

The Expressway Moscow – Saint Petersburg, Section km 15th – 58th

Environmental and Social Action Plan LLC 'NWCC'

➤ Purpose

- The goal of the NWCC ESAP is to describe briefly basic actions (to prevent, reduce and compensate), which shall be implemented in the course of realization of the Project
- The plan covers both construction and operation stages

➤ References

- Developed from the **Environmental and Social Action Plan performed by ERM** from the start of the technical studies

The environmental measures proposed are included in the Concession Agreement (obligations of NWCC as a Concessionnaire under the Concession Agreement will be fulfilled under the contract with the company-operator)

- In line with the **10 UN Global Compact Principles**
- In line with The **Global Reporting Indicators** proposed by the UN Global Compact Principles
- In line with the **ISO 14001 2004** standard (International Organization for Standardization)



➤ **3 parts - 35 actions:**

1. ENVIRONMENT AND SOCIAL MANAGEMENT

2. BIODIVERSITY CONSERVATION

3. MITIGATION OF POTENTIAL ENVIRONMENTAL IMPACTS CAUSED BY AIR EMISSIONS, WASTEWATER DISCHARGE, SOLID WASTE GENERATION AND HARMFUL PHYSICAL IMPACT FACTORS

- Definition and implementation of an Environmental and Social Management System and a monitoring system to answer:
 - biodiversity preservation,
 - public engagement,
 - grievance mechanism,
 - community engagement.

By all involved parties of the Project, according to ISO 14001

- Implementation of an Emergency Response Plan (*taking into consideration the fact that river Klyazma and Moscow Canal are sources of drinking water and classified as water bodies of the highest fishery category*)
- Reports on the implementation of this plan by General Contractor and Operator
- Participation to the development of the Khimki Forest Ecosystem Improvement Project
- Open and constructive dialogue with stakeholders

➤Prevent

- Reduction of tree cutting in the Khimki forest from 144 to 95 ha in particular by the reduction of the road's width and by the relocation of one toll gate outside the forest area

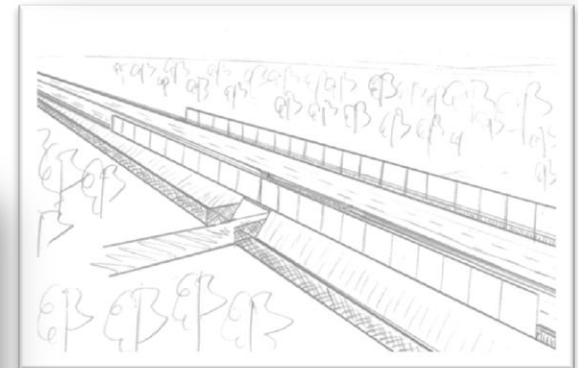
➤Reduce

- Proposition to implement a program of activities under the provisional name "Patriarch Trees" as part of KFCP
- Installation and maintenance of birdhouses and nest boxes in the Khimki forest
- Rehabilitation of areas temporarily occupied during construction
- Implementation of measures aimed at maximum preservation of natural vegetation on the slopes of the Klyazma river (erosion prevention and control of activities)



➤ Reduce

- Promote for planning and establishment of local nature areas under special protection (ASEV)
- Construction of wildlife crossings protected with special screens to minimize cars' impacts (noise, headlights) on animals
- Arrangement of culverts for crossing of small mammals and amphibians (where the highway runs in the vicinity of water bodies and swamps)
- Installation of metal fencing along the entire route to prevent penetration of animals or pedestrians on the road and improve safety to the cars



➤ **Compensate**

- Plantation of 500 ha of forest

➤ **Local contribution**

- Improvement at St George spring, Khimki forest garbage gathering in partnership with local stakeholders



➤ Cleaning of storm and melt water with the use of modern technical means and technologies preventing contamination of surface and ground waters

➤ Use of modern anti-glaze materials for maintenance of the road in winter, and carrying out control measurements of the concentration of chloride compounds in soil, snow, and vegetation

➤ Provisions for monitoring concentrations of main pollutants in the ambient air at the houses located in the nearest vicinity of the highway (monitoring near house once a year during operation stage)



➤ Performing of Waste Management Plan

➤ “Management” of former and large dumps (on, near, or around the land plots of the highway)

➤ Implementation of screen noise barrier and acoustic plantations where sound and light exposure can have an impact on the environment and / or bring inconvenience to local residents and wildlife

