Northern Dimension Environmental Partnership

Экологическое Партнерство Северного Измерения

NDEP News

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NDEP projects in brief

NDEP Steering Group meets in St. Petersburg

The most recent NDEP Steering Group meeting was held on October 9th and kindly hosted by SUE Vodokanal St. Petersburg. The meeting brought together the EBRD, EIB, NEFCO, KfW, the European Union and Russia as members of the Group; with donor representatives from Denmark, Finland, Germany, Norway, Sweden and the Nordic Council of Ministers joining as observers.



(from left) Ms Betsy Nelson, EBRD Vice President, Mr Jaakko Henttonen, NDEP Manager, Mr Heinz Olbers, ElB Director for Lending Operations and NDEP SG Chair and Mr Virgil Nae, Head of ElB Representation in Russia

The Steering Group reviewed the progress of all the projects currently under implementation. Top of the agenda was a status report on the construction of the wastewater treatment plant in Kaliningrad.

The latest schedule by the client aims to have the plant technically completed by June 2014, allowing enough time for start-up and testing before next year's winter. It was noted that the Kaliningrad authorities still need to address the issue of financing the costs of start-up operations and the on-going operation of the plant.

The NDEP Support Fund stands at EUR 342 million with EUR 165.1 million allocated for the nuclear safety window and EUR 176.9 million available for environmental projects. So far about EUR 128 million has been allocated for projects in north-west Russia and Belarus which leaves a balance of EUR 55 million for new proposals.

The EBRD presented a new proposal for further modernization of the Kaliningrad district heating network as a follow up phase 2 of the successful project now close to completion. NEFCO informed the group of a number of feasibility studies being carried out for new investments in Karelia, Komi Republic, Vologda, Kaliningrad and Leningrad regions. The Steering Group Chair, Mr Heinz Olbers, urged the IFIs to develop new proposals for co-financing with NDEP to utilise the available grants.

Now that all the major cities round the Baltic Sea (apart from Kaliningrad) have adequate wastewater treatment, it is the combined impact of smaller municipalities which need to be addressed. Similarly energy efficiency is a priority for the donors as recent contributions to the Fund were made with a request to co-finance additional district heating investments.

The Steering Group will report on its activities throughout the year when the NDEP Assembly of Contributors next meet in London on 6 December 2013.



NDEP Steering Group meeting – 9 October 2013 St Petersburg



Inauguration of the Northern Tunnel Collector in St. Petersburg - the biggest project in the NDEP environmental window

Deep below the famous golden cathedrals, palaces and squares of St. Petersburg, a whole underground world has slowly been taking shape over recent years known as the **Northern Tunnel Collector.** With a EUR 24 million NDEP grant it is the biggest project in the NDEP environmental window and has radically improved the ability of Russia's second city to stop polluted wastewater flowing into the Neva River, Gulf of Finland and Baltic Sea.

The 'Collector' is an enormous underground complex of tunnels which merge urban wastewater from an area of 330 km². There are two main tunnels each 12.2 km long and 4 m wide with additional tunnels and micro-tunnels, and 64 shafts embedded at a depth of up to 90 m. At the heart of the system is a uniquely designed pumping station located between the two main tunnels and described as an 'underground skyscraper' because it is comparable in height to a 35-storey building. Most of the wastewater flows through the tunnel by force of gravity but in the area of Grenadiersky Embankment the tunnel needs to go up potentially causing problems with the flow and sediments. This is the reason why a powerful pumping station (URS422) was needed to lift the wastewater up by 60 m and redirect it to another discharge tunnel connected to the Northern Wastewater Treatment Plant.

The inauguration of the project took place at 10:00 on the 10^{th} of the 10^{th} this year. It was a memorable event with a high-profile delegation from Russia, Finland and representatives of NDEP donors and IFIs. The City's Mayor, Mr Georgiy Poltavchenko, former Mayor Ms Valentina Matvienko and the Director General of SUE Vodokanal, Mr Felix Karmazinov went to the control room of the underground pumping station that NDEP financed and started the operation of the Collector with a push of a button. The inauguration coincided with the 155th anniversary of Vodokanal, with one observer noting that it was the best possible gift that the company could have.



(from left first row) Ms Valentina Matvienko, Speaker of the RF Council, Mr Georgiy Poltavchenko, Mayor of St.Petersburg (second row from left) Mr Paavo Lipponenen, ex-President of Finland, Mr Felix Karmazinov, Director General of Vodokanal

Ms Valentina Matvienko, Speaker of the Russian Federation Council and former Mayor of St. Petersburg said, *"It is difficult to imagine what lies underground. It is*

an underground city with kilometers long tunnels, laid at a depth of 40-90 m.... It is also difficult to understand the enormous financial scale of this investment".



Via video link – the high level delegation starting the work of the Collector

The opening of the Collector means that 98.4% of St. Petersburg's wastewater is now treated. It prevents over 334,000 m³ of untreated wastewater per day (the equivalent of Stockholm's wastewater treatment capacity) from being drained into the Neva River. It is worth pointing out that the hugely celebrated inauguration of the Southwest Wastewater Treatment plant in 2005 has the capacity of treating 330,000 m³ of untreated wastewater per day. Over the years, the city has become a centre of excellence for wastewater treatment operating in full compliance with the HELCOM, EU and Russian standards.

The project has only been possible thanks to significant Russian funding coming from the budgets of the Russian Federation, City of St. Petersburg and Vodokanal. That amounts to 82% of the total investment cost of EUR 562.6 million. The NIB, EBRD and EIB extended loans of EUR 60 million which attracted additional grant co-financing from NDEP (EUR 24 million), EBRD (EUR 6 million), Sweden (EUR 7.9 million), Finland (EUR 6.1 million) and EUR 0.3 million from the Finnish John Nurminen Foundation. Significant donor funds came in recognition of the project's great impact on the ecology of the Baltic Sea.

Georgy Poltavchenko, the Mayor of St Peterburg who officially opened the Collector concluded, "We've waited a few decades for this event... not only the residents of our city, but residents of all areas adjacent to the Baltic Sea region."



NDEP Delegation in front of the URS-22 Pumping Station (from left) Mr Andrey Kolesnikov, Russian Ministry of Foreign Affairs, Mr Virgil Nae, EIB, Mr Heinz Olbers, EIB and Mr Jan Thompson, Norwegian Ministry of Foreign Affairs

Investment plans of SUE Vodokanal St. Petersburg - full treatment for wastewater by 2030

In 35 years the amount of wastewater treated in St. Petersburg has gone from zero to over 98%. But water utility company Vodokanal is not resting on its laurels. It wants water treatment levels to reach 100% and for residents to be able to swim in their city's river again.



Photo from the inauguration of the Northern Tunnel Collector on 10 October 2013

Until 1978 the sewage from households, factories, hospitals and schools was released into the Neva River. Even by 2001, only 67% of the city's wastewater was cleansed and sanitized. Sustained investment and construction has achieved much in recent years. In 2005 the EUR 200 m Southwester Wastewater Treatment Plant opened, and now with the new Northern Tunnel Collector, 98.4% of St. Petersburg's wastewater is treated. In addition, all the large treatment plants in the city have started using chemical phosphorus removal to help the city meet the HELCOM standard of less than 0.5 mg of phosphorus/litre of wastewater.

During a presentation at the International Conference which followed the inauguration ceremony of the Northern Tunnel Collector, Mr Felix Karmazinov, the Director General of Vodokanal, outlined the company's future plans. For wastewater, the target by 2030 is to treat 100% of municipal sewage and run-offs, construct additional tunnels and backup networks and fully modernize street sewer networks.

There are currently two major on-going investments both with co-financing from NDEP. The reconstruction of the Northern Wastewater Treatment Plant as part of the overall Neva Programme is planned for completion in 2014. Similarly, the rehabilitation of ten suburban wastewater treatment plants with co-financing from NEFCO will be finished next year. Further plans include adding new technologies and treatment at the existing plants to deal with surface water run-offs, industrial wastewater and specific contaminations. The company also plans to build additional permanent snow-melting stations to re-direct the water directly to treatment plants. Finally, landfills with sludge from wastewater treatment need to be to disinfected and treated for heavy metals.

Amid all the new investments Vodokanal has another potentially even more challenging ambition: to change people's attitude towards environmental protection through its support for the children's education centre and the innovative water museum that already attracts 40,000 children and students every year.

Interview with Heinz Olbers, the new Chair of the of the NDEP Steering Group



The Chairmanship of the NDEP Steering Group rotates on an annual basis amongst the IFIs. The EIB took over the chairmanship at the start of July 2013 and below is a short interview with Mr Heinz Olbers, EIB's Director of the Eastern Neighbours and Central Asia Department (photo left)

What are your expectations of NDEP during the EIB's Chairmanship?

It is crucial that we continue to work closely with our colleagues from the EBRD and NIB, and that we stay focused on progress at the Kaliningrad Wastewater treatment plant. We may see the plant technically completed by July 2014 which will still fall during the EIB Chairmanship.

Secondly I hope for smooth progress with wastewater treatment projects in Belarus. Both NDEP grants and loan agreements with EBRD and NIB have been signed so all is currently on track.

Also there are several projects under preparation, in particular by NEFCO, and I look forward to seeing some of them becoming fully developed and approved by the Steering Group in due course. NDEP has over EUR 55 million available as co-financing with IFI loans for good environmental and energy saving projects.

• What is your assessment of the EIB cooperation with NDEP?

So far it's been really positive. The EIB supports the European Neighbourhood Policy in Russia, including the Northern Dimension Environmental Partnership. Up until now the EIB has contributed to four projects within the framework of NDEP. The EIB loans for these investments come to over EUR 102 million. All the projects are in St. Petersburg and include the Flood Protection Barrier, Northern Sludge Incinerator, Southwest Wastewater Treatment plant and the Neva programme. NDEP offers a proven structure for EIB that helps partner governments, the European Commission, donors and international financial institutions to put financing together for successful projects.

• The EIB has opened a Permanent Representation in Russia. Will the new office have an impact on NDEP activities in Russia?

I think the new office will really help NDEP activities by facilitating EIB's relations with all stakeholders on the ground and helping to develop lending operations across Russia. Having a local presence is especially helpful given the shift in the focus to more complex projects in the Russian regions. These would require intense dialogue with promoters, local and central Russian authorities, our partner international and local financial institutions, as well as additional involvement of the EIB team from an early stage of the project cycle.

The EIB is fully committed to environmental improvements, including energy-efficiency investments, a sector where it already holds solid know-how and experience. And the environment is one of the priorities of both the EIB's current External Lending Mandate and the EU – Russia Partnership for Modernisation.

NDEP Nuclear Operating Committee reviews progress at its meeting in London on 7 November 2013

The Nuclear Operating Committee (NOC) met on 7 November 2013 in London to assess the progress and to prepare new recommendations to the forthcoming Assembly of Contributors. Mr Mario Pain from the French Ministry of Ecology, Energy, Sustainable Development and Sea chaired the NOC meeting which gathered representatives of contributors from Finland, France, Germany, Norway, Russia, Sweden and the UK.

Since the last NOC meeting in May 2013, two key contracts were signed in June both for EUR 5 million. The first one is for the manufacture of a SNF retrieval machine to support the recovery and repacking of the spent nuclear fuel at Andreeva Bay. The second contract signed with the Nerpa shipyard is for the preparation of the infrastructure at the shipyard to enable the preliminary dismantling of Lepse and her placement on the slipway.



New Accumulation Pad for SNF Casks at Andreeva Bay

The EBRD reported good progress on all the other projects but raised some concerns about the timescale for placing Lepse on the slipway. This was originally planned for December 2013 but is now scheduled in May 2014 due to conditions at the Nerpa shipyard.



The EBRD, FCNRS and International Consultant delegation at Zvezdochka shipyard next to the Papa-class submarine three compartment unit during a site visit in May 2013

At the request of Rosatom, the NOC agreed to support a request to the NDEP Assembly for additional funds for the Andreeva Bay SNF Transport and Handling project to improve the power supply to ensure the effective operation of the SNF facilities.

A detailed progress report and project recommendations will be presented to the next NDEP Assembly of Contributors on 6 December in London.

NDEP Projects in brief (in million EUR)

Project	Lead IFI	Total cost	NDEP grant	Progress
1. St. Petersburg Southwest Wastewater Treatment Plant	NIB	193.6	5.8	Completed - in operation
2. St. Petersburg Flood Protection Barrier	EBRD	2000	1	Completed - in operation
3. St. Petersburg Northern Incinerator	EBRD	90.4	6.35	Completed - in operation
4. Leningrad Oblast Municipal Programme	NIB	23.2	4	Approaching completion
5. Komi Syktyvkar Municipal Services	EBRD	31.8	6	Approaching completion
6. Kaliningrad District Heating Rehabilitation	EBRD	21.8	7.3	Under construction
7. Archangelsk Municipal Water Services Project	EBRD	25.5	8.2	Approaching completion
8. Novgorod Water and Wastewater Rehabilitation	NIB	23	3	Completed
9. St. Petersburg Neva Programme	NIB	563	24	Under construction
10. Kaliningrad Water and Environmental Services	EBRD	110	10	Under construction
11. Vologda Municipal Water Services	EBRD	20	5.18	Under construction
12. Kaliningrad Project Implementation Unit	EBRD	3.8	3	Under implementation
13. Sosnovyi Bor Municipal Water Services	NEFCO	3.3	0.5	Approaching completion
14. PIU for Poultry Farms in Leningrad Oblast	NEFCO	3.5	2	Under implementation
15. Petrozavodsk Waster and Wastewater Rehabilitation	NEFCO	32	5	Under construction
16. Ten Suburban WWTP in St. Petersburg	NEFCO	16	3.75	Under construction
17. Petrozavodsk Solid Waste Management	NEFCO	8.5	1.5	Approved by Assembly
18. Pskov Water/Wastewater Infrastructure Rehabilitation	EBRD	27.4	6.5	Under construction
19. Murmansk City Water/Wastewater Rehabilitation	EBRD	30.1	6	Approved by Assembly
20. Vitebsk Wastewater Treatment Rehabilitation	EBRD	21.2	2	Approved by Assembly
21. Grodno Water/Wastewater Treatment Rehabilitation	NIB	25.1	2	Approved by Assembly
22. Brest Water and Wastewater Treatment Rehabilitation	NIB	18.4	2	Approved by Assembly
23. Vologda District Heating	EBRD	17.8	2	Under implementation
24. Gatchina Wastewater Treatment Plant	NEFCO	2.5	0.39	Approved by Assembly
25. Tikhvin Wastewater Treatment Plant	NEFCO	1.3	0.25	Approved by Assembly
26. Vyborg Wastewater Treatment Plant	NEFCO	6.5	1.25	Approved by Assembly
27. Novgorod District Heating	EBRD	23.3	1	Approved by Assembly
28. Gatchina District Heating	NEFCO	4	0.5	Approved by Assembly
29. Lomonosov District Heating Rehabilitation	EBRD	15.2	2.5	Approved by Assembly
TOTAL		€3.3 billion	€123 million	

The Northern Dimension Environmental Partnership (NDEP) was set up in 2001 in response to calls from Russia and the international community for a concerted effort to address environmental problems in the Northern Dimension Area (NDA). The most pressing actions relate to water, wastewater, solid waste, energy efficiency and nuclear waste.

The NDEP Support Fund is managed by the EBRD and provides grant financing to key investments in environmental and nuclear safety projects in the Northern Dimension Area. NDEP projects are implemented by the EBRD, NIB, NEFCO, EIB, the World Bank and KfW.

The European Union, Russia, Belarus, Belgium, Canada, Denmark, Finland, France, Germany, the Netherlands, Norway, Sweden and the United Kingdom are the sponsors of the NDEP Support Fund, which currently stands at €342 million.

For more information, visit <u>www.ndep.org</u>, or contact: **Jaakko Henttonen**, EBRD Regional Office, 25 Nevsky Prospect, St. Petersburg 191186, Russia - Email: <u>HenttonJ@ebrd.com</u> **NDEP Secretariat: Ewa Manik**, EBRD, One Exchange Square, London EC2A 2JN, UK - Email: <u>ManikE@ebrd.com</u>