Electricity consumption

Electricity consumption volumes are recorded at all of the Group's office facilities, both owned and leased. Increased electricity consumption in 2019 was due to the installation of new equipment and in the context of an increase in energy use intensity to revenue.

Servers and computing equipment are the Group's largest consumers of electricity. The operation of MOEX's systems involves maintaining large amounts of equipment at three data centers.

The Group is focusing on two main areas to manage computing power and use energy responsibly:

- Consolidation of computing capacity by developing virtualization systems and introducing solutions based on microservice architecture, which means server equipment is operational only as and when needed.
- Ongoing equipment rotation and updating, and deployment of more modern and energy- efficient server solutions.
- ▶ In addition to control over operation of computing equipment, the Exchange carefully monitors power consumption at office premises. Forced shutdown is applied to all electrical equipment when not in use, and cold atmospheric air is used to air-condition server rooms in winter.
- ▶ In 2019, the Group doubled the number of energysaving light-bulbs. In just three years, about a third of all lightbulbs at MOEX's main office have been replaced with energy-saving bulbs.

Energy costs (thousand rubles)

Resource	2018	2019	Change 2018/2019 (thousand rubles)	Change 2018/2019 (%)
Gasoline	3,212.77	2,848.01	-364.76	11.35
Diesel	291.86	296.72	4.86	1.6
Electricity	56,495.66	58,196.17	1,700.51	3
Heat	7,500.09	7,073.56	426.53	-5.7

Greenhouse gases

In its activities, Moscow Exchange directly emits greenhouse gases through the operation of corporate vehicles and its own diesel generators to generate electricity in the event of emergency outages. Indirect emissions occur due to the use of electric and thermal energy purchased from energy suppliers.

In 2019, the Group reduced direct and indirect emissions (Scope 1 and Scope 2) of greenhouse gases and the ratio of emissions intensity to revenue. This was achieved through a reduction in the Group's consumption of heat and diesel fuel by limiting the operation of a number of older and less efficient vehicles and as a result of lower energy consumption for heating purposes due to a warm winter in 2019-2020.