

# Rosneft Climate Goals Summary

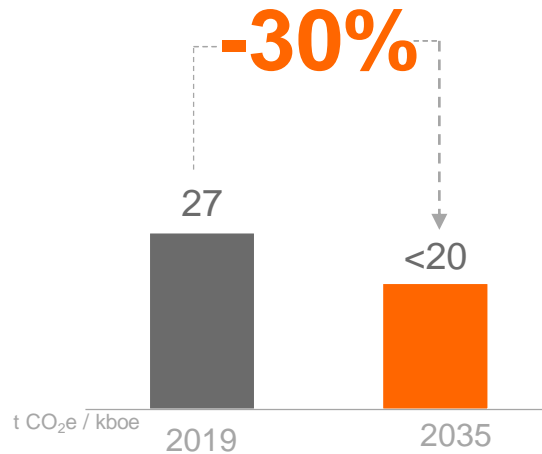
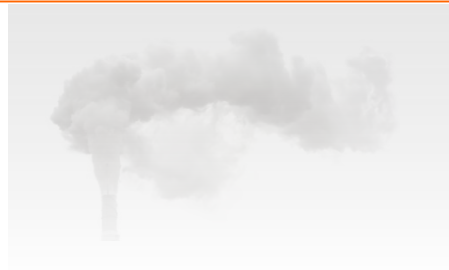


**Preventing emissions<sup>1</sup> by 2035**



**-20  
mln t CO<sub>2</sub>e**

**Reduction of Upstream emissions intensity<sup>2</sup> by 2035**

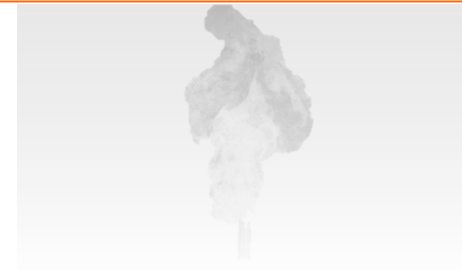


**Reduction of methane emissions intensity by 2035**



**<0.25%**

**Achieving zero routine flaring by 2035**



**Zero  
flaring<sup>3</sup>**

Note: all figures are for assets in Russia only.

<sup>1</sup> Preventing of absolute Scope 1 and 2 (direct and indirect) emissions in comparable terms.

<sup>2</sup> Scope 1 and 2 (direct and indirect) emissions

<sup>3</sup> Zero routine flaring of associated gas.

# Rosneft is in a Unique Position to Deliver its 2035 Climate Goals

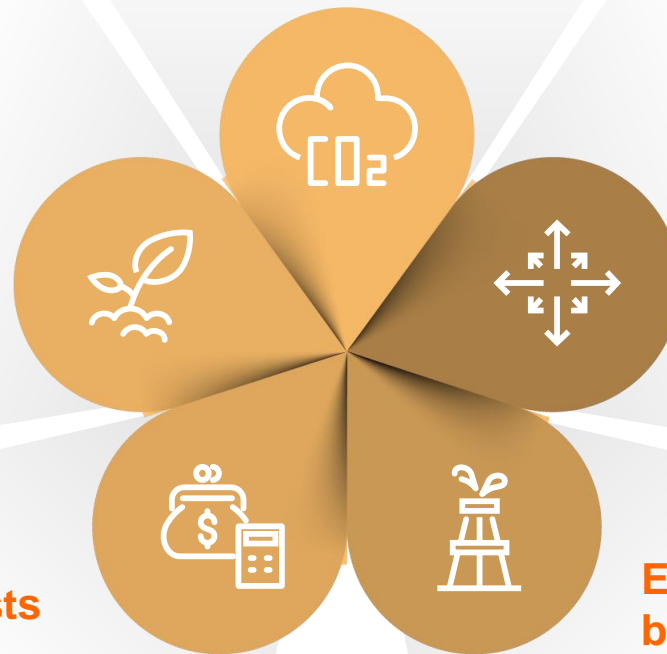


**Underground storage potential in Russia and Rosneft's depleted fields potential** to develop CCUS projects for disposal of greenhouse gas and APG storage

**Great potential of natural carbon sinks in Russia**

to develop forest conservation projects and offset CO<sub>2</sub> emissions

**Size of the company allows to realize “economy of scale”** (e.g., when replacing traditional generation with renewable energy)



**Leadership in lifting costs** allows to finance decarbonization and remain competitive on the cost curve

**Extensive natural gas resource base** with low production costs and growth potential

# Levers to Deliver GHG Reduction Goals (1/2)



## Lever

## Details



### Energy saving and energy efficiency

Energy savings have already achieved >4 mln toe<sup>1</sup>  
Company will continue energy efficiency program through **continuous improvements, including automation systems for lowering energy consumption**



### APG utilization and flaring reduction

APG flaring reduction program acceleration and “zero routine flaring” target  
Company considers additional options on **application of advanced technologies for APG reinjection and APG utilization**



### Methane emissions

Advanced processes of **leakage prevention and elimination with innovative technologies**: drones, laser and infrared scanners, supersonic detectors



### Share of gas in portfolio

Rosneft plans to produce 100 bcm of gas, increasing **gas in portfolio to >25%**

<sup>1</sup> For 2014-9M2020 period.

# Levers to Deliver GHG Reduction Goals (2/2)



## Lever

## Details



### CCUS projects

Rosneft plans to **leverage underground storage potential** of Russia, its own depleted fields and infrastructure

Analysis, development and pilot projects of carbon **capture, chemical neutralization, transportation and storage**

CCUS projects likely will be linked with blue hydrogen projects



### Renewables

**Potential for substitution of traditional thermal power with renewable**  
Renewable energy at new projects – economy of scale potential



### New products

Evaluation of projects producing new clean products, including **blue hydrogen** (optionally – green hydrogen) and other sustainable fuels, e.g. sustainable aviation fuel and biofuels – Scope 3 emissions reduction<sup>1</sup>

Retrofitting existing steam methane reforming hydrogen production, achieving **OPEX synergies with CCUS** and economy of scale



### Natural carbon sinks

Unlock natural carbon sinks potential of Russia and **develop full-scale forest conservation program** to offset CO<sub>2</sub> emissions<sup>2</sup>

<sup>1</sup> Emissions from customers' use of Company's products.

<sup>2</sup> Including mechanisms of net compensation of emissions through quotas purchase and monetization.