Prospects for NIB financing of environmental projects in the Arctic region

“What is NIB doing for the Barents Sea environment”
Anár/Inari/Enare 8.10.2002
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Senior Environmental Analyst
**NIB in a nutshell**

- Owned by the five Nordic countries
- Finances Nordic projects in
  - the Nordic region
  - in the neighbouring areas
  - other industrialized countries
  - emerging markets in Asia, Latin America, Africa, the Middle East and in Central and Eastern Europe
- Financing based on sound banking principles
- Funding on the international capital markets
- Highest possible credit rating AAA/Aaa
- Head office in Helsinki and offices in Copenhagen, Stockholm, Oslo, Reykjavík and Singapore
NIB key figures for 2001

• Net interest income € 147 mill.

• Profit € 131 mill.

• Loans outstanding at the end of 2001: € 10,1 billion

• Loans disbursed in 2001: € 1,66 billion
  out of which 61 loans in the Nordic region (77%)
  and 20 loans outside the Nordic region (23%)
MISSION AND STRATEGY

NIB’s primary purpose is to promote sustainable economic growth by means of long term financing of projects that entail cross-border integration and environmental improvement, within as well as outside the Nordic region. NIB endeavours to reach this goal by:

• Acting as a catalyst for Nordic industrial cooperation by financing new investments, infrastructure projects and structural improvements, particularly cross-border investments

• Participating in the financing of foreign direct investment in the Nordic countries and of Nordic companies’ investments outside the Nordic countries

• Participating in the financing of projects in the emerging markets thus promoting the globalisation of Nordic industry

• Contributing with financing to the economic transformation and development in the areas adjacent to the Nordic region

• Playing an important role in the financing of environmental improvement investments in the Nordic countries, the Baltic Sea and Barent Sea regions

• Co-operating with Nordic and international financial institutions
Financing of Environmental Projects in the Baltic Sea Region

More than €2 billion disbursed 1988-2002
For more than 200 different environmental projects incl.:

• Waste water treatment
• Waste handling projects
• District heating
• Energy efficiency improvement
• Distribution and transmission
• Wind power projects
NORDIC ENVIRONMENTAL LOANS
1991 - 2001

Outstanding Disbursed per annum

EUR million

0 200 400 600 800 1 000 1 200

91 92 93 94 95 96 97 98 99 00 01
NORTHERN DIMENSION
ENVIRONMENTAL PARTNERSHIP
A new approach by Russia and the international community to meet the regional environmental challenges is needed.

The transboundary and legacy nature of the environmental hazards strengthens the case for grant support from international donors.

It is clearly beyond the capacity of any single country or organisation to tackle the environmental challenges of the NDA single-handedly.

The results of the present approach of ad-hoc financing of individual projects by IFIs and bilateral donors are not sufficient.

Sustained, concerted and coordinated action needs to be undertaken by all parties jointly to achieve a breakthrough.
**NDEP CHARACTERISTICS**

- It has a clear sectoral and geographic focus, initially on Northwest Russia.
- It is based on a programme defined through a bottom-up approach.
- It is a new way of co-ordinating local, bilateral and multilateral resources through a Steering Group and through assigned project leadership to facilitate a well-planned and effective implementation.
- It includes a multilateral initiative to start addressing nuclear waste hazards in the world’s largest nuclear waste repository.
- It aims at mobilising resources in advance for grant co-financing of key investments through the NDEP Support Fund.
- The grants provided by the Support Fund will constitute only a limited portion of the funding of municipal environmental projects, while most of their funding will be in the form of loans and local contributions. For these projects, grants provided by the Fund will play an important catalytic role.
## POTENTIAL NDEP PRIORITY PROJECTS

<table>
<thead>
<tr>
<th>Project name</th>
<th>Estimated project cost (EUR million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archangelsk Municipal Services Improvement Project</td>
<td>20</td>
</tr>
<tr>
<td>Kaliningrad District Heating Rehabilitation</td>
<td>32</td>
</tr>
<tr>
<td>Kaliningrad Solid Waste Management Project</td>
<td>55</td>
</tr>
<tr>
<td>Komi Municipal Services Improvement Project</td>
<td>30</td>
</tr>
<tr>
<td>Leningrad Oblast Municipal Environmental Investment Programme</td>
<td>120</td>
</tr>
<tr>
<td>Murmansk District Heating Project</td>
<td>52</td>
</tr>
<tr>
<td>Novgorod Cross Municipal Rehabilitation Project</td>
<td>65</td>
</tr>
<tr>
<td><strong>St. Petersburg</strong> Southwest Wastewater Treatment Plant, (SWWTP)</td>
<td>181</td>
</tr>
<tr>
<td><strong>St. Petersburg</strong> Direct Wastewater Discharge Project</td>
<td>202</td>
</tr>
<tr>
<td><strong>St. Petersburg</strong> District Heating Programme</td>
<td>92</td>
</tr>
<tr>
<td><strong>St. Petersburg</strong> Flood Protection Barrier</td>
<td>&gt; 500</td>
</tr>
<tr>
<td><strong>St. Petersburg</strong> Northern Incineration Plant</td>
<td>50</td>
</tr>
</tbody>
</table>
Projects should be:

- fully in line with Russian priorities
- adequately funded from the outset
- selected to fit in with an integrated, holistic approach; all steps to be taken aiming at the eventual disposal of radioactive material need to be established at the beginning of the process
- built on the experience of existing bilateral programs and the work of the Contact Expert Group under the auspices of IAEA as well as the EBRD’s extensive experience in the nuclear safety area
- in line with international best practice and rely on effective work by locally based Project Management Units (PMUs) under the guidance of Russian and international experts.
## Tentative Ideas of Potential Projects for NDEP’s Nuclear Safety Window

<table>
<thead>
<tr>
<th>Project</th>
<th>Indicative cost (USD million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure at <strong>Andreeva Bay</strong></td>
<td>9 - 13</td>
</tr>
<tr>
<td>Regional interim storage facility for <strong>SNF</strong></td>
<td>50</td>
</tr>
<tr>
<td>Retrieval of SNF at <strong>Andreeva Bay</strong></td>
<td>80 - 95</td>
</tr>
<tr>
<td>Remediation of the service ship <strong>Lepse</strong></td>
<td>10 - 20</td>
</tr>
<tr>
<td>Removal of SNF from <strong>Lotta</strong></td>
<td>10 - 15</td>
</tr>
<tr>
<td>De-fuelling of <strong>nuclear submarines</strong></td>
<td>7 - 15</td>
</tr>
<tr>
<td>Repository at <strong>Novaya Zemlya</strong></td>
<td>70</td>
</tr>
<tr>
<td>Interim storage facility for <strong>radioactive waste</strong></td>
<td>11 - 17</td>
</tr>
<tr>
<td>Production facility for <strong>waste containers</strong></td>
<td>2</td>
</tr>
<tr>
<td>Retrieval of sludge at building 5 at <strong>Andreeva Bay</strong></td>
<td>n.a.</td>
</tr>
<tr>
<td>Processing of radioactive waste at <strong>Andreeva Bay</strong></td>
<td>10</td>
</tr>
<tr>
<td>Retrieval of waste at <strong>Murmansk Radon facility</strong></td>
<td>2</td>
</tr>
<tr>
<td>Reactor compartment storage at <strong>Saida Bay</strong></td>
<td>&gt;100</td>
</tr>
</tbody>
</table>
NDEP PIPELINE
*Priority environmental and nuclear waste projects divided by category/sector*

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>APPROX. SHARE %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water and wastewater</td>
<td>22</td>
</tr>
<tr>
<td>Solid waste</td>
<td>3</td>
</tr>
<tr>
<td>Energy efficiency</td>
<td>12</td>
</tr>
<tr>
<td>Pollution and flood prevention</td>
<td>26</td>
</tr>
<tr>
<td>Cross-sector (water and wastewater, solid waste, energy efficiency)</td>
<td>9</td>
</tr>
<tr>
<td>Nuclear waste clean-up</td>
<td>28</td>
</tr>
</tbody>
</table>

**TOTAL** 100
NDEP SITES

- Leningrad Oblast
  - Nuclear clean-up
  - District heating
  - Wastewater
- Vorkuta
  - Wastewater
  - Waste
  - District heating
  - Flood protection
  - Cross-sector
- Baltic Sea
- Gulf of Bothnia
- Murmansk
- Natalingrad
- Leningrad Oblast
- Novgorod
- Moscow
- Barents Sea
- Arkhangelsk
- Syktivkar
- Komi
What are the shortcomings of IFIs in relation to the remaining problems

- A lot of remaining Hot Spots does lack cashflows = not bankable, i.e. old dump sites
- Non-point (diffuse) Hot Spots often the result of the combination of several factors
- IFIs are typically wholesale banks and can not handle small and scattered project
- Agriculture and fishery are not easy to finance due to the individual sizes
CASE: Environmental benefits from the investments in the Pechenga nickel smelter by Norilsk Nikel

<table>
<thead>
<tr>
<th></th>
<th>Before investments</th>
<th>After investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphur dioxide</td>
<td>148 000 t/a</td>
<td>12 000 t/a</td>
</tr>
<tr>
<td>Dust</td>
<td>6 000 t/a</td>
<td>300 t/a</td>
</tr>
</tbody>
</table>

Reduction of sulphur 92% and of dust 95%. The dust contains heavy metals like nickel, copper, cobolt, lead, chromium and cadmium. Unit costs in Pechenga approx. 1 SEK/kg sulphur reduced, in comparision to 30-35 SEK/kg S in a Nordic country.