCO's performance in 2012?

Despite the economic downturn in Europe, we were able to maintain a steady flow of new projects. A total of 65 new projects were approved and administered by NEFCO during the period, and the value of all the funds managed by the corporation was EUR 549 million. We also managed to achieve good environmental results. For instance, our climate investments in 2012 reduced carbon dioxide emissions by 3.6 million tonnes – a figure corresponding to the amount of carbon dioxide emitted when 11.7 million passengers travel by aeroplane from Helsinki to Paris and back.

Last year, NEFCO decided to expand its area of operation to Moldova. Why?

We decided to follow the Eastern Europe Energy Efficiency and Environment Partnership's (E5P) example to broaden the geographic scope to Moldova. E5P has operated in Ukraine since 2011 and NEFCO has chaired the Steering Croup of E5P since July last year. By expanding NEFCO's business operations to Moldova we hope to be able to identify energy efficiency projects with environmental benefits.

The financial situation in NEFCO's main countries of operation is currently challenging. How will this affect NEFCO's business operations in 2013?

In the wake of the global economic slowdown and continued financial crisis in Europe, NEFCO's countries of operation have not been unaffected. NEFCO acknowledges the elevated risk and it will take precautionary measures to maintain a healthy portfolio rather than reducing the efforts in the countries concerned. It is important for an organisation such as NEFCO to continue its operations even in times of stress, as its presence becomes even more important when other sources of financing become scarce. Not only does NEFCO's maintained presence strengthen the relations with its current partners but it will also provide NEFCO with future advantages when the economies stabilise.

What is the outlook for NEFCO's activities this year?

We foresee a robust flow of new projects in Ukraine as a result of our involvement in the E5P. In the Arctic region, we hope to be able to finance a range of new environmental projects, given the financial backing from the Arctic Council's member countries and the Project Support Instrument administered by us. The pilot programme in Peru will also move ahead as the project preparation on the ground is already taking place. Moreover, we will try to explore new innovative ways to cooperate with commercial banks in our countries of operation, and, last but not least, we are expecting a decision on the replenishment of NEFCO's Nordic Environmental Development Fund in 2013.

"

It is important for an organisation such as NEFCO to continue its operations even in times of stress, as its presence becomes even more important when other sources of financing become scarce.

01 NEFCO's Managing Director Magnus Rystedt.



01

NEFCO'S MANAGING DIRECTOR

with Magnus

Interview

Rystedt



NTRIK RASTENBERGER

FOCUS AREA

Energy investments

WARMTENETWER



NEFCO's investments in energy-related projects increased slightly in 2012 compared with the situation in 2011. Last year, over 33 per cent of all the projects financed by the Corporation's main financial instruments – the Investment Fund and the Nordic Environmental Development Fund – covered investments in renewable energy or energy efficiency. Most of the industrial projects financed by NEFCO during the period also included measures that improved energy efficiency and this, in turn, generated emission reductions that benefited the climate.

According to the Corporation's environmental status report, the climate investments in 2012 reduced carbon dioxide emissions by approximately 3.6 million tonnes – a figure corresponding to the amount of carbon dioxide emitted by 11.7 million persons travelling by aeroplane from Helsinki to Paris and back.

In 2012, NEFCO approved ten municipal projects to improve energy efficiency in municipally owned buildings in Ukraine and Russia. The Corporation's Investment Fund approved three new energy-related projects including investments in wind energy, equipment for environmental monitoring and energy efficiency measures. The Facility for Cleaner Production gave the green light to nine new projects, which all improved energy efficiency at the production facilities concerned. All in all, the Corporation's environmental status report shows that through its investments in 2012, NEFCO managed to save energy totalling 8,412,992 megawatt hours. This amount of energy corresponds to the annual energy consumption of approximately 1.3 million Danish households.

In July 2012, NEFCO assumed the chairmanship of the Steering Group of the Eastern Europe Energy Efficiency and Environment Partnership (E5P). The E5P, which was launched by a Swedish initiative in 2009, provides grant financing for energy and environmental projects to supplement lending by international financial institutions. Further progress was also made with the DemoUkraina programme, which is managed by NEFCO and the Ukrainian Ministry for Regional Development, Construction, Housing and Municipal Economy. The programme generated ten new projects in the Ukrainian district heating sector using modern technology and demonstrating Nordic experiences of improving energy efficiency and reducing emissions of greenhouse gases. DemoUkraina is financed by the Swedish Government and the E5P.

NEFCO's Carbon Finance and Funds department broadened its climate financing activities during 2012. Further progress was reported with its technical assistance and market readiness activities, notably with the Nordic Climate Facility (NCF) and in the area of financing Nationally Appro-



priate Mitigation Actions. The NCF, which is funded by the Nordic Development Fund, is now active across Sub-Saharan Africa, the Andean region and the poorest regions of Asia, and it is currently working on innovative low-cost climate solutions that promote the development of local businesses.

The core carbon market activity delivered good results, notwithstanding the collapsed demand and market price, with over 2 million emission reductions delivered to public and private sector participants in its carbon funds. The portfolios were derisked and consolidated during the year, and a record number of Clean Development Mechanism projects were registered. The main areas of project focus remain renewable energy and energy efficiency, principally in Eastern Europe and Developing Asia. NEFCO continues to undertake developmental activities to promote the concept of market-based mechanisms as an important means of mobilising international finance for climate action.

01

DemoUkraina generated ten new projects in the district heating sector in 2012.

02 FairWind's installation of windmills in Ukraine.



FOCUS AREA

Working for a healthier **Baltic Sea**

A cleaner future for Lake Onega

to improve drinking water

NEFCO's work aimed at combating eutrophication in the Baltic Sea continued on many fronts in 2012. During this period, the BSAP Technical Assistance Fund allocated all of its remaining funds to finance projects with a favourable impact on the environmental condition of the Baltic Sea. The BSAP Fund, which was established in 2009 by the governments of Sweden and Finland to facilitate environmental projects as outlined in HELCOM's Baltic Sea Action Plan, has been jointly administered by NEFCO and the Nordic Investment Bank.

Since its inception, the BSAP Fund has managed to allocate EUR 11 million to 34 projects. Among its activities, the BSAP Fund has facilitated investments in the recycling of algae nutrients, improved sewage treatment, modernised manure treatment and supported the use of alternative ship fuel. Since 2009, the Fund has financed projects valued at EUR 39 million, with the main focus on promoting replicable innovative technical solutions.

In February 2012, NEFCO joined a factfinding mission to Kingisepp, Russia, to gather more information on the high nutrient load found in the River Luga and its specific source. HELCOM and the Finnish Environment Institute estimated that the annual phosphorus discharge from Kingisepp could be in excess of 1,000 tonnes per year. The local fertiliser producer EuroChem invited representatives of HELCOM, NEFCO and the Ministries of Environment of Finland and Russia, accompanied by other Russian experts and authorities, to assess the situation. As a result of the investigation, the EuroChem management was later able to identify the leakage points, and measures were taken to prevent further discharges of nutrients into River Luga and the Gulf of Finland.

In April, NEFCO and the Municipality of Kingisepp signed a Memorandum of Understanding to finance the modernisation



of the city's water distribution and wastewater treatment facilities. The results of the feasibility study for the project will be announced in 2013. The city of Kingisepp has approximately 50,000 inhabitants.

In May, NEFCO and the water company OKOS signed a loan agreement to rehabilitate wastewater treatment facilities serving the towns of Svetlogorsk, Pionersk and Zelenogradsk in Russia. According to preliminary calculations, the project will reduce phosphorus discharges by about 13 tonnes per year, which is equivalent to unprocessed discharges from a population of about 18,000. The project is part of an extensive wastewater facilities rehabilitation programme that covers several small towns and villages in the Kaliningrad region. The programme gets financial backing from the EU and Sweden.

In July, the Finnish Ministry of the Environment, the Republic of Karelia, the City of Petrozavodsk, together with the Petrozavodsk Communal Utilities Systems (PKS) and a group of international financial institutions, signed a EUR 32 million investment package to finance improvements in drinking water quality and a reduction in untreated wastewater being discharged from Petrozavodsk into Lake Onega in northwestern Russia. The city has approximately 270,000 inhabitants. The setup of the investment package was coordinated by NEFCO, which provided a EUR 4 million loan to the project.

NEFCO's environmental status report for 2012 shows that the projects cofinanced by the Corporation resulted in the reduction of phosphorus discharges by 1,206 tonnes, compared to 1,126 tonnes for the previous year. The corresponding figure for nitrogen was 5,832 tonnes. These figures correspond to untreated wastewater discharges by about 1.8 million people.





01 The seashore in Noarootsi (Nuckö), Estonia.



CASE STUDY



Lithuania / Latvia Treatment of contaminated soil

In 2012, NEFCO decided to increase its share capital in the Danish-Lithuanian company DGE Baltic Soil and Environment, which specializes in engineering and environmental consulting. One of DGE Baltic Soil and Environment's focus areas is to examine and treat contaminated soil and groundwater at sites that could pollute the Baltic Sea. The capital injection will increase NEFCO's stake to 36 per cent of the company's share capital.



FOCUS AREA Mitigating environmental toxins

In 2012, NEFCO promoted a number of projects designed to reduce emissions of toxic substances or persistent organic environmental toxins.

In December, NEFCO's Board of Directors decided to increase the Corporation's share capital in the Danish-Lithuanian company DGE Baltic Soil and Environment, which specializes in engineering and environmental consulting, DGE Baltic Soil and Environment was established in the Lithuanian capital Vilnius in 2005 and its activities have included examining and treating contaminated soil and groundwater at pesticide waste storage sites in Lithuania.

Obsolete pesticide waste disposal is still a major environmental problem in Eastern Europe. Besides being a health hazard to both humans and animals, untreated pesticide waste also pollutes soil and groundwater sources. In 2011. DGE Baltic Soil and Environment treated and removed close to 8,900 tonnes of environmentally harmful substances from contaminated sites and watercourses in Lithuania.

The capital injection, which will enable DGE Baltic Soil and Environment to expand its operations to neighbouring Latvia and establish an office in Riga, will increase NEFCO's stake to 36 per cent of the company's share capital. The company's main priority in Latvia will be to examine and assess contaminated soil and groundwater at industrial facilities and other sites that could pollute the Baltic Sea.

Within the framework of NEFCO's Facility for Energy Saving Credits, a number of municipal projects aimed at revamping street lighting systems were financed during 2012. These projects also had a toxicfree component since the obsolete street lights that were removed in many cases contained mercury, which was removed and mitigated.

Many of the energy-related and industrial projects financed by NEFCO in 2012

((()

In 2012, the **Barents Hot Spots** Facility approved two projects aimed at improving the treatment of solid waste in Komi and Petrozavodsk in Russia.

also reduced the emissions of acidifying substances, such as sulphur and nitrogen oxides, as a result of switching from heavy crude oil to natural gas or renewable energy sources. The Corporation's 2012 environmental status report shows that it succeeded in cutting down on sulphur oxide emissions by 4,212 tonnes, equivalent to about 22 per cent of Norway's total emissions of sulphur oxides in 2011. The total reductions in nitrogen oxide emissions achieved by NEFCO in 2012 amounted to 1,957 tonnes.

The plastics film factory in Kaluga, cofinanced by NEFCO, went on stream in 2012. As a raw material, the factory uses polyethylene, which is expected to reduce local production and consumption of the toxic polyvinylchloride (PVC). A NEFCOfinanced paint factory in Odessa, Ukraine, commenced operations at the beginning of 2012. The new facility manufactures water-based paints, which will replace the local production of oil-based paints. This

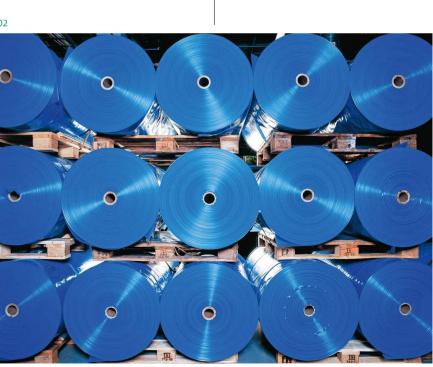
02

01



01 Contaminated soils are cleaned up with financial back-up from NEFCO's Barents Hot Spots Facility.

02 The PVC-free plastics film factory in Kaluga, co-financed by NEFCO. went on stream in 2012.



is expected to reduce emissions of hazardous volatile organic compounds (VOC) by approximately 870 tonnes per year.

At the end of 2012, the Norwegian government decided to allocate NOK 3 million to NEFCO's Barents Hot Spots Facility (BHSF), which provides grants for the clean-up of the so-called environmental hot spots in the Russian Barents region. These hot spots, identified by NEFCO and the Arctic Monitoring and Assessment Programme (AMAP) in 2003 include places and sites with contaminated soils, emissions of toxic compounds or insufficient management of solid waste or wastewater. In 2012, the Barents Hot Spots Facility approved two projects aimed at improving the treatment of solid waste in Komi and Petrozavodsk in Russia.

FOCUS AREA

Environmental initiatives in the Arctic

NEFCO strengthened its focus on the Arctic region in 2012. The preparation of new investments and projects took place in the Murmansk, Archangel and Komi regions, and the corporation was actively involved in the Arctic Council's meetings during the period. In June, the U.S. Government decided to allocate funds to the Arctic Council's environmental projects. The funds will be allocated to the Arctic Council's Project Support Instrument (PSI), which is administered by NEFCO.

The Arctic Council Project Support Instrument, which was established by the Arctic Council in 2005, is a financial initiative that aims to focus on actions preventing pollution of the Arctic, including abatement and elimination of the release of hazardous substance such as persistent organic pollutants and mercury, and mitigation of climate change. The PSI is open to contributions from the Arctic Council

members, observers and other interested parties.

"The U.S. Contribution will enable us to finance a range of environmental projects in the Russian Arctic, including mitigation of short-lived climate pollutants," said Special Adviser Husamuddin Ahmadzai at NEFCO.

In September, the Lepse Floating Maintenance Base for spent nuclear fuel was removed from Murmansk harbour and towed to Nerpa shipyard, some 40 kilometres from Murmansk. The decontamination process will be carried out in a special shelter, which will be built on the slipway in 2014. The floating vessel's uncontaminated sections will be scrapped and re-cycled, and specialist equipment will be used to recover spent fuel. The decontamination project is being financed by the Northern Dimension Environmental Partnership (NDEP) programme and EBRD. NEFCO was involved in the preparation of the project.



(...) The Lepse Floating Maintenance Base for spent nuclear fuel was removed from Murmansk for decontamination.

In December, the Swedish government decided to allocate additional funds to NEFCO and Sweden's joint trust fund on mitigation of short-lived climate forcers (SLCF). The SLCF Fund was established in 2010 by the Swedish Environmental Protection Agency and NEFCO.

The Trust Fund, which is administered by NEFCO, gives priority to projects identified by the Arctic Council's Steering Group on SLCF. The fund currently has access to SEK 2,550,000 for environmental projects in the Russian Arctic.

The main aim of the Fund is to finance Russian projects that reduce SLCF emissions, including black carbon. Black carbon is a potent climate-forcing aerosol that remains in the atmosphere for only a few days or weeks. Black carbon is a component of soot and a product of incomplete combustion of fuels such as oil, diesel, coal, wood, crop waste and other biomass. Es-



01 Reindeer lichen is badly affected by emissions of sulphur oxides and heavy metals in the Arctic region.

02 Svalbard Arctic waters.

timates of the radiative forcing of black carbon indicate that it may be the second or third leading cause of global warming after CO2 and methane.

In 2009, eight member states belonging to the Arctic Council signed a declaration in Tromsø that stated that black carbon and other short-lived climate forcers, including methane and tropospheric ozone, may pose a particular threat to the Arctic and that reducing these forcers has "the potential to slow the rate of Arctic snow, sea ice and sheet ice melting in the near term."

EMISSION REDUCTIONS

Environmental status **report 2012**

In terms of the dominant indicators CO2 and energy, the overall environmental results achieved in 2012 fell slightly short of the 2011 levels. This is due to depreciation charges and the fact that data on some of the projects are still missing. No progress was made in the substantial reductions in indirect CO2 emissions reported last year.

The figures for nitrogen (N) and phosphorus (P) exceed the previous year's levels by a narrow margin. This is due to the fact that the performance of on-going wastewater projects has further improved. Because of the dominant position of the Southwest Wastewater Treatment Plant in St. Petersburg in terms of volumes (80 million m³) and energy consumption, its impact was excluded from the 2012 figures indicating the volume of wastewater treated. This was also the case in 2011. Overall, the water sector continued to show good performance in 2012.

Within the energy sector projects, the rate of reduction in carbon dioxide emissions increased slightly compared to 2011. Unlike in 2011, when energy consumption increased, major progress was made in this respect in 2012. An energy project tabled in Russia no longer affects the outcome, while at the same time wind power production in the Baltics expanded. On the whole, the sector performed positively in terms of CO2 reductions. Overall, no major changes in reductions took place in 2012.

In NEFCO's industrial projects, the rate of reduction in CO2 emissions slowed down during 2012. This has to do with the fact that NEFCO writes down environmental reductions by 5 % per annum over a period of 20 years for projects that have been concluded. Projects that are currently active in NEFCO's portfolio are however performing as expected. Similarly, the slightly lower reductions in nitrogen and sulphur oxides can be explained by write-offs. That industrial projects lead to higher rates of reduction in wastes indicates that industry in NEFCO's host countries is improving its performance in recovering and recycling resources in its processes.

In 2012, NEFCO initiated use of a new indicator, namely black carbon, to the

(**

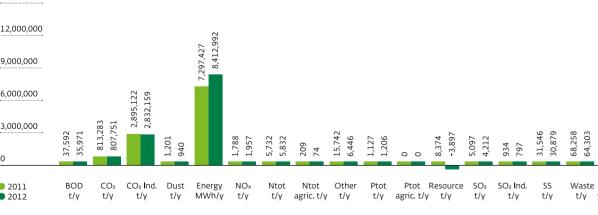
In 2012, NEFCO initiated use of a new indicator. namely black carbon, to the environmental monitoring of all projects financed by the Corporation.

15,000,000 12,000,000 9,000,000 6,000,000 3.000.000 02011 BOD CO2 CO₂ Ind. Dust Energy NOx Ntot Ntot Other Ptot Ptot Resource SO₂ SO₂ Ind. SS Waste Waste-VOC • 2012 t/y t/y t/y t/y MWh/y t/y t/y agric.t/y t/y t/y agric.t/y t/y t/y t/y t/y t/y watert/y t/y

Figure	1
BOD	Biochemical oxygen demand
CO2	Carbon Dioxide
MWh	Megawatt hours
Nox	Nitrogen oxides
Ntot	Nitrogen total
Ptot	Phosphorus total
SO2	Sulphur oxides
SS	Suspended solids
VOC	Volatile organic compounds
t/y	Tonnes per year

01 NEFCO managed to reduce electricity consumption by 8,412 GWh through its investments in 2012.

Figure 1 NEFCO: Total reductions





NEFCO has, together with other International Financial Institutions. worked on finding a harmonised approach to project-level greenhouse gas (GHG) accounting.

environmental monitoring of applicable projects financed by the Corporation. Black carbon is a component of soot and is a product of incomplete combustion of fuels such as oil, diesel, coals, wood, crop waste and other biomass. Estimates suggest that black carbon may be the second or third leading cause of global warming after CO2 and methane.

NEFCO engaged actively in various working groups which are supporting attempts to harmonise the environmental methodology applied at International Financial Institutions. During the period under review, Senior Manager Karl-Johan Lehtinen from NEFCO participated in meetings hosted by the Working Group on Environment for Multilateral Financial Institutions.

Moreover, NEFCO has, together with other International Financial Institutions. worked on finding a harmonised approach to project-level greenhouse gas (GHG) accounting. The rationale for this work is to harmonise GHG accounting during project appraisal. The purpose in undertaking this work is to establish minimum requirements which each IFI can optionally exceed with additional considerations and reporting.

The International Financial Institutions recognised that approaches to GHG accounting should be harmonised as far as possible, recognising the differing mandates and geographical coverage of each institution. A harmonised approach will improve consistency and comparability across IFIs, provide increased reliability for other users of the data, set a good-practice standard for other IFIs and facilitate the sharing of experience and lessons learnt.

NEFCO has, during the period under review, sought to identify new innovative approaches to obtaining environmental benefits. The Baltic Sea Action Plan Fund, administered by NEFCO and NIB, facilitated investments in the recycling of algae nutrients, improved sewage treatment, manure treatment and ship fuel. Many of the projects financed from the Fund have utilised unique innovative solutions for reducing discharges of nutrients to the Baltic Sea. One good example of this is the treatment of manure using the pyrolysis process, which produces renewable energy and biocoal.

NEFCO IN NUMBERS 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



1.206 tonnes = Untreated wastewater from 1.8 million people



01 NEFCO managed to reduce nitrogen discharges to the Baltic Sea by 5,832 tonnes in 2012.

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





SOx **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



Report of the Board of Directors 2012

CASE STUDY

Ukraine Lighting up Zhytomyr

Zhytomyr and NEFCO are reduce energy consumpThe dire state of the economy in Europe continued to affect the Corporation's operations. For NEFCO, it meant that a longer period of time was required for planning investments and that fewer projects were approved, even though the Corporation received more inquiries than ever before over the years. Consequently, general interest in the funding available from NEFCO remained high, suggesting that international financial institutions serve an important purpose even under less favourable conditions.

At the same time, overall interest in environmental investments among municipalities has increased. A number of municipal projects to build up district heating and water management capacity were identified for closer scrutiny during the reporting period. NEFCO possesses extensive experience in municipal environmental investments and the growing interest in Russia and Ukraine is perceived as an important positive development and a result of the cooperation and project support provided by the Northern Dimension Environmental Partnership (NDEP) in Russia and the Eastern European Energy Efficiency and Environment Partnership (E5P) in Ukraine.

The year was one of vigorous project activity. A total of 65 new projects were approved in 2012 by the various funds managed by NEFCO as compared to 66 the year before. The volume of new projects financed by the NEFCO Investment Fund fell to EUR 5.7 million while the corresponding figure for 2011 was EUR 13.5 million. However, the value of provisionally approved projects amounted to EUR 51.8 million, much higher than the 2011 level of EUR 28.7 million. At the end of 2012, there were 46 active projects financed by NEFCO's principal fund, the NEFCO Investment Fund, with total investments amounting to EUR 115.9 million. As disbursements are made with a certain delay, a larger proportion of NEFCO's resources was actually allocated than indicated in the statement of financial position.

Just like the operations of the Investment Fund, NEFCO's other main line of activity - fund management - was also successful. In June 2012, NEFCO signed an agreement with the USA on participation in the Project Support Instrument (PSI) to be administered by NEFCO on a mandate from the Arctic Council.

One of the Corporation's climate funds - the Baltic Sea Region Testing Ground Facility (TGF) - completed its primary investment phase with the expiry of the first commitment period under the Kyoto Protocol in 2012. The other climate fund, NEFCO Carbon Fund (NeCF), cut down on its investment activities drastically as a result of the weak market for emission rights. While NeCF will continue to operate for several years to come, investments in new purchase agreements will most likely be limited and the fund will primarily focus on managing its existing agreements.

Three new funds were established and five dissolved during the reporting period. Swedish funding was made available for environmental projects in Russia; funding from the Northern Dimension Environmental Partnership (NDEP) for a wastewater project in Petrozavodsk, Russia; and funding from the Eastern Europe Energy Efficiency and Environmental Partnership (E5P) for financing an energy-efficient district heating demonstration project in Ukraine

At the end of the year, NEFCO had 27 funds (excluding the Investment Fund) with total assets of EUR 346 million under management, NEFCO renders separate accounts for all these funds. The funds are not included in NEFCO's statement of financial position.

The financial result was modest, which was mainly due to the foreseen appropriation of EUR 1.5 million for NEFCO's contribution to the Nordic Environmental Development Fund (NMF). This was the last tranche of NEFCO's total commitment of EUR 5.75 million to the NMF fulfilled over the past three years. In all other respects, the net balance between capital gains and losses provided no surprises.

As expected, environmental performance during the reporting period was also sound compared to previous years. A more detailed account of environmental performance is presented in the annex.

NEFCO's area of operations was expanded during 2012 when the Board of Directors authorised NEFCO to commence operations in Moldova, Underlying this expansion was the decision of the Eastern Europe Energy Efficiency and Environmental Partnership (E5P) to intensify its efforts in the country. Cooperation within this E5P partnership is carried out by the European Investment Bank (EIB); the Nordic Investment Bank; the World Bank; and the European Bank for Reconstruction and Development (EBRD). E5P finances energy-efficiency and other environmental schemes funded by the Nordic and Baltic countries, the EU, the USA, Ukraine and, in 2013, by Moldova. NEFCO has held the presidency of the E5P management team as of July 2012.

(A total of 65

new projects were approved in 2012 by the various funds managed by NEFCO as compared to 66 the vear before.

Assessment of the environmental impact of projects

In line with the procedures developed over time by NEFCO, each project is assessed in terms of its expected environmental impact before a decision on financing is made, followed by a review of the actual effects upon completion of the project. The analysis of the projects launched under both the Investment Fund and the Environmental Development Fund indicates that, on average, the positive environmental impacts are at the expected level. Of the 67 on-going projects assessed in terms of environmental impact, 15 were deemed to have exceeded expectations, 7 were at the expected level and 14 failed to meet expectations. In 30 cases, no conclusions could yet be drawn. Of all the analysed projects, 128 have been completed.

NEFCO also systematically assesses the environmental cost-effectiveness of projects in relation to the cost of attaining comparable levels of emission reductions in the Nordic countries. On average, the costs of NEFCO's projects are roughly one eighth of the corresponding project costs in the Nordic countries.

Personnel

At the end of 2012, NEFCO had 30 employees, one of whom was a part-time special advisor. NEFCO also engages consultants.

Financial result

The financial statements show a surplus of EUR 27,499.73. In accordance with previous practice, the Board of Directors proposes that the surplus be allocated to operations in the form of retained earnings.

Helsinki, 7 March 2013



Jon Kahn Deputy Chair

Dompostor Steam het insdulling

Danfríður Skarphéðinsdóttir

Søren Bukh Svenningsen

First ginen Ann-Britt Ylinen

Magnus Rystedt Managing Director

This is a shortened version of the Report of the Board of Directors. The full report is available at www.nefco. org/newsroom/annual reports

FINANCIAL STATEMENT

Statement of comprehensive income

1 January – 31 December

(Amounts in EUR)	2012	2011
Income		
Interest income, placements with credit		
institutions	878 243	1 1 3 1 4 9
Interest income, lending	1 446 568	1 025 875
Net result of financial operations	-1 606 654	-549 713
Other income	4 795 214	4 802 745
Total income	5 513 372	6 412 056
Operating expenses		
Administrative expenses	5 465 878	5 380 242
Depreciation and write-down in		
value of tangible and intangible assets	23 047	19 172
Foreign exchange gains and losses	-33 493	117 939
Impairment of loans / reversals	30 441	62 831
Total operating expenses	5 485 872	5 580 184
RESULT FOR THE YEAR	27 500	831 872

FINANCIAL STATEMENT

Statement of financial position 31 December

(Amounts in EUR)

ASSETS

Total cash, cash equivalents a placements with credit instit

TOTAL ASSETS	
Tangible assets	
Intangible assets	
Other placements	
Investment assets	
Loans outstanding	
Accrued interest	
Other receivables	

LIABILITIES AND EQUITY

Liabilities
Other liabilities
Equity
Paid-in capital
Reserve for investment/credit lo
Operational fund
Retained earnings
Result for the year
Total equity

TOTAL LIABILITIES AND EQ

•	4 839 013	37 924 887
ions	107 349 612	78 747 438
and		
tutions	112 188 625	116 672 325
	239 194	173 944
	865 992	838 569
	23 579 115	18 296 442
•	16 453 827	15 753 827
•	3 750 836	3 921 843
•	28 676	30 011
	6 226	13 813
	157 112 491	155 700 774
	2 132 544	748 327
	113 406 560	113 406 560
osses	24 557 177	24 557 177
	4 500 000	4 500 000
••••••	12 488 711	11 656 839

_
72

2012

2011

ντιυ	157 112 491	155 700 774
	17/ 115 491	100//4

Proposed allocation of the year's result	2012	2011	
Appropriation to the retained earnings	27 500	831 872	
RESULT FOR THE YEAR	27 500	831 872	

(Amounts in EUR)	Paid-in capital	Reserve for investment/ credit losses	Operational Fund	Retained earnings	Result for the year	Total
Equity as of 1 January 2011	113 406 560	24 557 177	4 500 000	11 197 961	458 877	154 120 576
Appropriation to the retained earnings	·····			458 877	-458 877	-
Appropriation to the reserve for investment/credit losses		-				-
Appropriation to the Operational Fund						-
Paid-in capital	-		••••			-
Result for the year			••••		831 872	831 872
Equity as of 31 December 2011	113 406 560	24 557 177	4 500 000	11 656 838	831 872	154 952 447
Equity as of 1 January 2012	113 406 560	24 557 177	4 500 000	11 656 838	831 872	154 952 447
Appropriation to the retained earnings	•••••		••••	831 872	-831 872	-
Appropriation to the reserve for investment/credit losses		-				-
Appropriation to the Operational Fund			••••			-
Paid-in capital	-		••••			-
Result for the year					27 500	27 500
Equity as of 31 December 2012	113 406 560	24 557 177	4 500 000	12 488 711	27 500	154 979 947

FINANCIAL STATEMENT **Cash flow** statement 1 January - 31 December

(Amounts in EUR 1,000)	2012	2011
Cash flow from operating activities		
Result for the year	27	832
Depreciation and write-down in value of tangible and intangible assets	23	19
Value adjustments, investment assets	-	-1 500
Value adjustments, other placements	1 683	3 017
Capital adjustments, other placements	185	636
Impairments, lending	-451	63
Change in accrued interests	-24	-316
Lending		
Disbursements	-11 924	-6 821
Repayments	3 826	2 064
Premature repayments	2 919	-
Realised credit losses	333	-
Capitalisation of interest and loan receivables	-	-594
Exchange rate adjustments	-41	104
Change in investment assets	-700	144
Cash flow from operating activities	-4 143	-2 352
Cash flow from investing activities		
Change in placements with credit institutions	-28 602	2 701
Change in other placements	-1 697	-2 535
Change in other receivables and liabilities, net	1 370	-745
Change in tangible and intangible assets	-14	-22
Net cash flow from investing activities	-28 943	-602
Change in cash and cash equivalents	-33 086	-2 954
Breakdown of cash and cash equivalents		
Cash and balances with banks	4 839	7 904
Placements with a maturity of less than six months	-	30 021
TOTAL CASH AND CASH EQUIVALENTS	4 839	37 925

NEFCO 2012

FINANCIAL STATEMENT

Changes in equity

EQUIVALENTS	4 839	37 925
-------------	-------	--------

Independent Auditors' Report

In our capacity as auditors appointed by the Control Committee of the Nordic Environment Finance Corporation we have audited the accompanying financial statements of the Corporation, which comprise the statement of financial position as at 31 December 2012, and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory notes.

The Board of Directors' and the Managing Director's responsibility for the financial statements

The Board of Directors and the Managing Director are responsible for the preparation of the financial statements that give a true and fair view in accordance with International Financial Reporting Standards, and for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair

presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements give a true and fair view of the financial position of the Nordic Environment Finance Corporation as of 31 December 2012, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Report on the other requirements

In accordance with the Terms of Engagement our audit also included a review of whether the Board of Directors' and the Managing Director's administration have complied with the Statutes of the Corporation. It is our opinion that the administration of the Board of Directors and the Managing Director complied with the Statutes of the Corporation.

Helsinki, 7 March 2013

Sixten Nyman Authorised Public Accountant KPMG Oy Ab

Per Gunslev State Authorised Public Accountant **KPMG Statsautoriseret** Revisionspartnerselskab

Statement by the Control Committee

In accordance with section 9 of the statutes of the Nordic Environment Finance Corporation, we have been appointed to ensure that the operations of the Corporation are conducted in accordance with the Statutes and to bear responsibility for the audit of the Corporation. Having completed our assignment for the year 2012, we hereby submit the following report.

The Control Committee met during the financial year as well as after the Corporation's financial statements had been prepared, whereupon the necessary control and examination measures were performed. The Corporation's Annual Report was examined at a meeting in Helsinki on 7 March 2013, at which time we also received the Auditor's Report submitted on 7 March 2013 by the authorised public accountants appointed by the Control Committee.

Following the audit performed, we note that:

- the Corporation's operations during the financial year have been conducted in accordance with the Statutes, and that
- the financial statements give a true and fair view of the financial position of the Corporation as at 31 December 2012 and of its results and cash flows in 2012. The Statement of Comprehensive Income shows a profit of EUR 27 499,73.

We recommend to the Nordic Council of Ministers that:

- the profit for the financial year be treated as proposed by the Board of Directors,
- the Statement of Comprehensive Income and the Statement of Financial Position be adopted, and
- the Board of Directors and Managing Director be discharged from liability for the administration of the Corporation's operations during the accounting period examined by us.

Helsinki, 7 March 2013

Bill Fransson Thomas Jensen Hans Frode Kielland Asmyhr Åsa Torstensson **Tuula** Peltonen Ragnheiður Rikhardsdóttir

Approved projects 2012

INVESTMENT FUND (IF)

INVESTMENTS (3)

Russia

Equipment for environmen tal monitoring (Finland)

Ukraine

Installation and maintenance of wind generators (Denmark)

Ukraine

Energy efficiency measures at municipal buildings (Sweden)

SUPPLEMENTAL **INVESTMENT (1)**

Latvia and Lithuania

Engineering and environmental consulting (Denmark)

Russia

EXPRESSIONS OF

(Denmark/Sweden)

Modernisation of the

Donetsk (Sweden)

district heating system in

Energy-saving measures in

ings in Zhytomyr (Sweden)

Production of construction

Service and maintenance of

Production of construction

materials (Finland)

windmills (Denmark)

materials (Denmark)

Modernisation of the

district heating system in

Severodonetsk (Sweden)

Centralised monitoring of

the consumption of elec-

tricity, heat and water in

Water and wastewater

treatment in Kingisepp

Energy service measures

at municipally owned

Modernisation of the district heating system in Komi (Finland/NDEP)

buildings (Sweden)

(BSAP TA/NDEP)

housing (Denmark)

municipally owned build-

Production of solar energy

INTEREST (21)

Ukraine

Ukraine

Ukraine

Russia

Ukraine

Ukraine

Ukraine

Ukraine

Russia

Ukraine

Russia

Automatic cleaning of district heating pipes (Denmark/Sweden)

Russia

Loan programme for energy-saving projects in the private sector (Denmark/Finland)

Russia

Production of materials in the construction industry (Finland)

Russia

Upgraded energy efficiency in the district heating sector in Karelia (Finland/Sweden)

Ukraine

Loan programme for energy-saving projects in the agricultural sector (Nordic technology)

Russia Modernisation of the transport sector (Finland)

Russia Production of biogas at landfills in Gatchina (Sweden)

Russia Biogas from poultry manure (Sweden)

Belarus

Equipment for district heating networks (Denmark)

Russia

lighting in Petrozavodsk (Finland/Sweden)

NORDIC **ENVIRONMENTAL**

DEVELOPMENT FUND (NMF)

INVESTMENTS (2)

Ukraine

Guarantee facility for grant financing for environmental projects (NDEP/E5P)

Russia

Guarantee facility for potential currency exchange rate losses for rouble loans (NEFCO IF)

APPROVED CLEANER PRODUCTION PROJECTS (9)

Ukraine Boiler room modernisation

Russia Modernisation of heating systems

Ukraine Upgrading of the heating system at a sanatorium

Ukraine Modernisation of bituminous concrete production facilities

Ukraine

Modernisation of the production process in the furniture industry to make use of the wood waste generated

Ukraine

Upgrading of equipment for agricultural production

Ukraine

Ukraine

Ukraine

Modernisation of the production process in the manufacture of concrete

Boiler room modernisation and upgrading of heating system in Zhytomyr

Reservation of funds for the

gramme DemoUkraina II

energy efficiency pro-

APPROVED ENERGY

at a day care centre and

Upgrading of the street

Refurbishment of kitchen

facilities in school buildings

lighting in Gorlivka

improved street lighting in

SAVINGS CREDITS

PROJECTS (9)

Ukraine

Zhytomyr

Ukraine

Ukraine

sector in Pavlograd

Ukraine

sector

Ukraine

Ukraine

SUPPLEMENTAL **INVESTMENT (1)**

Ukraine

in 9 municipally owned Energy efficiency measures

APPROVED BARENTS HOT SPOTS FACILITY PROJECTS (3)

Karelia Initial assessment of waste tip in Petrozavodsk

Karelia

Komi

Energy efficiency measures in 10 municipally owned buildings in Petrozavodsk

Komi

Boiler room modernisation at the municipal hospital in Alchevsk

Ukraine

Ukraine

Energy efficiency measures in municipally owned buildings in Konotop

Russia

Upgrading of street

Energy efficiency measures in municipally owned buildings in the educational

Energy efficiency measures in 5 municipally owned buildings in Kramatorsk

Energy efficiency measures in municipally owned buildings in the educational

Energy efficiency measures buildings in Ivano-Frankivsk

Consulting framework for investment projects in the energy sector in Karelia

Preparation of investment in the solid waste sector in

CARBON FINANCE AND FUNDS (CFF)

TESTING GROUND FACILITY (TGF)

2 new purchase agreements

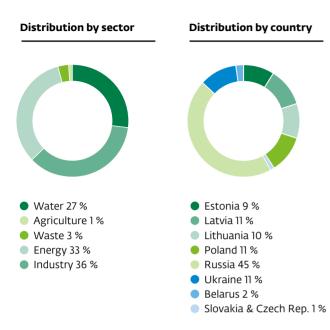
NEFCO CARBON FUND (NECF)

1 new purchase agreement

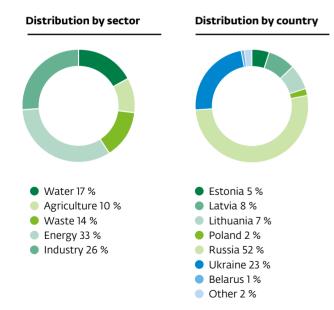
NORDIC CLIMATE FACILITY (NCF)

13 new projects

INVESTMENT FUND



NORDIC ENVIRONMENTAL DEVELOPMENT FUND (NMF)



CASE STUDY V Ukraine Fair winds for Ukraine

NEFCO 2012



2012 Personnel

01

Clockwise: Ann-Britt Ylinen, Magnus Rystedt, Jon Kahn, Harald Rensvik, Søren Bukh Svenningsen, Danfríður Skarphéðinsdóttir

BOARD OF DIRECTORS 2012

DENMARK

Søren Bukh Svenningsen Head of Division. Environmental Protection Agency/ Ministry of the Environment

Carl Biørn Rasmussen Head of Section. Environmental Protection Agency/ Ministry of the Environment, Alternate

FINLAND

01

Ann-Britt Ylinen Director, Ministry of the Environment

Kristiina Isokallio

Director, Ministry of the Environment, Alternate

SWEDEN Magnús lóhannesson. lon Kahn Secretary General, Ministry Director, Ministry of the of the Environment (until Environment

ICELAND

January 2013)

Skarphéðinsdóttir

Danfríður

NORWAY

Harald Rensvik

Jan Thompson

Secretary General, Ministry

of the Environment. Chair

Senior Adviser, Ministry of

the Environment, Alternate

Lars Elfvin Senior Administrative Officer, Ministry for Foreign Senior Adviser, Ministry of Affairs, Alternate the Environment. Alternate

> OBSERVERS Mats Ekenger Senior Adviser. Nordic Council of Ministers

Søren Kjær Mortensen Senior Director. Head of Origination, Nordic Investment Bank

CONTROL COMMITTEE

Chairman **Bill Fransson** Director

Denmark **Thomas Jensen** Member of Parliament

Finland **Tuula Peltonen** Member of Parliament

Iceland Ragnheiður Rikhardsdóttir Member of Parliament

Norway Hans Frode Kielland Asmvhr Member of Parliament

Sweden Åsa Torstensson Member of Parliament

AUDITORS Sixten Nyman

Authorised Public Accountant KPMG Finland, Helsinki

Per Gunslev Authorised Public Accountant KPMG Denmark, Copenhagen

SECRETARY TO THE CONTROL COMMITTEE **Birgitta Immerthal** Authorised Public Accountant, KPMG Finland, Helsinki

PERSONNEL 2012

Magnus Rystedt Managing Director

Husamuddin Ahmadzai Special Adviser Environment and Technology

Mia Alén Loan Administrator

Tita Anttila Chief Counsel

Marie Baltzari-Setälä Assistant

Amund Beitnes Investment Manager

Janika Blom Legal Counsel Carbon Finance and Funds

Ulf Boiö Senior Investment Manager

Aliona Fomenco Project Officer Carbon Finance and Funds (until March 2013)

Henrik Forsström Senior Adviser **Barents Hot Spots Facility**

NEFCO 2012



Peter Henningsen Investment Manager (until July 2012)

Kari Homanen Vice President

Kari Hämekoski Manager Carbon Finance and Funds

Fredrik Larsson Analyst

Karl-Johan Lehtinen Senior Manager Environmental Affairs

Helle Lindegaard Senior Legal Adviser

Maria Maliniemi Investment Manager

Tina Nyberg Assistant Carbon Finance and Funds

Bo Eske Nyhus Senior Investment Manager (from April 2012)

Anja Nystén Senior Adviser Carbon Finance and Funds

Elisabet Paulig-Tönnes, Senior Manager Project Administration

Maija Saijonmaa Project Manager Carbon Finance and Funds Ash Sharma Vice President Carbon Finance and Funds

Julia Shevchuk Chief Investment Adviser Representative Office in Kiev. Ukraine

Heli Sinkko Legal Assistant

Mikael Sjövall **Communications Manager**

Tua Skand Loan Administrator

Thor Thorsteinsson Investment Manager

Marina Valkonen Assistant to the Managing Director

Torben Vindeløv **Executive Vice President**

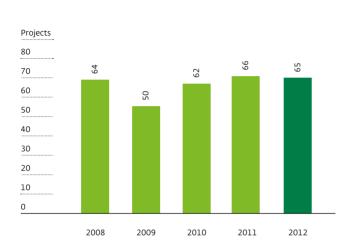
Johan Willert Senior Adviser

Emilie Yliheljo Legal Counsel Carbon Finance and Funds (until September 2012)

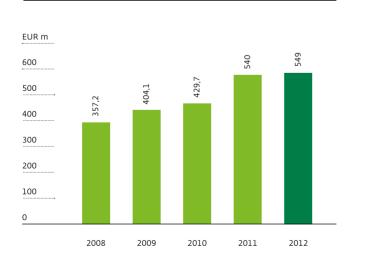
NEFCO IN NUMBERS

Five year comparison

Number of projects approved by NEFCO's Board of Directors



The total value of funds administered by NEFCO



•••

At the end of the year, NEFCO had 28 funds with total assets of EUR 549 million under management. Design: Nimiö (www.nimio.fi) Cover photograph: David Frazier / Corbis Printhouse: Lönnberg Print Oy, Helsinki 2013

This NEFCO publication has been printed on FSC certified paper.



NORDIC ENVIRONMENT FINANCE CORPORATION

Street address: Fabianinkatu 34 Postal address: P. O. Box 249 FI-00171 Helsinki, Finland tel: +358 10 618 003 fax: +358 9 630 976 www.nefco.org / info@nefco.fi twitter.com/NefcoNordic



441 017 Printed matter