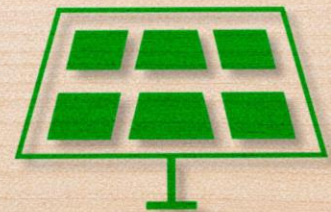
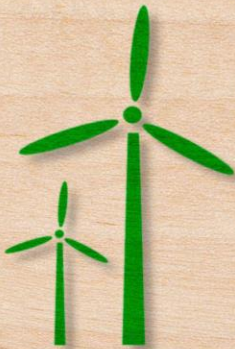


CASPY COMMODITY EXCHANGE JSC

2021



# CARBON FOOTPRINT REPORT

**Letter from the president of  
“Caspian Commodity Exchange” JSC**



For almost ten years, the Republic of Kazakhstan has been implementing a program to regulate greenhouse gas emissions. The emissions trading system, introduced in 2013-2014 as part of the implementation of the Kyoto Protocol, is gradually gaining momentum but is still far from perfect. The country’s leadership has set ambitious targets to reduce GHG emissions by 15-20% under the ratified Paris Agreement and to achieve carbon neutrality by 2060. We understand that it is impossible to achieve the stated targets only through the efforts of large industrial companies. However, existing regulations limit participants and do not allow everyone to purchase carbon units to offset their emissions. Meanwhile, globally, there is a deterioration in key climate indicators. Despite a temporary reduction in emissions due to the COVID-19 pandemic, carbon dioxide levels remain at record highs and continue to rise.

“Caspian Commodity Exchange” JSC being the first organized platform for CO2 emissions trading in the post-Soviet space, has been organizing secondary market trading of carbon units for eight years. In addition, since 2019, the company has been listed on the Kazakhstan Stock Exchange (KASE), which promotes the implementation of sustainable development principles and the disclosure of information in this area among its issuers. We understand that not only countries but also every company and individual worldwide must adopt plans to achieve net-zero emissions and take action as soon as possible to get on the right path towards this goal and implement measures to reduce emissions.

“Caspian Commodity Exchange” JSC as a company not included in the mandatory list of legal entities regulated by Kazakhstan’s legislation on emission limits, has decided to monitor emissions and achieve carbon neutrality in the shortest possible time. To this end, we have decided to conduct an annual inventory of direct and indirect emissions under Scopes 1, 2, and 3, and to implement measures to reduce emissions or, if reduction is not possible, to offset them with carbon units from voluntary markets. With this step, we aim to set an example for other companies in the country to follow our path and accelerate the processes of reducing carbon dioxide emissions from their activities.

Sincerely,

Erik Tanayev

President of “Caspian Commodity Exchange” JSC

## INTRODUCTION

**L**ike the broader international community, JSC “Caspy Commodity Exchange” strives to implement advanced environmental, social, and governance (ESG) practices in its operations.

For the first time, the company has prepared a Carbon Footprint Report, covering greenhouse gas emissions for 2021. The primary purpose of this report is to disclose Scope 1, 2, and 3 greenhouse gas emissions, set the company’s carbon reduction targets, and identify initiatives to achieve these objectives.

The carbon footprint calculations are based on a comprehensive analysis of internal and external documentation, operational data, and information exchanges with external data providers. The report is prepared in alignment with the ISO 14064-1:2019 guidelines and the Greenhouse Gas (GHG) Protocol for Scope 1, 2, and 3 emissions accounting.

# METHODOLOGY FOR CARBON FOOTPRINT CALCULATION

The calculation of the 2021 carbon footprint follows the guidelines of ISO 14064-1:2019 and the standards of the international Greenhouse Gas Protocol. The operational control approach is used for this calculation, which includes the offices and activities over which JSC “Caspy Commodity Exchange” has direct control.

The emissions inventory encompasses emissions resulting from organization-level activities, such as direct and indirect emissions from office usage. Regarding project-related activities, only emissions from business travel are considered, including those from organization-managed vehicles and other means of transport.

The following table presents greenhouse gas emissions identified for the carbon footprint calculation, as previously mentioned, categorized by the three Scopes.

| Scope   | Emission category   | Emission source                        | Data used for calculation                                   |
|---------|---|--|---|
| Scope 1 | Direct emissions from an organization whose sources are owned or controlled by the organization | Company's own vehicles                 | Type and volume of fuel used, liters                        |
| Scope 2 | Indirect emissions associated with electricity consumption                                      | Company office electricity consumption | kWh of electricity consumed per year, office space occupied |
|         | Indirect emissions associated with heat consumption   | Heat consumption of company office     | Gcal of heat per year, office space occupied                |



| Scope   | Emission category   | Emission source   | Data used for calculation  |
|---------|---|---|--|
| Scope 3 | Indirect emissions from goods or services that the organization uses but which are not under the organization's control | Business trips of employees using transport that is not under the control of the organization (Air transport and motor transport) | Business trip destinations, number of employees, mode of transport |
|         |   | Daily logistics of employees home-work  | Employee survey  |

International methodologies, including those from the IPCC, UNFCCC, and relevant national and international standards, were applied to calculate emissions across all categories. Details on all coefficients used are provided in Appendix 1 of this report.

# CARBON FOOTPRINT OF CASPY COMMODITY EXCHANGE JSC

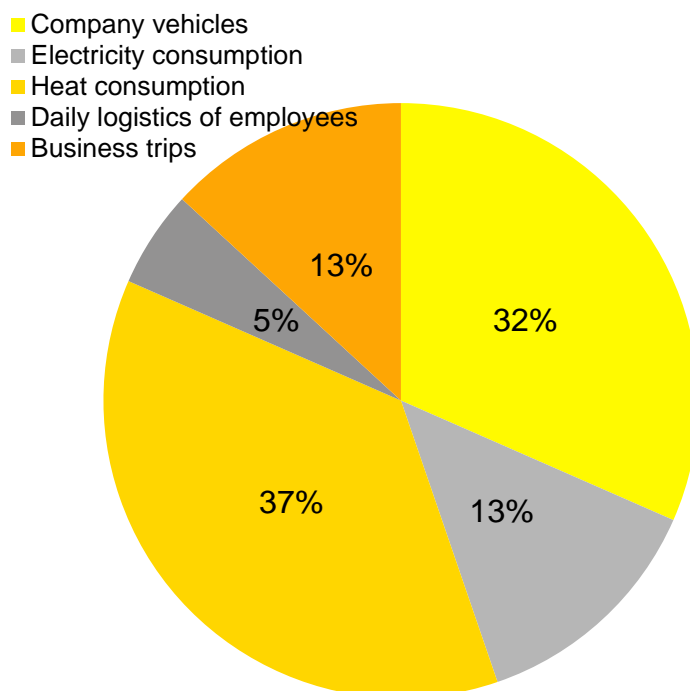


According to calculations, the company's carbon footprint for 2021 was:

At the same time, the distribution of emissions by Coverage was as follows:

- Coverage -2 emissions accounted for 50% of the total

- Scope 1 and 3 emissions were 31% and 19%, respectively.



The diagram above shows the distribution of emissions shares by source. As can be seen from the diagram, heat consumption (Scope 2) - 37% and emissions from own vehicles (Scope 1) - 32% are the most significant sources of CO<sub>2</sub> emissions for the company. Emissions from electricity consumption (Scope 2) and emissions from business trips account for 13% each, the smallest source of emissions is employee logistics to work. The table below provides a detailed breakdown of greenhouse gas emissions for each type of emission source and reach

| Nº  | Scope                        | GHG emissions, tCO <sub>2</sub> e |
|-----|------------------------------|-----------------------------------|
| 1   | <b>Scope 1</b>               | <b>12</b>                         |
| 1.1 | Company's own vehicles       | 12                                |
| 2   | <b>Scope 2</b>               | <b>19</b>                         |
| 2.1 | Electricity consumption      | 5                                 |
| 2.2 | Heat consumption             | 14                                |
| 3   | <b>Scope 3</b>               | <b>7</b>                          |
| 3.1 | Daily logistics of employees | 2                                 |

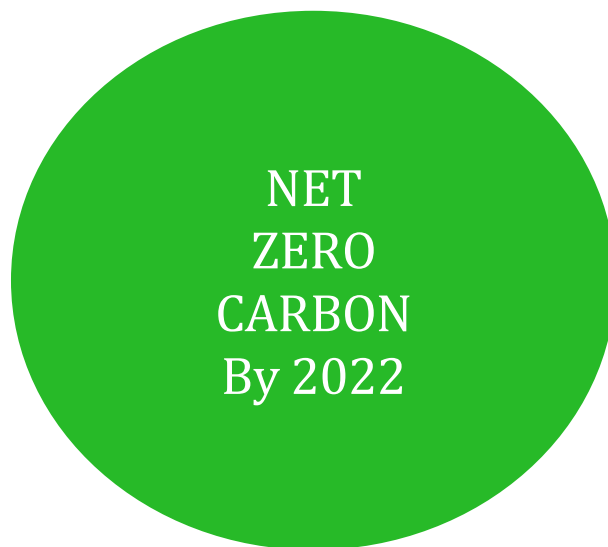
| №     | Scope           | GHG emissions, tCO <sub>2</sub> e |
|-------|-----------------|-----------------------------------|
| 3.2   | Business trips  | 5                                 |
| 3.2.1 | Air travel      | 4                                 |
| 3.2.2 | Motor transport | 1                                 |
|       | <b>total</b>    | <b>38</b>                         |



## CARBON FOOTPRINT REDUCTION TARGETS

In 2021, “Caspian Commodity Exchange” JSC conducted its first greenhouse gas emissions inventory for Scopes 1, 2, and 3, establishing 2021 as the company’s baseline year. The company’s leadership recognizes the critical importance of monitoring and reducing its carbon footprint as part of its contribution to combating climate change.

Kazakhstan's President, Mr. Kassym-Jomart Tokayev, has announced a national commitment to achieve carbon neutrality by 2060. In support of Kazakhstan’s goal, the management of “Caspian Commodity Exchange” JSC has committed to achieving company-wide carbon neutrality by 2022.



# MEASURES TO ACHIEVE CARBON NEUTRALITY

To reach carbon neutrality, “Caspy Commodity Exchange” JSC has considered various initiatives, including:

1. **Reducing Scope 1 emissions** by replacing the existing gasoline-powered vehicle with an electric vehicle.
2. **Reducing Scope 2 emissions from electricity consumption:**
  - Installing a separate electricity meter in the company office to monitor consumption more accurately.
  - Implementing “zero consumption” policies by ensuring all equipment is powered off at the end of each workday.
3. **Reducing Scope 2 emissions from heating consumption:**
  - Installing a dedicated heating meter in the office to track heat usage more precisely.
  - Adding thermostats to adjust heating levels according to office air temperature.
4. **Purchasing carbon offset credits** to compensate for greenhouse gas emissions.

After reviewing the above measures, the company has decided to achieve its carbon neutrality targets by purchasing voluntary market offset credits equivalent to its carbon footprint—38 tons of CO<sub>2</sub>e.

## APPENDIX 1

The table below presents the coefficients used in the carbon footprint calculation:

| Scope   | Emission source                        | Odds Used  | Data source   |
|---------|--|--|---|
| Scope 1 | Company's own vehicles                 | The calorific value of gasoline is 43.97 TJ/thousand. T<br>Specific CO2 emission factor - 69.3, tCO2/TJ,<br>Specific CH4 emission factor, t/TJ 0.033, Specific N2O emission factor, t/TJ, 0.0032 | Guidelines for calculating greenhouse gas emissions from motor transport enterprises, approved by the Acting Order. Minister of Environmental Protection of the Republic of Kazakhstan dated November 5, 2010 No. 280-p |
| Scope 2 | Company office electricity consumption | Network emission factor, tCO2/MWh - 0.9285   | "User's Guide to Calculating Power System Emission Factors and Using Them to Estimate Greenhouse Gas Emission Reductions in Kazakhstan" UNDP in Kazakhstan  |
|         | Heat consumption of company office     | Emission factor for consumed heat, tCO2/Gcal -0.484  | Acting order Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan No. 260 dated July 19, 2021 On approval of the list of benchmarks in regulated sectors of the economy                     |

| Scope   | Emission source   | Odds Used  | Data source   |
|---------|---|--|---|
| Scope 3 | Business trips of employees using transport that is not under the control of the organization (Air transport and motor transport) | The ICAO GHG emissions per passenger calculation tool was used   | <a href="https://www.icao.int/environmental-protection/Carbonoffset/Pages/default.aspx">https://www.icao.int/environmental-protection/Carbonoffset/Pages/default.aspx</a>   |
|         | Daily logistics of employees home-work  | The calorific value of gasoline is 43.97 TJ/thousand. T<br>Specific CO2 emission factor - 69.3, tCO2/TJ,<br>Specific CH4 emission factor ke, t/TJ 0.033,<br>Specific N2O emission factor, t/TJ, 0.0032 | Guidelines for calculating greenhouse gas emissions from motor transport enterprises, approved by the Acting Order. Minister of Environmental Protection of the Republic of Kazakhstan dated November 5, 2010 No. 280-p |