

Utilization of associated petroleum gas

APG utilization and achieving a reduction in its flaring are priority areas of our environmental policy. Significant investments have been made to resolve this issue as part of the Group's Efficient APG Use Program.

In 2017, over RUB 15 billion was allocated to the construction and renovation of APG treatment, transport, and refining facilities and for generating electricity and heat in Russia (2016: RUB 24.2 billion). In 2017, the program's most capital-intensive measures were in their final stages.

In 2017, the commissioning of 17 facilities was performed as a part of the Group's Efficient APG Use Program for 2017–2019, including the renovation of the Usinsk Gas Processing Plant and the commissioning of the Yarega power generating center in the Komi Republic.



Through the construction and commissioning of new APG utilization facilities in 2017, the total volume of APG flaring for the LUKOIL Group was almost halved compared to 2016, and LUKOIL's Russian oil and gas production subsidiaries achieved a utilization rate of 95.2%.

TOTAL APG (HYDROCARBON) FLARING, thousand cubic meters

	2015	2016	2017
Total for LUKOIL Group, including:	957,838	952,473	574,867
Russian subsidiaries of LUKOIL Group	900,161	937,555	555,327
Foreign LUKOIL Group subsidiaries	57,678	14,918	19,540

The Group's Efficient APG Use Program for 2018-2020 was approved in 2017. A number of measures are planned under this program, including the refurbishment of the Kokuy Gas Compressor Station and the construction of a power generation center at the Chashkinskoye field (LUKOIL-PERM), the technical

retrofitting of the compressor station at the Yu. Korchagin field (LUKOIL-Nizhnevolszhskneft), and the construction of a multiphase pump station (MPS) at the A. Alabushin field and thermal power plants at the Usinskoye field (LUKOIL-Komi).

The program covers a three-year period, and will be updated annually. The effectiveness of the measures taken is assessed through internal and external audits. Plans are revised based on the results of analyzing performance targets achieved.

APG UTILIZATION RATE, %

	2015	2016	2017
Total for LUKOIL Group, including:	92.0	92.1	95.4
Russian subsidiaries of LUKOIL Group	91.9	91.7	95.2
Foreign LUKOIL Group subsidiaries	93.5	98.1	97.6