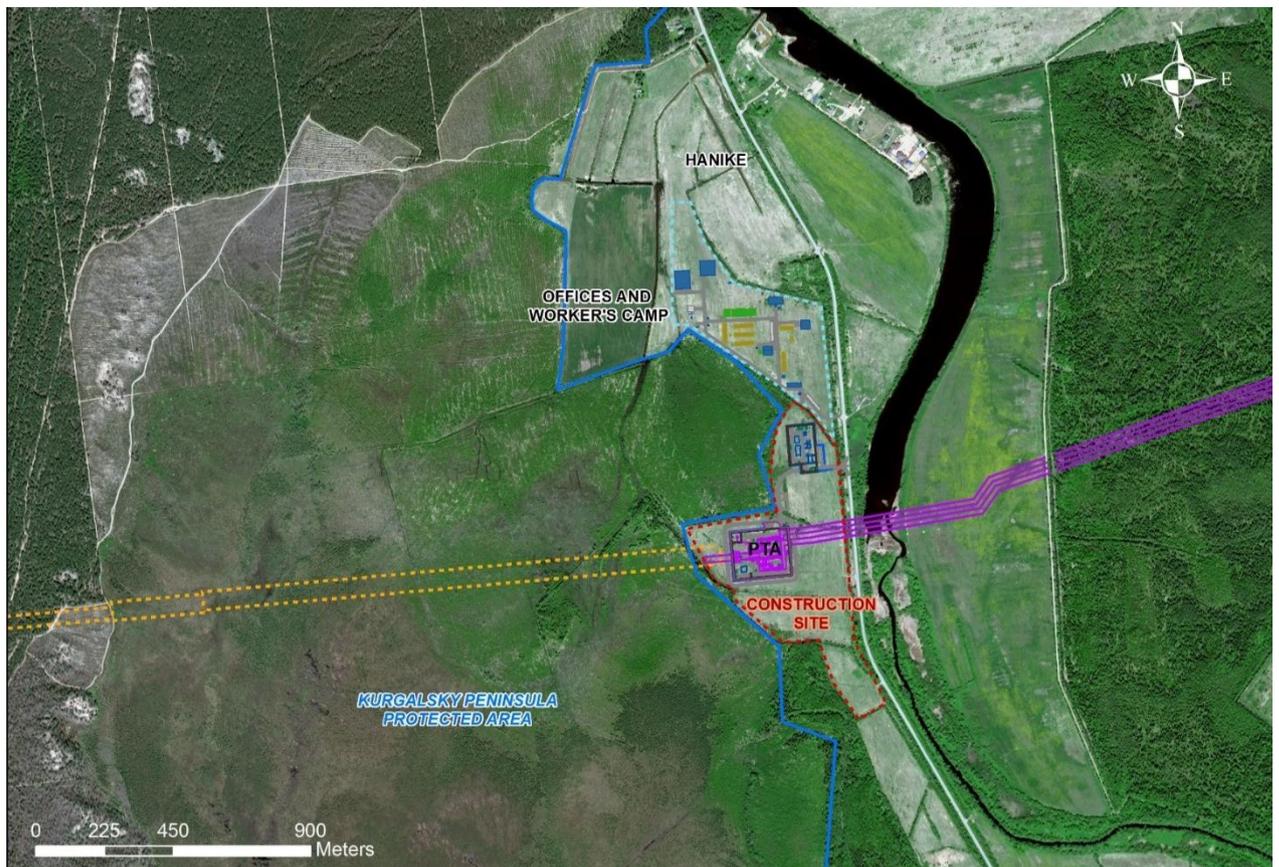


Nord Stream 2 Project in Russia

Nord Stream 2 AG | Jul-19





1. About the Project

The Nord Stream 2 project envisages a **modern and effective new gas pipeline** passing through the Baltic Sea. This international infrastructure project will expand Russia's access to the important European gas market and enhance supply security.

Nord Stream 2 is part of what is known as **the Northern Corridor** – a 4 000 km long gas transportation route connecting Russia's vast new Yamal gas fields to the European gas grid. Nord Stream 2 will make Russia's connection to the European gas market more sustainable, providing an important source of export revenue for the Russian economy.

In Russia, the Nord Stream 2 Pipeline crosses a section of about 3.7 km in the southern part of the Kurgalsky nature reserve, which is also protected under **the Ramsar Convention** on Wetlands of International Importance especially as Waterfowl Habitat and **the Helsinki Convention** on the Protection of Marine Environment of the Baltic Sea Area. In view of the protection status of the area, we are fully aware of our responsibility towards this sensitive habitat. The project is being implemented in line with applicable national legislation and international standards, including **the International Finance Corporation Performance Standards on Environmental and Social Sustainability (IFC PS)**. Based on a mitigation hierarchy approach provided by the IFC PS, Nord Stream 2 is obliged to avoid, minimise and compensate potential impacts.

Nord Stream 2 builds on **the successful experience of construction and operation of the Nord Stream gas pipeline (2011 – to present)**. Already during construction, Nord Stream was recognised as a benchmark project in terms of compliance with stringent industrial and environmental safety standards as well as public affairs and stakeholder engagement. This gas pipeline has become a symbol of mutually beneficial international cooperation and a key element of the European energy security.

Nord Stream 2 AG is a project company established for planning, construction and subsequent operation of the Nord Stream 2 Pipeline. The company is based in Zug, Switzerland and is owned by PJSC Gazprom.

Nord Stream 2 signed financing agreements with leading energy companies such as ENGIE S.A. (France), OMV AG (Austria), Royal Dutch Shell plc (UK/Netherlands), Uniper SE (Germany) and Wintershall Dea GmbH (Germany) that have committed to provide long-term financing for up to 50 percent of the total cost of the project. Each company has committed to providing long-term financing for up to 50 percent of the total maximum cost of the project.

2. Project Status in Russia

Various construction activities are currently underway in Russia. A majority of the preparatory works for the foundations **at the landfall facilities** has been largely completed; installation of equipment such as valves and filters is ongoing, while the operation buildings are under construction. Landfall facilities include a service & operational zone and a Pipeline Inspection



Gauge (PIG) trap area. The intelligent PIGs will be used to scan the pipeline from the inside to ensure the integrity of the Nord Stream 2 pipelines at the operational phase.

The company is also proceeding with **optimised construction of the onshore linear section by pulling the pipeline strings** with the help of winches into the trenches prepared with the use of trench boxes. **This innovative open-cut construction method** was designed specifically for the Russian section of the Nord Stream 2 pipeline that crosses approximately 3.7 km of the Kurgalsky nature reserve to reduce the width of the construction corridor and minimise potential impacts (for more details, please see chapter 4).

Construction works are proceeding well **at the offshore section**. In May-June 2019, **the first 100-kilometre of the Nord Stream 2 twin gas pipeline was laid in Russian territorial sea**. Earlier this year, as part of the temporary construction works, a 460-metre-long **cofferdam was installed** to prepare for pipe laying at the shoreline crossing. The cofferdam consists of parallel vertical steel walls that allow to keep the width of the disturbed area to a minimum. In addition, sea-bed preparatory activities have been finalised. This includes **preparation of an approximately 3.5-kilometre trench** to ensure pipeline stability in rough seas and to protect the pipeline from potential ice scour during the winter season.

In 2018, a temporary camp was commissioned to accommodate construction personnel in the immediate vicinity of the site. The camp's systems, including electricity, water supply and sewage, function autonomously, so as **to minimise the potential impact on local communities and pressure on infrastructure**.

3. Regulatory Environment and Permitting Procedure in Russia

All project activities in Russia are being carried out **based on the permits** for construction and for the installation of an underwater pipeline in the territorial sea of the Russian Federation, issued in summer 2018 by the Ministry of Construction and the Federal Service for Supervision of Natural Resources (Rosprirodnadzor) respectively. As an integral part of the permitting process, Nord Stream 2 conducted an Environmental Impact Assessment (EIA) in compliance with Russian environmental protection legislation, additional regulations, and international law.

In 2018-2019, following finalization of detail design, **technical solutions and construction methods have been optimised** to accommodate ground conditions, further enhance reliability and reduce impacts on the environment. The updates made to the project documentation are technical in nature and largely relate to the onshore and temporary facilities. Russian legislation requires all modifications, including improvements, to be reflected in the updated project documentation and approved in line with the established procedure by competent authorities prior to the commissioning of the gas pipeline. In March 2019, Nord Stream 2 initiated the corresponding EIA procedure by preparing an updated draft report and disclosing it to the public.



In 2017, **international consultations on the Nord Stream 2 Project were completed in line with the Espoo Convention on Environmental Impact Assessment in a Transboundary Context.** Although the Russian Federation has not ratified the Espoo Convention, it acts as a party of origin as far as national legislation allows. The Espoo Report, including a comprehensive Map Atlas as well as a Non-Technical Summary published in ten languages, was a key element of the public participation process in all countries across the Baltic Sea region.

4. Innovative Construction Solution to Minimise Impact on Kurgalsky

In recognition of the protection status of the Kurgalsky reserve, as well as in the response to feedback received during public consultations on the EIA report, Nord Stream 2 developed and is currently implementing **an innovative construction solution specifically for crossing the Kurgalsky reserve.** This technical solution is a key measure to significantly reduce environmental impacts during construction and operation.

- The proposed method relies on trench boxes to maintain vertical trench walls and **reduce the construction corridor and related impacts by some 50 percent. It also reduces approximately 70 percent of the excavated material** when compared to a conventional unsupported trench.
- Within the coastal forest, the most sensitive habitat, **the width of corridor is limited to 30 metres for a length of 1.3 kilometres.** This is the narrowest corridor feasible for the construction of a pipeline of such capacity.
- **The pipelines will be installed as two strings pulled in a flooded trench,** limiting the dewatering required during construction. **This ensures that groundwater levels during and after construction will not be altered,** keeping surface hydrology in its natural condition as well. It also requires very limited equipment on site for pipeline installation, significantly lowering noise emissions and associated disturbances during the pipeline installation phase.
- As part of optimization of technical solutions, in some areas trench boxes are replaced by Larsen sheet piles, providing the trenches with **greater stability,** whilst retaining **environmental benefits of trench boxes** and accommodating ground conditions.

The optimised construction solution limits the impact from the project activities to a bare minimum:

- **The onshore construction corridor will impact only an area of 0.175 km² or 0.10 percent of the Kurgalsky reserve's overall onshore territory.** The reserve territory is 171.1 km² and equal to the total area of the reserve (555.1 km²) minus the offshore area (384.0 km²).
- Upon construction completion, the entire area will be reinstated. **A 30-m wide corridor above the pipeline, or only 0.111 km²,** will be maintained free of trees and naturally vegetated, as required by the Russian safety standards that forbid planting trees over or near high pressure pipelines.



5. Environmental and Community Initiatives Strategy

Beyond the requirements of Russian legislation, Nord Stream 2 has undertaken a voluntary commitment to comply with the IFC Performance Standards. Guided by this responsible approach, Nord Stream 2 has developed the **Environmental and Community Initiatives Strategy** to ensure sustainable project implementation and benefits for the environment and communities in the project area in Russia.

The proposed Environmental and Community Initiatives (ECo-I) Strategy **is based on four pillars and represents a holistic approach** to statutory compensations, biodiversity enhancement, community initiatives and sponsorship. It reflects the company's long-term commitment to offset any adverse effects that the project might have, in accordance with Russian legislation and international standards.

In 2018, **approximately 35 projects were launched and implemented** as part of Nord Stream 2's ECo-I strategy, featuring: approximately 20 social projects focusing on health & safety, cultural heritage and community wellbeing; and 15 **research projects, including biodiversity conservation and habitat loss prevention initiatives, in the Kurgalsky reserve**. This work continues in 2019.

Specific initiatives under the Strategy are being defined and implemented **in cooperation with competent authorities, including the municipal officials, experts and local residents**, in line with the cooperation agreement that the company signed with the Government of the Leningrad Region in February 2018.

6. Net Gain for the Kurgalsky Reserve

Our commitment to the IFC PS (IFC PS # 6: **Conservation of Biological Diversity and Sustainable Management of Living Natural Resources**) and the protection status of the Kurgalsky reserve trigger the need for a **Biodiversity Action Plan (BAP)** to achieve a Net Gain of the biodiversity values in the project area of influence.

Nord Stream 2 has developed the BAP as part of the ECo-I Strategy with the aim **to preserve valuable habitats and eventually achieve a net gain on the biodiversity value of the Kurgalsky peninsula**. This plan provides an opportunity for the company to demonstrate its commitment to implementing the project responsibly in a protected and internationally recognised area – the Kurgalsky nature reserve. The plan has been developed based on **complex environmental surveys performed across the entire Kurgalsky peninsula**.

In late 2017 and early 2018, the draft plan was discussed with the Committee for Natural Resources of the Leningrad Region and presented to regional and international experts and NGOs at two events organised in St Petersburg and Geneva.

At present, a **Management Plan for the Kurgalsky reserve is being developed** as one of key elements of the BAP and Nord Stream 2's commitments to enhance biodiversity and



comply with the IFC PS. The Plan will serve as an administrative tool for enforcement of the Kurgalsky conservation objectives in the medium and long term in line with regional legislation. The project is being implemented in partnership with Strelka KB, a leading company in the area of spatial development strategies in Russia, and in dialogue with key experts and research institutions from St Petersburg and the Leningrad region.

7. Keeping Stakeholders Informed and Involved

We have been engaged in an **open dialogue with federal, regional and local authorities, elders, local residents, environmental NGOs and other stakeholders** from the early stages to ensure that public opinion is taken into account in decision-making. As part of public consultation process, Nord Stream 2 held a series of meetings with the local communities, environmental NGOs and experts to discuss the draft EIA report and the environmental surveys that had been carried out.

Nord Stream 2 has established **information points** in rural settlements of the Kingisepp District situated in the proximity to the project. The company has a **community liaison officer** based on site who ensures that voices of local residents are being heard and their needs and opinions are being taken into account by Nord Stream 2.

The company aims to be a good neighbour to local residents and **strives to participate in social initiatives in the Kingisepp District** within the framework of the Eco-I Strategy. In 2018-2019, a number of initiatives has been carried to support local cultural and educational activities. All of these activities were in line with the priorities laid out **in the comprehensive social assessment and studies**, which the company conducted in 2017 in partnership with specialised Russian and international consultancies.

In line with these priorities, Nord Stream 2 supported, among others, **the 25th anniversary celebration of the Izhora Museum in Vistino and the festival of Izhora culture** in July 2018 – an annual landmark event for the local cultural life, which aims to preserve language, traditions and ethnic culture of this indigenous people. In September 2018, **the Clean Beach Initiative**, an international waste collection campaign, also took place throughout the Kurgalsky reserve. A range of social initiatives is planned to be implemented in 2019.

In August 2018, Nord Stream 2 also supported a **Summer Archaeological School for over 20 teenagers from the Kingisepp District**, organised in partnership with the Leningrad Regional branch of the Russian Geographical Society. Building on this successful experience, **in 2019, a comprehensive educational programme named “My Land”** is being implemented. The project is the first of its kind to be carried out in the Kingisepp District; it is designed to reach all local schools with talks, workshops, scientific & creative contests, guided tours, and field trips. The programme will last for over a year between March 2019 and February 2020 and will target all schools in the Kingisepp District.

Our commitment to transparency and open dialogue goes way beyond bare legislative requirements. To comply with international standards, we have developed and adopted a **Stakeholder Engagement Plan** for the Russian Landfall and **the Grievance Mechanism for External Stakeholders**.

To keep interested parties informed, we regularly publish, update and distribute information materials tailored to different audiences. All activities implemented at the local level are also published promptly on VK: <http://vk.com/nordstream2>.



For more information, please visit our website: <https://www.nord-stream2.com/>.

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About Nord Stream 2 AG

Nord Stream 2 is a planned pipeline through the Baltic Sea, which will transport natural gas over 1,200 km from the world's largest gas reserves in Russia via the most efficient route to consumers in Europe. Nord Stream 2 will largely follow the route and design of the successful Nord Stream pipeline. With Europe's domestic gas production projected to halve in the next 20 years, Nord Stream 2's twin pipeline system will help Europe to meet its future gas import needs, with the capacity to transport 55 billion cubic metres of gas per year, enough to supply 26 million European households. This secure supply of natural gas with its low CO2 emissions will also contribute to Europe's objective to have a more climate-friendly energy mix with gas substituting for coal in power generation and providing back-up for intermittent renewable sources of energy such as wind and solar power.

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