RESPONSIBLE RESOURCE UTILISATION

SUEK is aware of climate change risks and supports local and global programmes to reduce greenhouse gas emissions into the atmosphere.

2020 PRIORITIES

Implementing technologies to increase energy efficiency of our power generation and mining equipment

Developing a project plan of increasing energy efficiency for new plants and the start of their implementation

Promotion of co-generation to optimise fuel use

2020 RESULTS

0.115
Mt of CO_2e
SAVED IN 2020 DUE TO OUR BOILER HOUSE REPLACEMENT PROGRAMME

4.8
million m^3
OF CAPTURED MINE METHANE UTILISED

OUR REGULATORY FRAMEWORK

SUEK's Environmental Policy

SUEK's Energy Policy

ISO 50001

Paris Climate Agreement

ALL OF OUR POLICIES CAN BE FOUND ON THE COMPANY'S WEBSITE HTTP://WWW.SUEK.COM

UN SDGs

OUR APPROACH

We understand that mining, power generation and transportation are associated with emissions into the atmosphere, and we recognise our responsibility to preserve the environment for present and future generations and support the Paris Climate Agreement goals. As one of the largest producers of coal, electricity and heat, we also understand our responsibility to meet humanity's energy needs. We are convinced that climate problems should be addressed through an integrated scientific approach to ensure the sustainable development of the planet, including economic development and improving the lives of billions of people in developing countries.

Our aim is to develop and introduce new technologies for coal-fired generation and coal mining that will meet the demand for affordable energy, while reducing greenhouse gas emissions and optimising energy consumption.

Our strategy to reduce the company's carbon footprint is as follows:

- Investing in the development and introduction of technologies that improve the energy efficiency of our operations
- Maximising the generation of heat and electricity in a combined mode to reduce emissions per unit of energy
- Increasing the share of washed coal to lower the ash content and increase the calorific value of our coal, which reduces emissions during transportation and burning
- Capturing and utilising GHGs
- Delivering carbon offset projects

Our Board of Directors and management take into account climate risks when discussing strategic initiatives. SUEK's management KPIs include emission abatement.

The company also takes part in public discussions on carbon regulation.

OVERVIEW

The expansion of the company's energy business led to an increase in both total and specific GHG emissions in 2020. At the same time, in the 2019 operating perimeter, total GHG emissions from our power plants decreased by 9% as a result of substitution of heat supply by a number of standalone boilers with co-generated heat and energy efficiency measures. We started to develop and implement comprehensive modernisation and energy efficiency programmes for the acquired power plants to reduce their impact in the future.

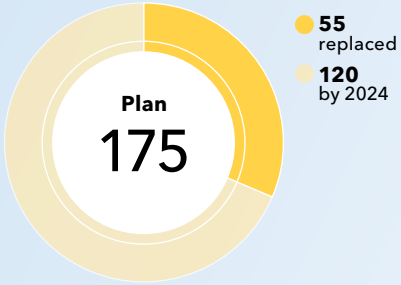
GHG emissions per unit of heat produced grew slightly because of new boiler houses that we purchased for being closed later as part of our boiler house replacement programme, the growth was largely offset by the substitution of previously acquired old boilers.

In the logistics business main GHG emissions are scope 2[1], proceeding from the electricity consumed by railcar transportation and port equipment. The increasing share of higher-capacity railcars enables us to gradually decrease the electricity per tonne consumed and, therefore, carbon footprint of transportation.

The direct GHG emissions of the commodities business decreased by 40% due to the implementation of energy efficiency measures and reduction in production.

#GHG emissions | #climate change

REPLACEMENT OF BOILER HOUSES



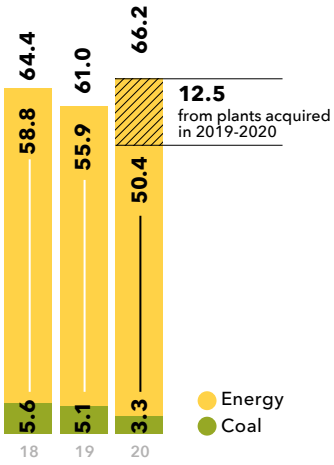
Total carbon savings

1 Mt OF CO_2 A YEAR STARTING FROM 2025

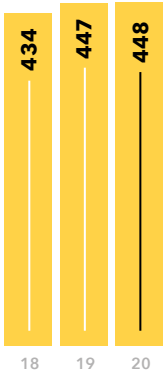
OR

0.115 Mt OF CO_2 AS OF 2020

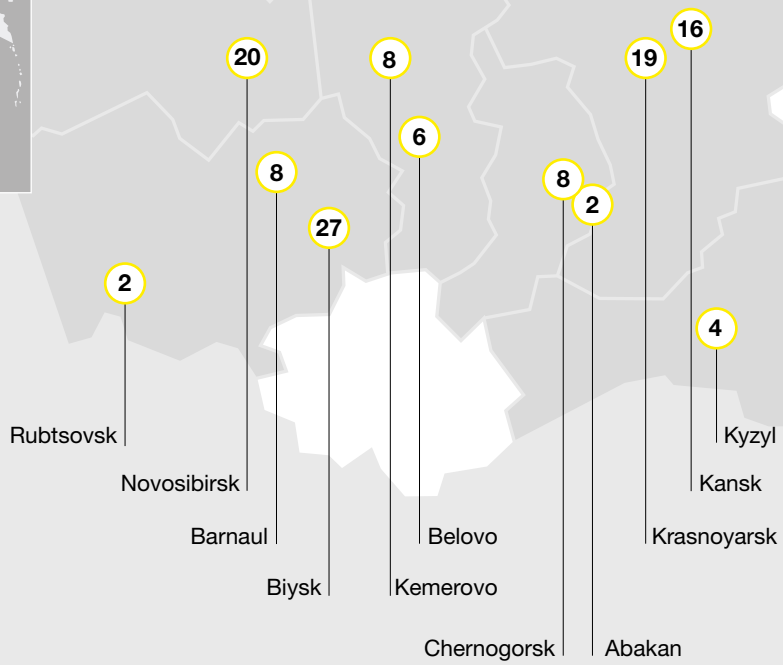
GHG emissions (Mt of CO_2e)



GHG emissions per unit of heat produced (kg CO_2e/ Gcal)

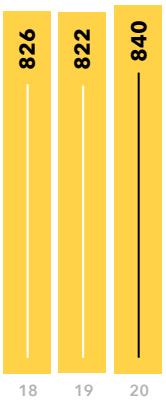


[1] Direct emissions of the Logistics Segment were less than <0.1 million CO_2e in 2020.



Replacement of 120 boiler houses in the next two years

GHG emissions per unit of electricity produced (g CO_2e / kWh)



PROJECTS TO REDUCE OUR CARBON FOOTPRINT

TRANSFERRING HEAT LOAD FROM BOILER HOUSES TO CHPPS

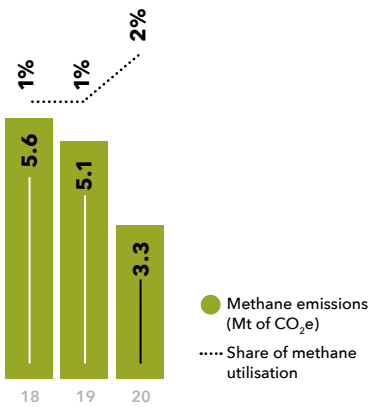
The co-generation of heat and electricity reduces CO_2 emissions per unit of energy by 32% because of the increased efficiency of our plants. Therefore, one of our main GHG reduction measures is replacing heat supply from standalone boiler houses with heat produced as a co-product at our co-generation power plants. The environmental advantage of co-generation lies in the re-use of boiler steam used for electricity generation to heat heating system water. This provides up to 50% of fuel savings on heat generation compared to separate production of electricity and heat, especially if heat is produced in small water boilers with low efficiency.

Co-generation of electricity and heat provides up to 50% of fuel savings on heat and a 32% reduction in CO_2 emissions per unit of energy production.

MINE METHANE CAPTURE AND UTILISATION

Coal deposits contain methane, which is pumped out of mines or liquefied to a safe level to ensure the safety of employees. To reduce the company's carbon footprint, we capture and utilise it whenever possible. SUEK's Kirov and Komsomolets mines are equipped with capture systems and gas engine plants that capture mine gas and use it to generate heat and electricity. In 2020, the company utilised 4.8 million m^3 of captured mine methane (that is equal to 67,651 tonne CO_2e), or 2% of total methane emissions.

Methane emissions and share of its utilisation



OFFSETTING MEASURES

We plant trees and shrubs every year to offset our CO_2 emissions. In 2020, we planted more than 21,000 trees in Khakassia, Zabaikalye, Krasnoyarsk, Murmansk and Kemerovo regions.

The Russian regulatory framework for large-scale forestry projects[1] is still being developed. SUEK is cooperating with relevant government agencies on the development of carbon sequestration measurements and plans to join such initiatives.

[1] Forestry projects include measures for forest husbandry, reforestation, introducing sustainable forest management practices, protection against fires, preserving valuable forests from devastation and transferring forests to managed forestry.

ENERGY EFFICIENCY

Our energy saving and energy efficiency programme gives us economic benefits and reduces environmental and carbon impact SUEK's energy management system is certified for compliance with the updated international standard ISO 50001. Annually we carry out an internal energy audit of our facilities to analyse the structure of the total energy consumption and types of fuel used, the potential for energy saving, identify problems that lead to the waste of resources and develop measures for increasing energy efficiency.

Our main energy saving activities are aimed at:

- Increasing the share of co-generated energy
- Improving the energy efficiency of production machinery and equipment, including the introduction of innovations and the best available technologies
- Reducing electricity consumption
- Reducing the consumption of fuel and energy resources
- Lowering heat losses by repairing heat networks and restoring pipe insulation
- Improving the knowledge of dedicated employees

ENERGY CONSUMPTION

In 2020, our electricity consumption totalled 6.3 TWh, heat consumption amounted to 3.6 MGcal.

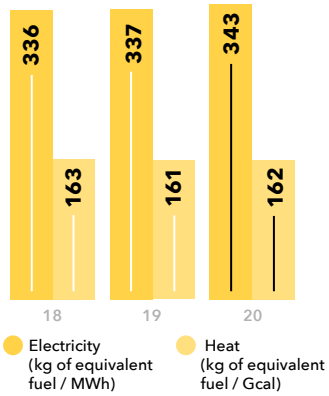
We mainly consumed coal, gas and fuel oil at our power plants. Co-generation allows us to reduce fuel consumption per unit of energy produced. We also implemented a large-scale renovation programme of district heating pipe network and researched new methods of kindling boilers. In 2020, we managed to save 47,800 tonnes of fuel equivalent, which corresponds to 135,000 CO_2 emissions savings.

In the commodities business, the main type of fuel consumed is diesel for mining dump trucks. Constant work is underway to optimise diesel fuel consumption: improving the condition of roads, motivating and training employees in fuel saving methods, reducing idle downtime and mileage, controlling travel routes, performing a set of measures during maintenance for ,additional tuning of fuel equipment, dump trucks robotisation. In the reporting year we reduced the energy consumption by 27,800 tonnes of fuel equivalent.

In the Logistics Segment, we continued to work on improving the indicators of locomotive use and the technical condition of the track facilities, the operation of merchant tugs, heat generation facilities, special and automotive equipment and infrastructure facilities, and optimisation of lighting systems. Increasing usage of higher-capacity railcars decreases electricity consumption and carbon emissions per tonne of cargo transported.

> "We want to completely abandon heating oil firing at our plants. If we do this, the economic and energy efficiency of SUEK's plants will rise, and the fire safety of our production operations will be even better."
>
> **Oleg Petrov,**
> SGC'S TECHNICAL DIRECTOR

Fuel consumption per unit of energy production



Energy consumption

Energy type	2020
Fuel (thousand tonnes of fuel equivalent), including:	**26,788.4**
Coal	**26,215.0**
Diesel	**258.0**
Natural gas	**223.8**
Fuel oil	**91.1**
Petrol	**0.3**
Other	**0.2**
Electricity (TWh)	**6.27**
Heat (MGcal)	**3.64**