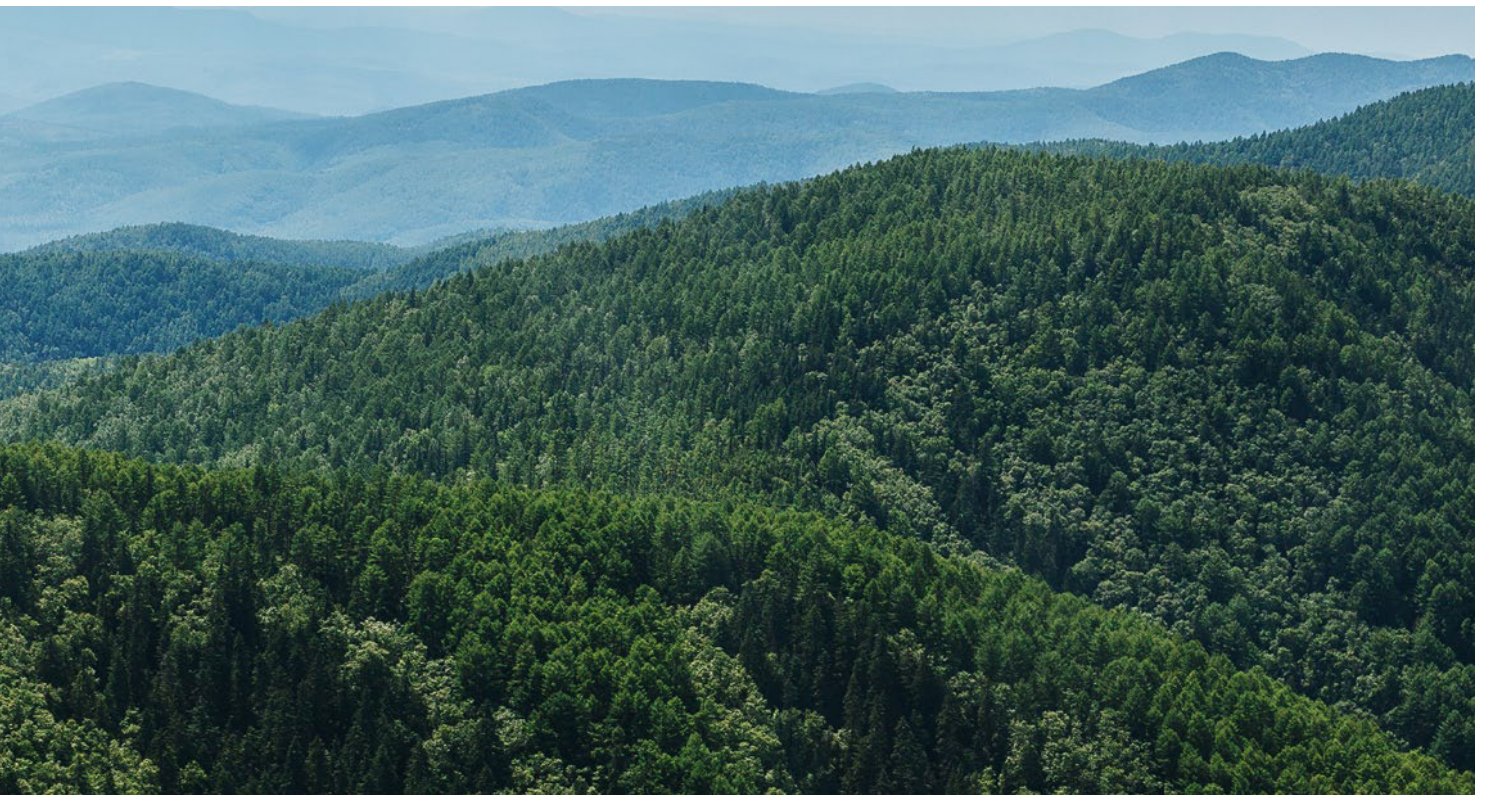


TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURE (TCFD)



INTRODUCTION

In 2021, Petropavlovsk is taking important internal steps to further strengthen its sustainability performance in all areas, through new senior management appointments, implementation of more stringent measures, and importantly a strategic review of all of our corporate sustainability KPIs, to track our progress and ensure our performance continues to improve. The group recognises the importance of addressing climate change risks and is committed to adopting the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

This report outlines the initial steps the company has taken towards applying TCFD recommendations, as well as our future plans, as part of our commitment to enhance our ESG disclosure and more fully align our reporting in accordance with TCFD in our Annual Report for the year ended 31 December 2021.

CLIMATE MATERIALITY

Petropavlovsk's hard-rock mines are located in the Amur region in the Russian Far East (RFE). The model simulations used in the Intergovernmental Panel on Climate Change (IPCC) fifth assessment report (IPCC 2013) indicate that the annual mean warming in the Russian Far East will exceed the global mean warming by 50–100%, and by even greater

in the northernmost parts. Precipitation is also projected to increase, with an estimated 5–10% increased annual rainfall for each 1°C of global warming. According to the recently published IPCC sixth assessment report, the observed mean surface temperature increase in Asia has clearly emerged out of the internal variability range compared to 1850-1900. Temperature extremes, both hot and cold, have increased, and these trends are set to continue over the coming decades. Regional changes expected in North Asia which includes RFE include lengthening and intensification of fire seasons and increased flooding. Permafrost is thawing, its temperature is rising, and the seasonal duration and extent of snow has decreased, while maximal snow depth has increased in the past 3-4 decades (high confidence). It is virtually certain that the extent and volume of permafrost will reduce with further global warming.¹

GOVERNANCE

Governance plays a central role in defining the level of ambition of the company's sustainability goals. The board is ultimately responsible for overseeing sustainability practices at Petropavlovsk and setting the company's sustainability strategy, including on climate-related issues. The board is also responsible for ensuring that any material risks that could impact the business will be appropriately identified, managed, and monitored.

1 https://www.ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Asia.pdf

The safety, sustainability & workforce (SSW) committee assists the board in overseeing climate-related matters and the chairman of the SSW committee regularly reports directly to the board.

The role of management is to oversee the implementation of the sustainability strategy at an operational level and ensure the continuous improvement of environmental, safety and corporate social responsibility practices. At an operational level, the integrated delivery of sustainability objectives, including climate change, is led by the CEO and is delegated among multiple departments.

STRATEGY

We have undertaken board-level discussions on climate-related issues at SSW Committee meetings and it was agreed that mitigating climate change risk through emissions reduction should be an area of strategic priority for the group. Over the next 24 months Petropavlovsk will focus on developing our net zero strategy with a step-by-step action plan and individual targets set to track progress.

We expect to develop our strategy through a combination of adaptation and resilience measures such as building effective leadership, energy efficiency measures, purchased renewables, and transitioning our vehicle fleet towards electric vehicles and cleaner fuel sources such as natural gas. During this period, we recognise that gas will be an important transition fuel as we will be retrofitting our diesel boilers. We expect the greatest challenges to our low-carbon transition will arise from decarbonising our fleet.

RISK MANAGEMENT

The group maintains risk registers to record the risks identified for each business function. The risk registers

include details of risk mitigations as well as where primary operational responsibility for monitoring and managing the risk. The process for identifying, assessing and responding to climate-related risks is integrated into a multi-disciplinary company-wide risk management system.

The group has taken initial steps to assess the materiality of our climate-related risks and opportunities. As climate change adaptation and resilience measures require a location-specific assessment of climate risks we are now undertaking further steps to conduct an in-depth assessment of climate-related risks for our mining operations and suitable approaches to address these. We will continue to develop our strategy and formal approach to reporting over the next 12 months based on our findings.

METRICS

We have adopted climate metrics since 2013 and we report our energy and GHG profile to CDP (formerly the Carbon Disclosure Project). Systematically widening the scope of our GHG emissions reporting will inform our strategy of how we expect to manage both climate risks and opportunities. We are continually improving the accuracy of Scope 1 and 2 emissions and work is underway to estimate the emissions arising from all categories contributing to Scope 3.

Our mining operations represent 91% of our carbon footprint, with 41% of operational footprint made up by purchased electricity (Scope 2). Our Scope 1 emissions are split between diesel, petrol, kerosene and coal. We have reduced our direct emissions related to our mining operations by 15% in 2020 and we plan to maintain our carbon intensity target of 0.82 tonnes/oz while we work to developing the baseline for our reduction strategy.

PETROPAVLOVSK CARBON EMISSION PROFILE (T)

	GROUP TOTAL		MINING OPERATIONS		SERVICE OPERATIONS		RESEARCH & MANAGEMENT	
	2020	2019	2020	2019	2020	2019	2020	2019
Scope 1: direct	186,162	206,379	154,913	183,070	30,516	23,309	733	n/a
Scope 2: indirect	267,992	248,502	259,603	245,473	6,788	3,029	1,600	n/a
Total Scope 1 & 2	454,154	454,881	414,516	432,395	37,304	22,486	2,333	n/a
Scope 3: Investment	49,505	n/a						

Further information on our GHG emissions, risk assessment and governance can be found in our CDP climate change report, initial assessment of climate related risks and [Sustainability Report 2020](#).

INITIAL ASSESSMENT OF CLIMATE-RELATED RISKS

	TYPE OF POTENTIAL RISK	PRIMARY DRIVER	DESCRIPTION	EXISTING MANAGEMENT PROCESSES
TRANSITION RISKS	Policy and legal	Policy actions: Current and emerging regulations	<p>Transitioning to a lower carbon economy may lead to extensive policy and regulatory changes to address mitigation and adaptation requirements related to climate change. Policy risk is particularly relevant for resource-intensive industries with high GHG emissions within their value chains as regulations aimed at reducing emissions may have a y direct effect on the operations. Non-compliance with current regulations and emerging regulations such as possible introduction of carbon price in Russian Federation can lead to increase in legal and operating costs.</p> <p>Enhanced emissions-reporting obligations: we also operate under a Dual Listed Company structure with primary listing in London and secondary listing Moscow. The regulatory landscape varies significantly between jurisdiction, particularly with recent introduction of the mandatory climate reporting in the UK increasing the challenge that climate-related regulation poses to the company.</p>	<p>There are established processes in place to monitor the full compliance with the Russian environmental legislation and UK regulatory requirements on an on-going basis. Processes are also in place to ensure compliance with the requirements of the licences and permits</p> <p>The Group regularly monitors the developments in Russian environmental legislation as well as UK regulatory requirements. In 2021 new developments in UK legislation related to climate change were reviewed by the Board-level Committee. The company fully support TCFD recommendations and is committed to report against TCFD in our Annual Report 2021.</p>
	Technology	Transition to new technologies	Technological innovations enable us to reduce our emissions, however, we understand that sometimes new technologies can also carry a higher degree of risk and lead to additional costs.	In our approach to Environmental management, we strive to use the latest technologies in order to achieve best results in minimising our impacts.
	Policy and legal	Exposure to litigation	If the Group was involved in a major environmental event, potential impacts could include fines and penalties, statutory liability for environmental redemption and other financial consequences that might be significant.	The Company operates a certified environmental management system at all of its sites which meet international standards. The Company has implemented a number of initiatives to monitor and limit the impact of its operations on the environment. As an ongoing risk mitigation measure The Group regularly monitors its compliance as well as new developments in regional and state legislation in Russia.
	Reputation	Increased stakeholder concern or negative stakeholder feedback	<p>There is an increasing level of public awareness relating to the effect of mining operations on communities and the environment. Adverse publicity from consumer and environmental groups may damage the Group's business or reputation.</p> <p>Whilst the Group seeks to operate in a socially and environmentally responsible manner, adverse publicity generated by such groups which relates either to the gold mining industry as a whole, or to the Group in particular, could have a material adverse effect on the reputation.</p>	The Group maintains an ongoing dialogue with local communities to ensure they are actively engaged in the Group's development plans. Local issues are addressed through public consultation. The Group continues to monitor circumstances in line with the commitment to maintain good relationships with local authorities and communities

	TYPE OF POTENTIAL RISK	PRIMARY DRIVER	DESCRIPTION	EXISTING MANAGEMENT PROCESSES
TRANSITION RISKS	Acute	Increased severity and frequency of extreme weather events such as cyclones and floods	<p>The Group's assets are located in the Russian Far East, a remote area that can be subject to severe climatic conditions. Severe weather conditions, such as cold temperatures in winter and torrential rain, potentially causing flooding in the region could have an adverse impact on operations. This includes the delivery of supplies, equipment and fuel. Delay in the delivery or the failure of mining equipment could significantly delay production and impact the Group's profitability.</p> <p>As part of the normal process of mining and recovering gold, various types of Hydraulic Storage Facilities (HSF) are required for further processing or storage of residues created after the initial ore processing. We recognise that there is an increased risk of dam's failure due to severe flooding events.</p>	<p>Management monitors natural conditions in order to pre-empt any disaster and in order that appropriate mitigating action can be taken. The Group aims to maintain several months of essential supplies at each site. Equipment is ordered with adequate lead time in order to prevent delays in delivery.</p> <p>Preventative maintenance procedures are undertaken on a regular basis to ensure that facilities will function properly under extreme cold weather conditions; heating plants at operational bases are regularly maintained and operational equipment is fitted with cold weather options which could assist in ensuring that equipment does not fail as a result of adverse weather conditions. Pumping systems are in place and tested periodically to ensure that they are functioning.</p> <p>Monitoring programmes and regular internal and external audits are in place at each facility to ensure the highest safety levels and provide up-to-date information on their stability. Emergency plans are prepared and approved annually. All hydrotechnical facilities are designed, constructed, and managed in compliance with Russian legislation requirements, incorporating detailed geological studies and complex monitoring measures. Zero incidents relating to the integrity or stability of the group's dams have been recorded over the entire period of their operations.</p>
	PHYSICAL RISKS	Acute	Increased likelihood and severity of wildfires	<p>Large parts of the Amur region where the Company operates are wooded which means that forest fires could quickly spread if not managed adequately, with potentially devastating effects on wildlife, the environment and local communities. The risk of forest fires is considered to be greatest in May, putting significant pressure on firefighters. We recognise that the risk of forest fires can increase due to the potential global warming effect.</p>
	Chronic	Rising mean temperatures	<p>Our Albyn mine, which represents 23% of the group's production, is located in the permafrost zone; Pokrovskiy, Pioneer and Malomir sites only have some occurrence of insular permafrost. The potential risks associated with permafrost include an increase in water levels during floods and decrease in structural stability.</p>	<p>We mitigate against these risks by carrying out regular monitoring, ensuring full compliance with design, construction and emergency planning.</p>

