Land and vegetation protection

Oil production and refining are potentially hazardous industrial operations. However, ongoing monitoring of equipment reliability and new technologies help the Company minimise the risk of soil contamination with oil or petroleum products.

The Company is running a targeted programme to **ensure pipeline reliability and the Clean Territory project**, which also seeks to reclaim disturbed lands. Under the programme, 400 km of pipes is replaced every year.

The Company is developing diagnostic technologies that reduce the number of failures and improve the economic efficiency of programmes. The innovative methods in use include non-contact magnetometric diagnostics which detects localised corrosion by registering magnetic fields, as well as UAV monitoring the technical condition of oil pipelines.

Gazprom Neft reclaims disturbed and contaminated land and mud pits by implementing cutting-edge pipeline technologies and land rehabilitation solutions based on prevalent soil properties and climatic conditions.

In 2018, the Company launched **the Green Seismic 2.0** – project based on seismic exploration technology preserving forested areas. The traditional approach requires building wide forest clearings to allow the passage of heavy all-terrain vehicles, with the width of the receiver lines of 4 m and the source lines of 4–5 m.

Green seismic survey is carried out using wireless recording equipment, which can be installed with the help of lightweight machinery. This enables us to significantly narrow down clearings or not to create them at all. The Green Seismic method introduced by the Company in 2016 reduced the width of the receiver lines[1] to one metre. At the end of 2017, Gazprom Neft launched a new stage of the Green Seismic 2.0 project to narrow the width of the source lines to 1–3 m. Each such project saves 450,000 trees[2].

The Green Seismic 2.0 project will not only contribute to preserving forested areas, but will also reduce the number of heavy all-terrain tracked vehicles, fuel consumption and emissions into the atmosphere, while improving industrial safety. In 2016–2018, the technology was rolled out at Gazpromneft-Noyabrskneftegaz, Gazpromneft-Khantos, Slavneft-Megionneftegaz, and Gazpromneft-Vostok. It saved 1,800,000 trees.

GREEN SEISMIC 2.0:
seismic exploration technology saving trees from cutting

1.8
MILLION TREES SAVED

The Clean Territory project on the Company's website

[1] The receiver and source lines are transverse and longitudinal lines featuring receiver points to record waves.
[2] The average area of 330 sq km was used for calculation, with the length of receiving lines of 1,175 linear km and forest coverage of 80%.

Clean Territory results in 2018

5,000 KM
diagnosed

5,300 KM
monitored in terms of corrosion rate

3,700 KM
protected with corrosion inhibitors

175 KM
upgraded

8.6 KM
overhauled