

# REDUCING IMPACT FOR THE GREEN FUTURE

SUSTAINABILITY REPORT  
2019



RUSAL

# Contents

About Rusal	4
Message from the CEO	12
Sustainability strategy	14
<b>1. OPERATIONAL EFFICIENCY AND INNOVATIONS</b>	<b>26</b>
1.1 Management approach	28
1.2 RUSAL business system	29
1.3 Quality management system	32
1.4 Supply chain	34
1.5 Innovation	40
<b>2. ETHICS AND HUMAN RIGHTS</b>	<b>42</b>
2.1 Management approach	44
2.2 Promoting ethical business conduct	45
2.3 Human rights	46
2.4 Anti-corruption and compliance	49
2.5 The Signal hotline	51
<b>3. EMPLOYEES</b>	<b>52</b>
3.1 Management approach	54
3.2 Personnel structure	55
3.3 Staff recruitment	57
3.4 Motivation and remuneration	59
3.5 Training and development	61
3.6 Social partnership	63
<b>4. HEALTH AND SAFETY</b>	<b>64</b>
4.1 Management approach	66
4.2 Risk identification and management	69
4.3 Safety audits	71
4.4 Performance results	72
4.5 Training	73
4.6 Special safety programmes and projects	74
4.7 Emergency preparedness	75
4.8 Contractor engagement	76
4.9 Health protection	77
<b>5. ENVIRONMENTAL PROTECTION</b>	<b>80</b>
5.1 Management approach	82
5.2 Water resources	85
5.3 Waste management	87
5.4 Use of hydraulic structures	90
5.5 Air emissions	91
5.6 Land and biodiversity	93
<b>6. CLIMATE CHANGE AND ENERGY</b>	<b>96</b>
6.1 Management approach	98
6.2 Climate strategy	99
6.3 Energy efficiency	104
<b>7. DEVELOPING LOCAL COMMUNITIES</b>	<b>106</b>
7.1 Management approach	108
7.2 Investing in local communities in Russia	112
7.3 Investing in local communities outside Russia	120
<b>APPENDICES</b>	
Appendix 1. About this Report	124
Appendix 2. Additional quantitative data	129
Appendix 3. GRI Content Index	133
Appendix 4. Glossary	143

# ABOUT RUSAL

GRI 102-1, GRI 102-3

RUSAL<sup>1</sup> is a low-cost, vertically integrated aluminium producer with operations in Russia, Kazakhstan, Australia, Armenia, Guyana, Ireland, Sweden, Guinea, Italy, Nigeria and Jamaica. RUSAL, together with its subsidiaries, is one of the largest producers of primary aluminium and alloys in the world.

## About RUSAL

The main offices are located in Russia (Moscow) and Cyprus (Limassol). RUSAL's ordinary shares are listed on the Hong Kong Stock Exchange and Moscow Exchange.

The principles of sustainable development underpin the values and strategy of the Company, and making improvements in the area of environmental, social, and corporate governance (ESG) is one of the most important tasks for the Company. RUSAL seeks to adhere to the principles of sustainability across all its daily operations and to create value for and to ensure the wellbeing of all groups of stakeholders.

## Our products

GRI 102-2, GRI 102-6

RUSAL produces a broad line of products, with almost half (41%) comprising high value-added products (aluminium sheet, ingots, wire rod, casting alloys, billets, etc.) The Company plans to increase the share of these products to 60% by 2021. The main products of the Company include primary aluminium, alumina, and foil. The Company also produces aluminium alloys, wire rod, silicon, gallium, and corundum.

RUSAL is continuously enhancing its management processes in order to improve the quality of its products and services. For more information, see the section Operational efficiency and innovations, p. 26.



APPROXIMATELY  
**5.9%** OF GLOBAL ALUMINIUM PRODUCTION



ABOUT  
**6.3%** OF GLOBAL ALUMINA PRODUCTION

## Types of Company products

### ALUMINIUM PRODUCTION CAPACITY

**3.8** MILLION TONNES

RUSAL ACCOUNTED FOR AROUND 5.9% OF GLOBAL ALUMINIUM PRODUCTION

### ALUMINA PRODUCTION CAPACITY

**7.9** MILLION TONNES

RUSAL ACCOUNTED FOR AROUND 6.3% OF GLOBAL ALUMINA PRODUCTION

### FOIL PRODUCTION CAPACITY

**90** THOUSAND TONNES

## Shareholding structure

GRI 102-5

The shareholding structure of the Company as at 31 December 2019 and 31 December 2018 was as follows:

Name of shareholder	31 December 2019	31 December 2018
EN+GROUP IPJSC (EN+, previously En+ Group Plc)	50.10%	48.13%
SUAL Partners Ltd. (SUAL Partners)	22.50%	22.50%
Zonoville Investments Ltd. (Zonoville)	4.00%	4.00%
Amokenga Holdings Ltd. (Amokenga Holdings)	6.78%	8.75%
Mr. Oleg V. Deripaska	0.01%	0.01%
Publicly held	16.61%	16.61%
<b>TOTAL</b>	<b>100.00%</b>	<b>100.00%</b>

As at the end of 2019, the free float amounted to 16.61% of the total number of the Company's issued shares.

## Participation in other companies and joint ventures

RUSAL holds a 27.82% stake in PJSC MMC Norilsk Nickel (Russian Federation), the world's largest producer of nickel and palladium and one of the largest producers of platinum and copper.

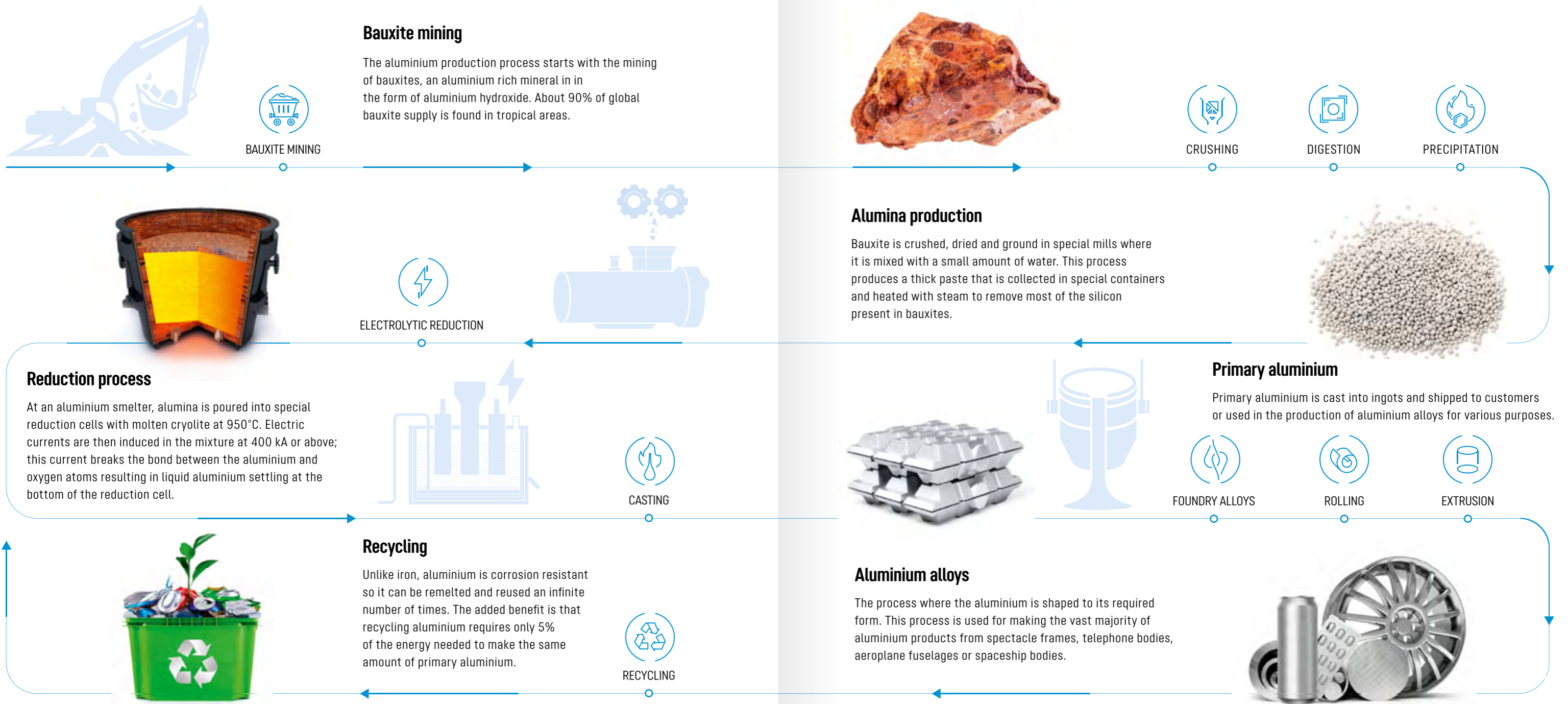
RUSAL also holds a 20% stake in Queensland Alumina Ltd. (Australia), producing alumina under a tolling agreement, and a 50% stake in BEMO project (Cyprus, Russian Federation).

Together with Samruk-Energo, the energy division of Samruk-Kazyna, which is located in Kazakhstan, RUSAL owns the Bogatyr Komir development production facility.

1. RUSAL together with its subsidiaries, is referred to in the RUSAL Sustainability Report 2019 as the "Company" or "RUSAL". For a full list of subsidiaries, see the section About the Report hereto.

# HOW ALUMINIUM IS PRODUCED

The pure form of aluminium does not naturally occur in nature, so remained largely unknown until as recently as 200 years ago. Creating aluminium using electricity was first developed in 1886 and is still used to this day.



# WHERE WE OPERATE

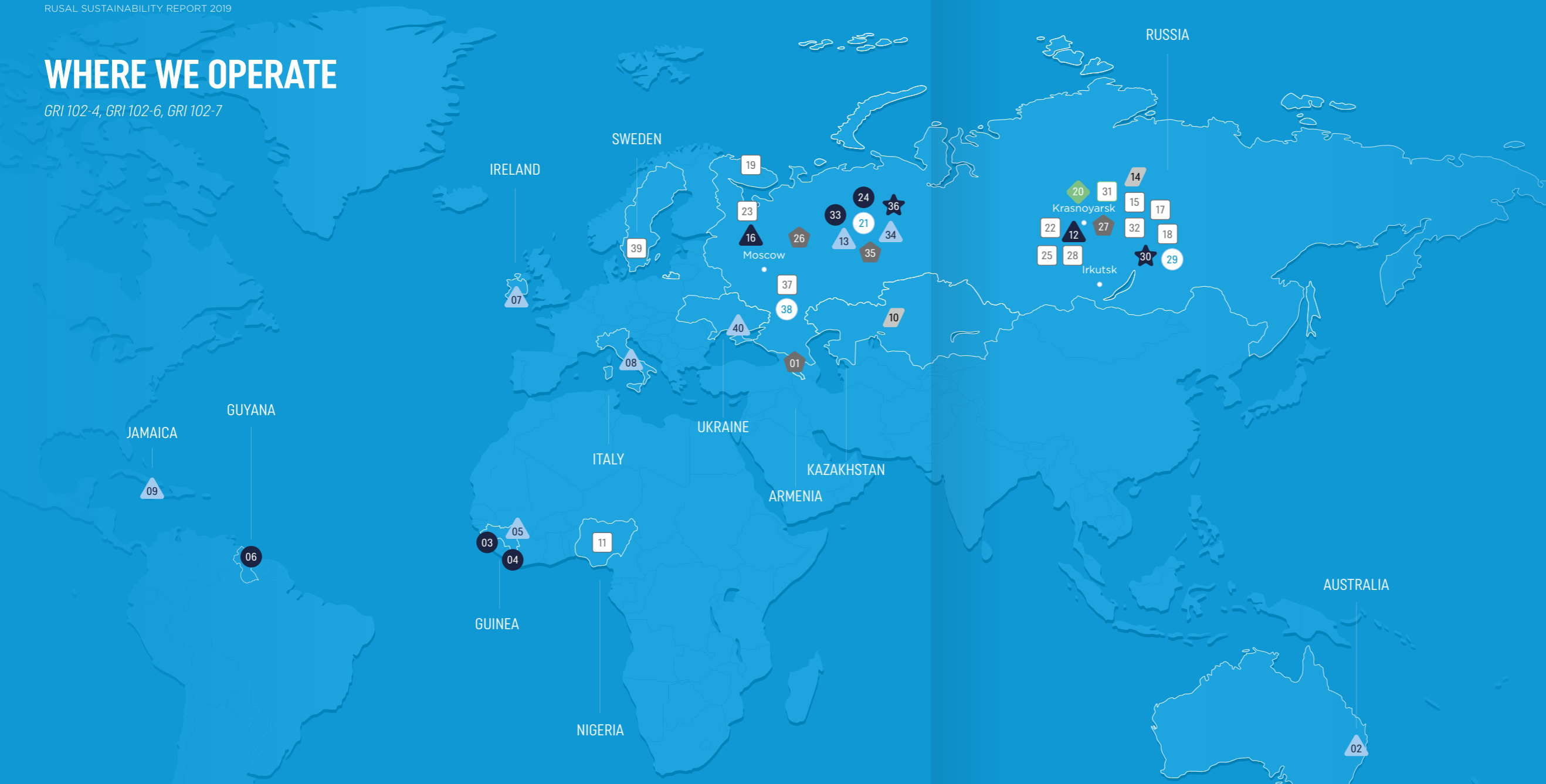
GRI 102-4, GRI 102-6, GRI 102-7

# Nº 1

## ALUMINUM PRODUCER OUTSIDE CHINA

### RUSAL OPERATES IN 12 COUNTRIES ON FIVE CONTINENTS.

Its production facilities are located mainly in Russia. The Company actively interacts with stakeholders in regions of operation, facilitates their economic and social development, and strives to minimise negative impacts on the environment.



## Company's operations in the world

# Nº1

## ALUMINUM PRODUCER OUTSIDE OF CHINA

### ARMENIA

01 Armenal

### AUSTRALIA

02 QAL

### GUINEA

03 Compagnie des bauxites de Kindia (CBK)  
04 Dian Dian Project  
05 Friguia Bauxite & Alumina Complex

### GUYANA

06 Bauxite Company of Guyana (BCGI)

### IRELAND

07 Aughinish Alumina

### ITALY

08 Eurallumina

### JAMAICA

09 Windalco

### KAZAKHSTAN

10 LLP Bogatyr Komir

### NIGERIA

11 ALSCON

### RUSSIA

12 Achinsk Alumina Refinery  
13 Bogoslovsky Alumina Refinery  
14 Boguchanskaya HPP (BEMO)

15 Boguchansky Aluminium Smelter (BEMO)

16 Boksitogorsk Alumina Refinery

17 Bratsk Aluminium Smelter

18 Irkutsk Aluminium Smelter

19 Kandalaksha Aluminium Smelter

20 Kia-Shaltyr Nepheline Mine

21 Krasnoturyinsk Powder Metallurgy

22 Krasnoyarsk Aluminium Smelter

23 Nadvoitsy Aluminium Smelter

24 North Urals Bauxite Mine

25 Novokuznetsk Aluminium Smelter

26 Sayana Foil

27 SAYANAL

28 Sayanogorsk Aluminium Smelter

29 Shelekhov Powder Metallurgy

30 Silicon (ZAO Kremniy), Shelekhov

31 SKAD wheels factory

32 Taishet Aluminium Smelter (project)

33 Timan Bauxite

34 Urals Alumina Refinery

35 Urals Foil

36 Urals Silicon

37 Volgograd Aluminium Smelter

38 Volgograd Powder Metallurgy

### SWEDEN

39 KUBAL

### UKRAINE

40 Nikolaev Alumina Refinery

## Map conventions

- Aluminium
- Alumina
- Bauxite
- Foil
- Powders
- Silicon
- Nepheline ore
- Other business
- Wheels

# 2019 SUSTAINABILITY PROFILE

GRI 102-7

Industry leader			
<b>3d</b> largest aluminium producer by primary production output in the world	<b>\$9,711 million</b> revenue	<b>4,176 kt</b> sales of primary aluminium and alloys	Management Company and three production facilities were certified under ASI Standards
Company with operational efficiency			
<b>\$7.8 million</b> economic effect from implementing employee improvement proposals	<b>\$27.8 million</b> economic effect from implementing Business System development projects	<b>2,968</b> employees trained in quality management	Business System 250 programme launched
Business that upholds human rights			
<b>24%</b> of employees are women	RUSAL's Human Rights Policy introduced	<b>More than 300</b> requests received and addressed through the hotline 'Signal'	Ethics Day organised in collaboration with the SKOLKOVO Moscow School of Management
Attractive employer			
<b>54,981</b> average number of employees	<b>65%</b> employees were trained in e-learning system	<b>85%</b> share of employees covered by collective agreements	Three-year wage-raising programme launched
Company ensuring work safety			
<b>100%</b> of employees are covered by the Health and Safety management system	<b>0.22</b> LTIFR	<b>26%</b> drop in the number of occupational disease cases	RUSAL joint Vision Zero initiative
Production geared up for protecting the environment			
<b>\$95.9 million</b> allocated for environmental protection	<b>69%</b> of our facilities' environmental management systems are compliant with international standard ISO 14001	<b>93.2%</b> recycled and reused water	New efficient Eco-Soderberg technology introduced at Aluminium smelters

Company with low carbon footprint			
<b>11%</b> reduction in specific GHG emissions compared with 2014 at existing aluminium production capacities	<b>3.3%</b> reduction in coal consumption at RUSAL facilities	<b>Over 1 million</b> trees planted as part of a large-scale project to restore and protect forests in Russia	Continued production of low-carbon aluminium under ALLOW brand
Socially responsible Company			
<b>\$192 million</b> paid to the state budget including income tax	<b>\$30.9 million</b> spent towards social programmes and charity	<b>44%</b> share of locally sourced raw materials and supplies to produce core products	A comprehensive study of social aspects in the regions of operation completed

## Recognition from the expert community

**Bloomberg Intelligence**

A study by Bloomberg Intelligence named RUSAL the cleanest aluminium producer among the top-five global aluminium producers.

**vigeo eiris**

In 2019, RUSAL was listed one of the three Russian companies in the top-100 Best EM performers ESG rating by Vigeo Eiris.

**CDP**

RUSAL was recognised by the Carbon Disclosure Project's (CDP) as a global leader in supply chain engagement on climate change.

First place in the nationwide competition for the best organisation of projects to reduce green-house gas emissions Climate and Responsibility 2019, carried out with the support of the Russian Ministry of Economic Development and the Russian Ministry of Natural Resources.

RUSAL was awarded by the V.I. Vernadsky Non-governmental Environmental Foundation for successfully participating in the national project Ecology.

RUSAL received an award "for a systematic approach to social investments" by the Forum of Donors.



Certification under the Aluminium Stewardship Initiative (ASI) Performance Standard and Chain of Custody Standard was achieved for several parts of RUSAL's operations. It included: RUSAL Headquarters, Boksit Timana bauxite mine, Kamensk-Uralsky (UAZ) alumina refinery, and IrKAZ (branch of PJSC RUSAL Bratsk in Shelekhov) aluminium smelting operation — including semi-fabrication activities. Work to certify further RUSAL's operations continues.

ASI is a global, multi-stakeholder, non-profit standards-setting and certification organisation in the aluminium industry. It aims to recognise and foster the responsible production, sourcing, and stewardship of aluminium.



RUSAL was awarded a bronze medal in the EcoVadis Sustainability rating 2020. The Company improved its performance compared to the previous audit three years ago.

The assessment considers a range of CSR issues, grouped into four themes: Environment, Labour & Human Rights, Ethics, and Sustainable Procurement. The highest scores are Environment (60 points) and Labour & Human Rights (50 points).

The recommendations contained in this year's report will inform further environmental, social, and governance developments at RUSAL and further strengthen the Company's sustainability strategy.

# MESSAGE FROM THE CEO

GRI 102-14, HKEX Para 9, HKEX Para 10



## Dear Friends,

It is my pleasure to welcome you to our 2019 Sustainability Report. I am pleased to say that despite all challenges and uncertainty that we faced in the past year, RUSAL remained steadfast in its ability to fulfil economic, environmental and social responsibility obligations.

As previously, we have been consistent in efforts to execute our sustainability strategy based on the principles of the UN Global Compact on human rights, labour, environment and anti-corruption and the UN Sustainable Development Goals.

We have remained committed to maintaining the high level for best ESG practices and achieved sustainable development goals, which is noted by independent experts and international ESG rating agencies. RUSAL's ESG performance has reinforced Company's listing among the top 100 Best Emerging Markets performers by Vigeo Eiris. RUSAL's compliance with diligent and scrupulous rating criteria by an independent authoritative organization recognises us as one of the leaders among metal companies in this field.

In 2019, RUSAL's headquarters and three production sites achieved Aluminium Stewardship Initiative certification by meeting various criteria ranging from business ethics and governance, environmental performance, human rights and social practices. This certification is an important milestone for RUSAL and reinforces its commitment to being a responsible aluminium producer.

This recognition comes at an important time when the market is looking for the transparent solutions to solidify the dedication of certain players to reduce the carbon footprint of their operations. Being the world largest producer of low carbon aluminium RUSAL continues to focus its efforts on perfecting the lowest aluminium carbon footprint possible through enhancing new top-notch technologies and developing our proper technological solutions. Every shipment of our low carbon aluminium ALLOW comes with an independently verified carbon-footprint statement from its smelter of origin, which means customers can guarantee the product contains less than 4 tonnes CO<sub>2</sub> per tonne of aluminium (direct and indirect energy emissions from aluminium smelters), which is four to five times lower than the CO<sub>2</sub> footprint of aluminium produced from a coal-based smelter.

Furthermore, RUSAL continues to implement large-scale environmental projects, raising the bar for the sector. In 2019, the Company launched the first voluntary initiative for greenhouse gas absorption called "Green Million", planting 1 million trees as part of a reforestation project in the Irkutsk region and the Krasnoyarsk territory.

Building on this, RUSAL's consistent efforts to reduce emissions, manage climate risks and ensure transparent communications in this area were duly recognised by the CDP rating. Our Company has been recognised as a global leader in supply chain engagement on climate change issues. In total, 150 companies were included in the Supplier Engagement Leaderboard list by CDP. RUSAL was not only the sole Russian company, but also the only aluminium producer to make the list.

In the past year RUSAL made a significant contribution to sustainability in its support for volunteer projects. In 2019, "Yenisei Day" grew to be a nationwide-scale project that included 12 Russian cities where RUSAL operates. The activities include collecting garbage and waste from the shores of one of Russia's largest rivers, the Yenisei, and a number of regional rivers. Several thousands of volunteers took part in the project and collected over 30 tonnes of waste.

In total, our sustainability commitments include supporting the communities in the regions of operations and contributing of improvement the quality of life for residents. In 2019, we invested almost USD31 million on social programs and charity which are aimed at the improvement of the living conditions in the regions where we operate.

As the business community becomes more conscious of the sustainability implications of its operations, the market moves forward in its commitment to reduce the impact on the environment and go an extra mile to comply with social and environmental standards. In 2019 RUSAL signed the sustainability linked syndicated facility for a record USD1.085 billion. The signed facility was the first ever sustainability linked syndicated facility arranged by international and Russian commercial banks in Russia. The interest rate is subject to a sustainability discount or premium depending on the Company's fulfilment of the sustainability key performance indicators (KPIs) all of which are related to the Company's environmental impact and sustainable development and include the sales growth targets of our low carbon aluminium, ALLOW.

Despite all the current market turbulence and the challenging times that the world economy faces as a result of the COVID-19 pandemic, we remain committed to our social and environmental goals, which will always be an integral part of our corporate strategy.

To conclude, I would like to thank all employees of the Company for your lasting support and hard work. 2019 was indeed a challenging year where we saw the aluminium market take a hit. However, I am honoured to say that despite all difficulties we have not lost the trust and confidence of the financial community, customers and other parties who constitute the business environment. RUSAL remains an attractive investment prospect that has proven its ability to withstand any hurdles that come its way and we remain proud to be amongst the pioneers in this market and a leader in the sector.

Evgenii Nikitin  
Chief Executive Officer

# SUSTAINABILITY STRATEGY

RUSAL recognises the principles and values of sustainable development and integrates them into its daily business. The goal for sustainability initiatives implementation is to achieve high standards in E – environmental stewardship, S – social and community performance, and G – governance issues.

## In this section

- Approach to sustainability management
- Sustainability governance
- The sustainability risk management system
- Contribution to UN Sustainable Development Goals
- Stakeholder engagement
- Value creation for stakeholders
- Membership of associations and taking part in international initiatives

## Approach to sustainability management

GRI 103, GRI 102-15, HKEX Para 10

RUSAL takes a responsible approach to its business practices and assesses its impacts on the environment and all groups of stakeholders. The principles of sustainable development underpin the strategy of the Company. According to environmental, social,

and corporate governance (ESG) standards adopted by international business and the investment community, the Company implements its sustainability activities in three main areas.

### Priority sustainable development areas



	Environmental	Social	Governance
<b>PRIORITY AREAS</b>	Environmental protection, p. 80 Climate change and energy, p. 96	Employees, p. 52 Health and Safety, p. 64 Human Rights, p. 46 Developing local communities, p. 106	Operational efficiency and innovations, p. 26 Promoting ethical business conduct, p. 45 Anti-corruption, p. 49
<b>STRATEGIC GOALS</b>	Retain the position of being one of the most cost-effective producers, with the lowest carbon footprint in the industry.  Improve environmental performance at production facilities.	Enhance the Company's status as an employer of choice.	Maintain an optimal capital structure and improve the liquidity of shares. Introduce innovative technologies improving operating efficiency. Improve operating flexibility to promptly adapt to a fast-changing market environment.

A major strategic objective is to make the Company the most efficient and green producer of aluminium in the world in terms of production and technology.

To attain this goal, the Company invests in research engineering, including the production of new types of alloys, the introduction of RA-550 cells and inert anode technologies, developing new products, and retrofitting production capacities.

For more detailed information, see the section Operational efficiency and innovations, p. 26.

### Standards and principles

The work of RUSAL in the area of sustainable development and corporate social responsibility is based on best practices as well as international and Russian standards and principles, including:

- The Principles of the UN Global Compact
- The Sustainable Development Goals of the UN
- The Provisions of the Social Charter of Russian Business
- The Provisions of the International Standard ISO 26000:2010
- The Aluminium Stewardship Initiative (ASI) Performance Standard and ASI Chain of Custody Standard.

### Key documents

RUSAL's management approach to sustainability is governed by a number of corporate codes and policies. The main internal documents regulating sustainable development in the Company are the following:

- The Corporate Code of Ethics
- The Human Rights Policy
- The HR Policy
- The Occupational Safety Policy
- The Industrial and Fire Safety Policy Statement
- The Anti-Corruption Compliance Policy
- The Policy to Combat Unethical Practices
- The Environmental Policy
- The Quality Policy
- The Business Partner Code.



## Sustainability governance

HKEX Para 10, GRI 102-27, GRI 102-31

The management of sustainable development is embedded in the Company's corporate governance system. RUSAL develops and continuously improves this system, and ensures that it is in compliance with the best international standards. In 2019, changes were made to the composition of the Board of Directors and the Executive Committee, the Compliance Committee under the Board of Directors was created, and the regulations of the Standing Committee, Corporate Governance and Nomination Committee and were updated.

For more detailed information about the RUSAL corporate governance system and the composition of the Board of Directors and the Executive Committee, see the Corporate Governance section of the Annual Report, p. 130.

The management of sustainable development is distributed among the Board of Directors, the CEO, the Executive Committee, the functional units of the Management Company, and the relevant business units of subsidiaries.

### Role of the Board of Directors

HKEX Para 8, HKEX Para 9, GRI 102-26, GRI 102-29, GRI 102-32

The Board of Directors and the Board's committees retain overall responsibility for the Company's ESG governance, which includes:

- Evaluating and determining the Company's ESG-related risks and opportunities
- Ensuring that appropriate and effective ESG risk management and internal control systems are in place
- Setting the Company's ESG management approach, strategy, priorities, and objectives
- Overseeing the implementation of all ESG-related corporate policies
- Periodically reviewing the Company's performance, including the environmental aspects of the Company and labour protection and health and safety issues
- Approving disclosures in the Company's annual sustainability report.

In 2019, 10 Board meetings were held to make decisions, inter alia, about the strategic development of the Company, health and industrial safety, environmental protection, and to review risk management reports (which include environmental and social risks). *GRI 102-34*

### Executive level

The CEO, the Executive Committee and business units of the Management Company and subsidiaries are responsible for the development and implementation of policies, action plans, and initiatives on aspects of sustainable development, in accordance with their business functions. Policies and major corporate documents are reviewed by the Executive Committee.

### Management divisions responsible for managing sustainability

The management divisions responsible for overseeing sustainability determine the contents of the Sustainability Report, and collect and analyse the required information. In addition, management divisions address issues to improve sustainable development practices. In the reporting period management divisions implemented a procedure to identify and evaluate material topics that are of the greatest significance for the Company, and they also prepared the Sustainability Report.

For more detailed information, see the Appendix 1. About the report, p. 124.

Responsibility for addressing the economic, social, and environmental aspects of sustainable development, as well as holding consultations with stakeholders, is exercised by employees within related services; the results of their work are brought to the attention of top management under existing corporate governance procedures.

## Organisational structure of sustainable development governance

GRI 102-18, GRI 102-19, GRI 102-20

### Corporate level



# The sustainability risk management system

HKEX Para 9, HKEX Para 10, GRI 102-30

## Approach to managing sustainability risks

Sustainability risk management is an integral part of RUSAL’s corporate risk management system. Risk management is an ongoing process at all management levels, and seeks to accumulate and disseminate knowledge about risks within the Company.

In accordance with the Company’s Risk Management Regulation, the risk management process is monitored and overseen by the Directorate for Control, Internal Audit, and Business Coordination (hereinafter referred to as ‘the Directorate for Control’). The Directorate for Control is responsible for the methodological aspects of risk management, while operational management and the development of anti-corruption and anti-fraud procedures are performed at business unit level.

The key elements of the Company’s risk management system are determining and assessing risks, developing and implementing risk mitigation activities, reporting on the results of risk manage-

ment, and evaluating the effectiveness of the risk management system.

Guided by the precautionary principle, RUSAL endeavours to avoid harming the environment and to conserve natural resources. RUSAL assesses social and environmental risks and measures that are aimed at preventing and reducing negative impacts on the ecosystem, as well as potential risks for the Company. *GRI 102-11*

For more detailed information about the Risk management system, see the Annual Report, p. 74.

## Key sustainability risks

*GRI 102-15, GRI 102-29, GRI 102-33*

The Company has identified three main risk groups, which comprise the following sustainability related risks:

The Company has identified additional corporate risks, which include the following sustainability related risks:

- Risks associated with ensuring the stability of production processes that guarantee the production and supply of quality products
- Risks related to increased fees and other sanctions imposed by regulatory authorities
- Risks linked to all life-cycle stages of hazardous substances (from production/procurement to disposal)
- Liquidity shortage risks to cover liabilities
- Technological risks related to the excessive consumption of resources
- Transport risks, in terms of liability to third parties in carrying out transport operations (liability of charterers, liability for causing harm to the environment during spills of oil products, etc.).

All the Company’s key sustainability risks are identified and assessed. According to the Risk Management Regulation, which was updated in 2019 for each sustainability risk, the degree of impact and probability was assessed, management measures were identified, and risk passports were prepared for the most critical risks, containing a detailed study of respective measures. The risk identification process involves process owners at the level of production sites and divisions. Also, the risk register is consolidated at Management Company level.

Risk assessment practices, including related to the implementation status of activities, are updated quarterly. The risk management report is submitted to the Corporate Governance Committee, the Executive Committee, and the Audit Committee of the Board of Directors.

In 2019, production facilities conducted full-time training on a new risk management approach for managers and key employees of the Aluminium Division.

In 2020, risk management trainings are planned for the management and employees of the Downstream and Alumina divisions.

E-learning courses on risk management for all Company employees, which also cover practical risk management cases and test questions, are in progress.

## Risks related to ensuring continuity of production and supplies in a COVID-19 pandemic

Maintaining the continuity of production is an integral task of RUSAL, since the main production process of the Company — the electrolysis production of aluminium — is continuous and cannot be stopped without entailing significant additional resumption-related costs. Each production facility of the Combined Group has a register of critical scenarios in which all critical elements related to logistics, infrastructure and production that can lead to significant production stoppages are examined in detail. Work is carried out on an ongoing basis related to important elements affecting industrial sites: searching for alternative suppliers, monitoring the level of stocks of critical raw materials, monitoring logistics, timely scheduled preventive equipment repairs, and exercises to implement emergency response plans. In 2020–2021 there are plans to significantly modernise the process of ensuring business continuity, based on the best global practices in this area.

In addition, the global COVID-19 pandemic poses a significant threat to the business continuity of the Company, primarily due to the risk of there being a significant reduction in personnel at plants as a result of illness. RUSAL uses unprecedented measures to manage this risk, up to the organisation of work on a rotational basis. This entails significant additional costs, but the Company considers it necessary to take such measures, since many Company employees work in hazardous industries and may have occupational diseases that potentially could be exacerbated by infection from the COVID-19 virus.

## Internal Audit System

The internal control system is organised to protect assets, improve business processes, ensure that the Company’s financial, economic and other activities comply with legislative requirements, and to maintain the control environment at an appropriate level.

40 regulatory documents regulate internal control issues, including: the Environmental Policy; the Occupational Safety Policy; the HR Policy; the Corporate Code of Ethics; the Anti-Corruption Compliance Policy; the Business Partner Code; the Regulations on Securities Transactions by Officials and Employees of the Company; and the Procurement Regulations.

The main authorised bodies that operate in this area are the Directorate for Control, Internal Audit and Business Coordination; the Audit Committee of the Board of Directors; and Review Commissions of the Group’s companies and production enterprises. The Directorate for Control quarterly reports to the Audit Committee of the Board of Directors the results of scheduled and unscheduled audits and the implementation status of recommendations made by the processes owners following internal audits.

## Management of key sustainability risks

Risks	Description	Risk management actions
Environmental risks <i>GRI 201-2</i>	<p>Risks associated with damage to the environment and incidents related to air emissions (including greenhouse gases), water, and waste.</p> <p>Risks associated with damage to environmental systems and the Company’s equipment.</p> <p>Risks associated with inadequate environmental appraisals and the non-receipt of required permits.</p>	<ul style="list-style-type: none"> <li>• In order to reduce risks, the Company monitors environmental legislation and implements a range of environmental protection activities (e.g., monitoring bauxite residue disposal areas)</li> <li>• Certification of most RUSAL operations under ISO 14001</li> </ul> <p>See the section Environmental protection, p. 80.</p>
Social risks	<p>Risks associated with labour law violations, fraud, and illegal enrichment.</p> <p>Risks related to socio-economic instability in the regions where the Company operates.</p>	<ul style="list-style-type: none"> <li>• Regular sessions with staff, management and trade unions are held to discuss these issues.</li> <li>• Supporting social, infrastructure, educational and cultural programmes</li> <li>• Informing employees about the principles set forth in the Corporate Code of Ethics, Business Partner Code and Anti-Corruption Compliance Policy</li> <li>• Running the whistleblowing hotline</li> </ul> <p>See the sections Employees, p. 52; Human Rights, p. 46; Developing local communities, p. 106.</p>
Health and safety risks	Risks related to the health and safety of employees.	<p>In order to prevent accidents, the Company has created a system to manage health, industrial, and fire safety (including assessing risks in this area), holds trainings for employees, implements programmes and activities to ensure safe working conditions, and conducts management audits.</p> <p>See the section Health and Safety, p. 64.</p>

# Contribution to UN Sustainable Development Goals

GRI 102-12

RUSAL is aware of the significance of UN Sustainable Development Goals (SDG) presented by the Transforming Our World: the 2030 Agenda for Sustainable Development and introduces sustainable development approaches to the Company's operations that are consistent with the 2030 Agenda. After conducting discussions and

an analysis of the Company's role in achieving SDG, key goals were identified which RUSAL could have the greatest impact in achieving. The measures taken to achieve these priority SDG are described in more detail in the Report using the links provided in the table.

## Priority SDG and inputs to meet Sustainable Development Goals

Priority SDG	Contribution to SDG
 <p><b>Goal 3:</b> ensure healthy lives and promote well-being for all at all ages</p>	<p>Inputs:</p> <ul style="list-style-type: none"> <li>Combating the epidemics of AIDS, tuberculosis, malaria and tropical diseases, and other infectious diseases</li> <li>Providing health care services, access to quality basic health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</li> <li>Assistance in research and development of vaccines and drugs for treatment of infectious and non-communicable diseases</li> </ul> <p>See the sections Health and safety, p. 64; Developing local communities, p. 106.</p> <p><b>Over USD10 million</b> invested in the construction of the Russian-Guinean Scientific Clinical and Diagnostic Center for Epidemiology and Microbiology to combat infectious diseases</p>
 <p><b>Goal 4:</b> ensure inclusive and equitable quality education and promoting lifelong learning opportunities for all</p>	<p>Inputs:</p> <ul style="list-style-type: none"> <li>Providing access to affordable and high-quality vocational and higher education, including university education</li> <li>Increasing the number of young and adult people with in-demand skills, including vocational and technical skills necessary for employment, decent work, and entrepreneurship</li> <li>Scholarships awarded to developing countries, especially the least developed countries</li> </ul> <p>See the section Employees, p. 52.</p> <p><b>36.8 thousand employees</b> used the e-learning system in 2019</p> <p><b>123 foreign students</b> from Guinea and Jamaica are studying in Russia</p>
 <p><b>Goal 8:</b> promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all</p>	<p>Inputs:</p> <ul style="list-style-type: none"> <li>Boosting productivity in the economy through diversification, technical modernisation, and innovation, including by focusing on high value-added and labour-intensive sectors</li> <li>Gradually increasing global efficiency in the use of resources in consumption and production systems and a desire to ensure that economic growth is not accompanied by environmental degradation</li> <li>Reducing the number of young people that do not work, study, or acquire professional skills</li> <li>Safeguarding labour rights and promoting safe and secure working conditions for all workers</li> </ul> <p>See the sections Employees, p. 52; Operational efficiency and innovations, p. 26.</p> <p><b>USD18 million</b> investment in R&amp;D</p> <p><b>USD645 million</b> employee wages</p> <p><b>USD409 thousand</b> was spent on implementing career guidance projects and creating licensed training courses for industrial specialties in secondary specialised educational institutions</p> <p><b>Around USD10 million</b> was spent on executing educational projects and building educational institutions</p>

Priority SDG	Contribution to SDG
 <p><b>Goal 12:</b> ensure the transition to rational consumption and production patterns</p>	<p>Inputs:</p> <ul style="list-style-type: none"> <li>The rational development and effective use of natural resources</li> <li>Reducing waste by taking measures to prevent their creation, reduction, recycling, and reuse</li> <li>Applying sustainable production methods and providing information on the rational use of resources in its reports</li> </ul> <p>See the sections Operational efficiency and innovations, p. 26; Environmental protection, p. 80; Climate change and energy, p. 96.</p> <p><b>14.4%</b> of total waste was recycled and reused</p>
 <p><b>Goal 13:</b> take urgent actions to combat climate change and its effects</p>	<p>Inputs:</p> <ul style="list-style-type: none"> <li>Reducing direct and indirect energy greenhouse gas emissions</li> <li>Enhance resilience and the ability to adapt to climate hazards and natural disasters</li> </ul> <p>See the section Climate change and energy, p. 96.</p> <p><b>11%</b> reduction in direct specific greenhouse gas emissions in existing aluminium smelters compared to 2014</p>
 <p><b>Goal 15:</b> protect and restore of terrestrial ecosystems and promote their rational use, rational forest management, combat desertification, halt and reverse land degradation and halt the loss of biodiversity</p>	<p>Inputs:</p> <ul style="list-style-type: none"> <li>The conservation, restoration and rational use of terrestrial and inland freshwater ecosystems and their services, including forests, wetlands, mountains, and drylands</li> <li>Introducing methods to foster the rational use of all types of forests, restore degraded forests, and significantly expand afforestation and reforestation</li> <li>Measures to curb the degradation of natural habitats and protect biological diversity</li> </ul> <p>See the sections Environmental protection, p. 80; Climate change and energy, p. 96.</p> <p><b>Over 1 million trees</b> were planted as part of the largest forest restoration and protection project in Russia</p> <p><b>40 tonnes</b> of garbage were collected during the implementation of the environmental 'marathons' 'Yenisei Day' since 2011</p> <p><b>18.6 hectares</b> of land restoration</p> <p>Aerial firefighting protection on the territory over <b>505 thousand hectares</b> in the Lower Yenisei Forestry in the Krasnoyarsk Territory</p>

## Stakeholder engagement

HKEX Para 6, GRI 102-21, GRI 102-42

RUSAL seeks to accommodate the legitimate expectations of stakeholders, including individuals or entities influencing, or directly or indirectly affected by, the Company's activities. For RUSAL, it is important to engage with stakeholders and to have open dialogues with them.

The main documents regulating relations between RUSAL and stakeholders are the Corporate Code of Ethics and the Business Partner Code. The Company maintains effective channels of communication in order to meet the needs of stakeholders. The interaction methods applied by the Company on an ongoing basis and identified areas of interest are shown in table below.

### Methods of stakeholder engagement

GRI 102-40, GRI 102-43, GRI 102-44

Stakeholder groups	Topics for interaction	Interaction methods
Shareholders and investors	<ul style="list-style-type: none"> <li>Performance</li> <li>Strategic business outlook</li> <li>Prudent risk management</li> <li>Corporate governance quality</li> </ul>	<ul style="list-style-type: none"> <li>Meetings between the Company's leadership and analysts and investors, including at roadshows and industry conferences (at least one-to-two times a year)</li> <li>Regular meetings with minority shareholders</li> <li>Annual general meeting of shareholders</li> </ul>
Customers and suppliers	<ul style="list-style-type: none"> <li>Quality and reliability of product deliveries</li> <li>Access to bids and procurement, clarity and transparency of procurement procedures</li> <li>Nature of business relations</li> <li>Management of sustainable development aspects</li> </ul>	<ul style="list-style-type: none"> <li>Tenders and procurement plans (as required)</li> <li>Supplier certification and development system (continuous process)</li> <li>Complaints system: weekly reviews of customer complaints (continuous process)</li> <li>Contractual relationships</li> <li>Responding to customer inquiries about the Company's sustainable development activities (upon receipt)</li> </ul>
Employees and trade unions	<ul style="list-style-type: none"> <li>Remuneration and social guarantees</li> <li>Working conditions</li> <li>Career development opportunities</li> <li>Respect for employee rights</li> </ul>	<ul style="list-style-type: none"> <li>Collective bargaining agreements (once every three years)</li> <li>Corporate media: magazine, social media (monthly)</li> <li>Regular meetings with leadership and management (at least one-to-two times a year)</li> <li>Management conferences (periodically)</li> <li>Considering hotline reports (continuous process)</li> <li>Participation in the reputation study (annually)</li> <li>Corporate sports and cultural events, professional competitions</li> <li>Volunteering projects</li> </ul>
Federal and regional authorities	<ul style="list-style-type: none"> <li>Payment of taxes</li> <li>Regulatory compliance</li> <li>Contributing to the development of regions where the Company operates</li> <li>Creating/preserving jobs</li> </ul>	<ul style="list-style-type: none"> <li>Public hearings and consultations in the retrofitting and expansion of existing industries and the construction of new facilities (as the projects are completed)</li> <li>Dialogue with state authorities on legislative and regulatory issues (continuous process)</li> <li>Memberships of associations</li> </ul>
Local communities: town residents, non-profit organisations, small businesses, professional and creative organisations, etc.	<ul style="list-style-type: none"> <li>Developing regions where the Company operates</li> <li>Creating/preserving jobs</li> <li>The condition of environments near production facilities</li> <li>Grant support for initiatives</li> </ul>	<ul style="list-style-type: none"> <li>Public hearings and consultations in the retrofitting and expansion of existing industries and the construction of new facilities (as the projects are completed)</li> <li>Social and economic partnership agreements with a number of regional governments and municipalities</li> </ul>

## Value creation for stakeholders

HKEX KPI B8.2, GRI 201-1

RUSAL contributes to local and regional economies through its operations and distribute the created value among its stakeholders, including by remitting taxes to governments, effecting local procurements, providing employment, and implementing projects that benefit local communities.

Beyond that, RUSAL recognises its responsibility to create value for its shareholders. In situation of overall aluminium market balance deterioration the Company believes that its main priority is to preserve and improve those inherent qualities which set apart RUSAL as a unique asset strongly positioned to capture upside and deliver value to all its stakeholders as a leading global vertically integrated and low carbon aluminium producer:

- Capital discipline with an aim to efficiently carry out existing strategic investment projects as well as achieve key objective of gradual deleveraging
- Maintenance of the market share and further improving VAP share in total sales mix
- Commitment to low carbon production and overall sustainable agenda, which will bring extra value to shareholders in future.

### RUSAL's direct economic value generated and distributed, \$ million

Item	Stakeholder	2019
<b>DIRECT ECONOMIC VALUE CREATED</b>		<b>11,425</b>
Revenue		9,711
Share of profits of associates and joint ventures		1,669
Interest income on loans		45
<b>ECONOMIC VALUE DISTRIBUTED</b>		<b>(9,070)</b>
Operating costs	Suppliers and contractors	(8,079)
including employee wages		(645)
Retirement costs	Employees	(179)
Community investments	Local communities	(31)
Payments to providers of capital		(589)
including dividends paid	Shareholders, investors and banks	0
including financial expenses		(589)
Payments to governments		(192)
including income tax	Government authorities	(162)
<b>ECONOMIC VALUE RETAINED</b>		<b>2,355</b>

## Participation in industry organisations and international initiatives

GRI 102-12, GRI 102-13



Being one of the largest producers of aluminium in the world, RUSAL actively participates in a number of international and domestic organisations and initiatives, including:

- The Aluminium Stewardship Initiative (ASI)
- The Carbon Pricing Leadership Coalition (CPLC)
- The International Aluminium Institute
- The UN Global Compact
- The Russian National Committee of the International Chamber of Commerce (World Business Organisation)
- The Climate Partnership of Russia
- The Business and Industry Advisory Committee OECD (BIAC OECD)
- The Commission on the Economics of Climate Change and Sustainable Development of ICC Russia
- The ICC Commission on Environment and Energy.

### RUSAL has successfully attained ASI certification

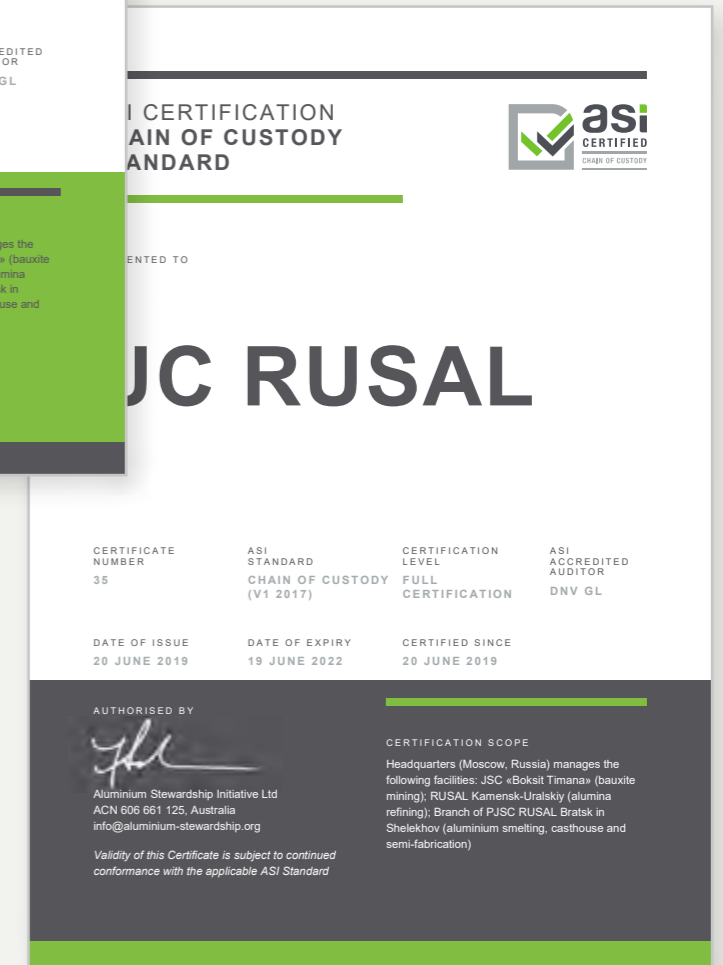
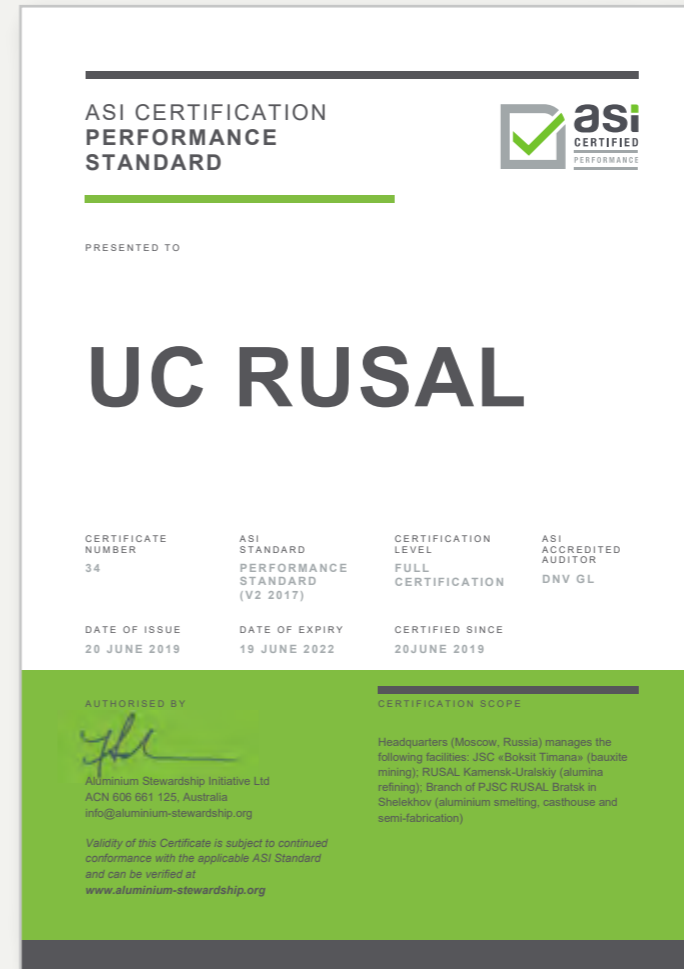
In December 2015, RUSAL joined the Aluminium Stewardship Initiative (ASI), an international initiative of aluminium and aluminium product producers and a global non-governmental sustainable development initiative for the aluminium value chain. The key objective of the ASI is to maximise the contribution of aluminium to sustainable development.

RUSAL is fully engaged in working groups assigned to the ASI and ASI Standards Committee, whose core objective is to develop ASI Standards and evaluate the best global practices. RUSAL representatives are also members of the following working groups: Biodiversity and ecosystem services, Greenhouse gases, Human rights, and Environmental impacts.

In 2019 the Management Company and three production facilities of the Company, including the Boksit Timana bauxite mine, Urals alumina refinery, and Irkutsk aluminium smelter were successfully certified under ASI Standards: the ASI Performance Standard and ASI Chain of Custody Standard. The Company works to further certify all facilities.

The ASI Performance Standard has been developed in collaboration with the industry, downstream users, and NGOs. It recognised as the only sustainability supply chain standard applicable across the entire aluminium value chain. ASI Performance Standard requirements cover 11 groups of criteria, including business ethics and governance, environmental performance, human rights, and social practices.

The ASI Chain of Custody Standard has been developed to support businesses in the aluminium value chain that wish to provide their customers and stakeholders with independent assurance for the responsible production and sourcing of aluminium. An independent, third-party audit of RUSAL was carried out by the Norwegian DNV GL.



# 1. OPERATIONAL EFFICIENCY AND INNOVATIONS

CONTRIBUTION TO UN SDG



## KEY FIGURES

# \$27.8 MILLION

is economic effect from implementing Business System development projects

## \$7.8 million

economic effect from implementing employees' improvement proposals

## 36%

share of locally sourced raw materials and supplies to produce core products

## \$18 million

invested in R&D

# 1.1 MANAGEMENT APPROACH

HKEX Para 9, HKEX Para 10, GRI 103

RUSAL adopts a systematic approach to managing operational efficiency and cultivates an environment that facilitates the development of personnel and a culture that ensures that the Company's production and business processes are continuously improved.

## Who is in charge?

- The Production Development Directorate
- The Sales Directorate
- The Business Support Directorate
- The Quality Management Directorate
- The Technical Directorate
- The Business System Development Department
- The Engineering and Technology Centre

## Which guidelines do we follow?

- The Quality Policy
- The Quality Manual
- The Business Partner Code
- Procurement regulations
- The Management of Customer Complaints

The Company invests in its own engineering and technology base, developing innovative technologies and products and retrofitting production facilities.

RUSAL has successfully established and implemented the Business System (BS) and the quality management system (QMS) and oversees supply chain management to foster operational efficiency within the Company.

Operational efficiency also covers responding promptly to customer needs, preventing issues from arising, and reducing supply chain variations.

As part of operational efficiency efforts RUSAL conducts on an on-going basis research and development (R&D) activities to implement the best-available technologies, which will facilitate a more rational use of natural resources and enhanced environmental safety.



# 1.2 RUSAL BUSINESS SYSTEM

## Approach

The RUSAL Business System ("BS") seeks to develop personnel and create a culture geared towards the continuous improvement of the Company's production processes. It ensures a systematic approach to the application of tools to boost efficiency, and promotes the introduction and proliferation of the RUSAL production system. The BS is established on a Company-wide scale, including overseas assets.

The BS is based on the TOYOTA Production System (TPS), which encourages the continuous improvement of production processes, promptly responding to customer needs, and retaining the position of being a successful company in the world market.

The BS targets align with the strategic goals of the Company, which include boosting equipment efficiency and reducing the use of raw materials.

## Key ongoing initiatives

One aim behind creating and developing the BS was to foster a culture of continuous improvement in production facilities, which requires the participation of all employees. The BS is central to employee development, and helps employees reach their full potential and advance their skills.

BS development initiatives include steering committee meetings, kaisen workshops, and 'Improvement of the year' competition.

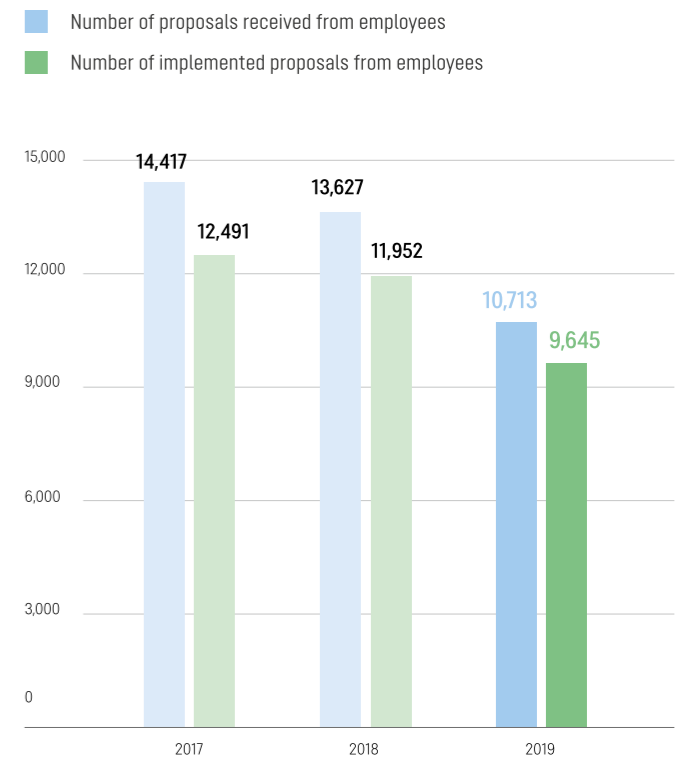
## Steering committees

In order to develop a business system at production facilities, steering committees have been set up. In 2019, four onsite steering committees were held at Bratsk Aluminium Smelter, Irkutsk Aluminium Smelter, Boksitogorsk Alumina Refinery, and Volgograd Aluminium Smelter with the participation of heads of divisions and members of the Executive Committee.

## Kaisen workshops

Kaisen workshops are an effective tool for optimising production processes and standardising technology operations, which allows employees to implement proposed improvements. These workshops operate at 10 RUSAL production facilities in the Aluminium, Alumina, and Packaging Divisions, as well as in the New Projects Directorate.

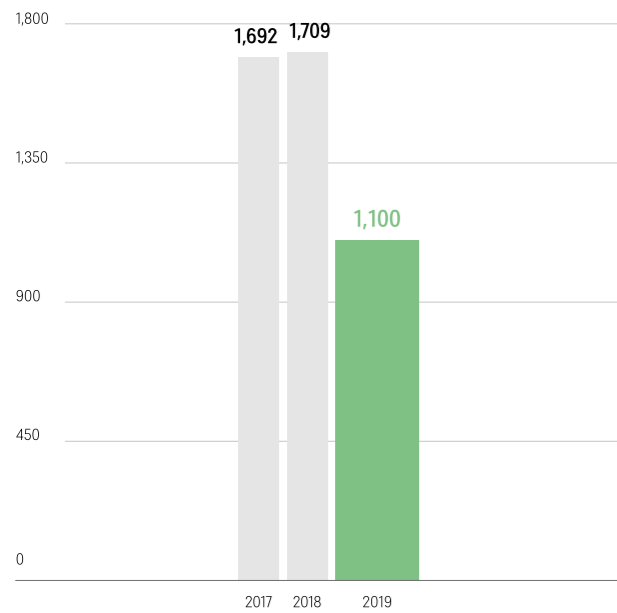
Number of BS development proposals from employees, 2017-2019



## 'Improvement of the Year' competition

The annual 'Improvement of the Year' competition is held in five categories: security, quality, performance, cost effectiveness, and theory of inventive problem-solving. Proposals received from employees are evaluated, and the winning ones are implemented in production. Every year RUSAL receives a significant social and economic benefit from implementing such proposals; in 2019, the economic effect amounted to USD7.8 million.

Number of competition participants, 2017-2019



## BS Principles Training

The implementation of the BS requires maximum participation, understanding, and commitment from all Company employees, including senior management. Therefore, staff development and training in related management mechanisms and tools, and the introduction of procedures to identify workplace leaders (the BS 250 programme) are compulsory elements within BS management.

The BS 250 successors programme ensures the continuity of approaches to managing the implementation of the BS and serves to pool the Company's experience.

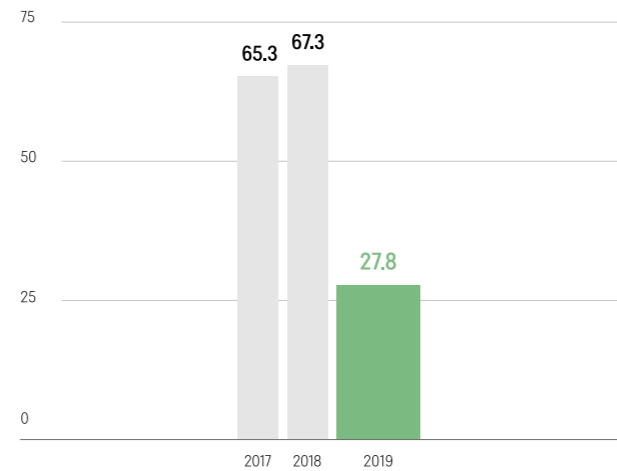
In 2019, 106 participants received promotions, including nine to the position of production facility managing director.

## 2019 results

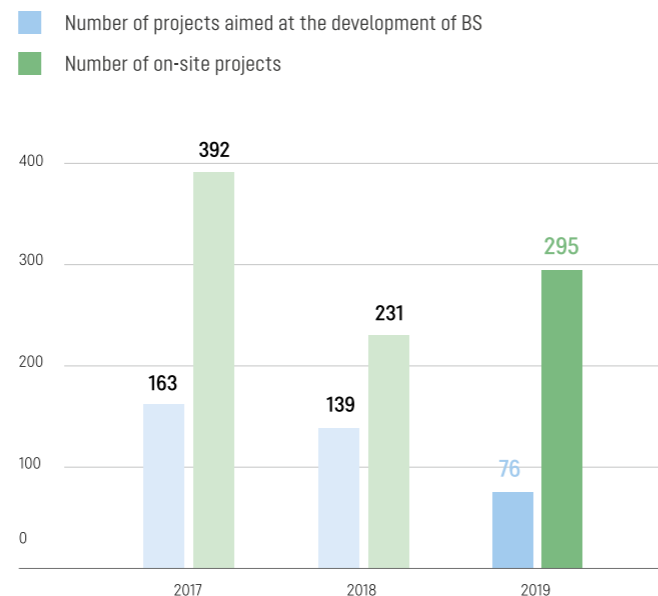
One of the Company's strategic objectives is to reduce the cost of production. BS projects can make a significant contribution towards achieving this goal, including through reducing transport costs, eliminating repackaging costs, reducing customer complaints related to delivery schedules, and good equipment maintenance.

In 2019, previous projects were continued, and new ones were instigated in order to reduce costs and improve equipment efficiency. In the reporting period, 76 BS development projects and 295 onsite projects were implemented; this created a total economic effect of over USD27.8 million.

Total economic effect of implementing BS introduction measures, 2017-2019, million USD



Number of projects to develop BS and number of onsite projects, 2017-2019



## 2019 key goals and results

Goal for 2019	Results in 2019
Organise and conduct factory and corporate stages of the Improvements of the Year 2019 contest	In the first half of the year, the factory stage of the competition was held. In November the corporate stage of the competition was held, and the results aggregated. 27 production facilities took part in the competition, 806 works were presented, and 1,100 people participated. The economic effect created from Kaisen workshops and participating projects was USD7.8 million. Six facilities participated in the TIPS nomination.
Organise and conduct audits on the implementation of the BS at <b>Company facilities</b> , in accordance with the schedule for 2019	37 audits were conducted at 10 Company facilities to assess the level of BS deployment (KrAZ, BrAZ, SAZ, IrkAZ, BAZ, UAZ, SUBR, Boksit Timana, SAYANAL, Kremniy).
Begin implementation of the project at Achinsk Alumina Refinery to restore equipment operability and ensure compliance with technological specifications	The project Reducing the emergency downtime of mills of the secondary sewage treatment plant of the raw materials shop of Achinsk Alumina Refinery was launched. The reduction in equipment downtime boosted operating times and allowed the operational efficiency (OEE) of OPSH mills to be increased from 61 to 63%.
Organise with the Human Resources Directorate the Fundamentals of Industrial Design programme (opening the Department of the Siberian Federal University), teach the principles of the BS, and organise the RUSAL Laboratory cooperation programme with the Centre for Youth Initiatives	<ol style="list-style-type: none"> <li>In the 2019-2020 academic year the BS led to: <ul style="list-style-type: none"> <li>70 people being trained at the Siberian State Industrial University in Novokuznetsk</li> <li>143 people being trained at the Siberian Federal University in Krasnoyarsk.</li> </ul> </li> <li>During the year, four RUSAL Laboratories successfully operated: at the Siberian Federal University, the Siberian State Industrial University, the Volgograd Technical University, and the Irkutsk National Research Technical University. Students worked on finding solutions to pressing issues being faced by RUSAL. As a result, an expert commission consisting of representatives of the Company and university management selected over 20 projects.</li> </ol>
Methodological support for a programme of interdivisional personnel reserve internships in 2019	Methodological support for a Manager / General Director programme to organise interdivisional internships (six people participated).

## Plans for 2020 and the medium term

The following Business System goals have been set for 2020:

- Training candidates for the BS 250 programme and creating a personnel reserve for key positions in the Company's model plants
- Organising and conducting factory and corporate stages of the Improvement of the Year 2020 contest
- Organising and conducting audits on implementation of the BS at Company facilities, in accordance with the schedule for 2020
- Implementing the project "The Influence of Physical Exertion on the Development of Occupationally Caused Diseases"
- Providing methodological support on the organisation of personnel reserve internships in 2020.



# 1.3 QUALITY MANAGEMENT SYSTEM

In order to create a uniform process and approach to all aspects of the Company's activities, RUSAL has implemented a quality management system (QMS), which facilitates the efficient operation and interaction of business processes. The RUSAL QMS fosters the continuous improvement of all processes and enhances the management of quality related risks and opportunities, and is geared towards preventing issues from arising and reducing supply chain variations. The high quality of management processes is a key factor behind achieving high-quality products and services.

The main RUSAL production facilities (both Russian and international) have ISO 9001 compliance certificates<sup>2</sup> (in total 29 production facilities<sup>3</sup>).

Five aluminium smelters and seven remote auxiliary divisions are certified for compliance with the international standard for automotive suppliers IATF 16949<sup>4</sup>. Two foil rolling plants are certified for compliance with FSSC 22000 (food safety certification system).

The quality policy establishes uniform requirements and principles for all Company production facilities. Based on the Policy, the Company developed a Quality Development Strategy, and goals are established annually in order to implement the strategy. The attainment of goals is assessed through the KPIs of functional units, and respective reports are subject to review by the Executive Committee.

In order to regulate activities in the Company's business units quality management meetings are held, and a two-level system of internal audits of the system, processes, and products is organised, which assesses respective conditions and identify areas for improvement. In 2019, 31 internal audits on compliance with international quality standards were organised by the Quality Management Directorate, and 26 independent quality audits were organised by the certification body.

The complaints management process is handled by the Quality Management Directorate, as the process owner. The Sales Directorate, production units, and divisions, as well as the Engineering and Technical Centre, take part in this process. Activities include receiving complaints, processing them, analysing issues, responding to clients, implementing remedial actions, and replicating best practices.

## Quality Development Strategy

The Quality Development Strategy for 2018–2021 is being implemented in accordance with the roadmap. Respective programmes have been developed that weekly assess progress made towards achieving established goals. The Company plans to update the roadmap for the period 2020–2022.

## QMS Perfect Process initiative

The Perfect Process initiative was launched with a view to developing production processes that are focused on meeting basic customer requirements. This initiative involves a series of actions to facilitate the continuous development and improvement of production processes. Stages include:

- Benchmarking by product characteristics
- Benchmarking on quality, determining gaps and opportunities
- Identifying special product characteristics
- Identifying special process parameters based on product characteristics
- Assigning control methods and assessing processes
- Monitoring and evaluating the stability and capacity of processes
- Developing and implementing remedial actions to improve processes and products
- Customer evaluation of processes and the joint determination of development areas.

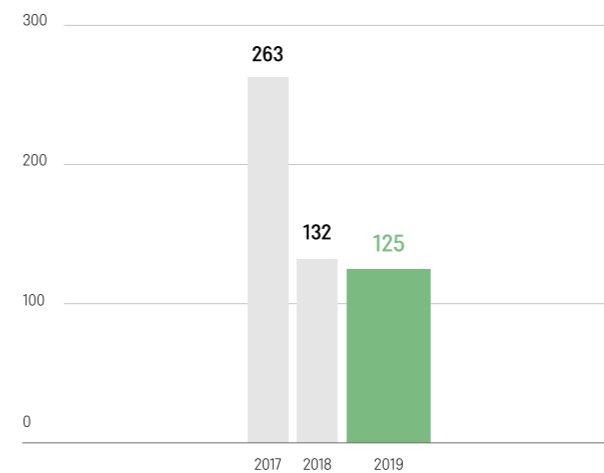
## Focused Improvement Programme for key customers

The Focused Improvement Programme for improving consumer relations, aimed at maintaining and fostering cooperation with key or strategic consumers, continued to be applied. The advantage of this programme is that it factors in the priorities of consumers

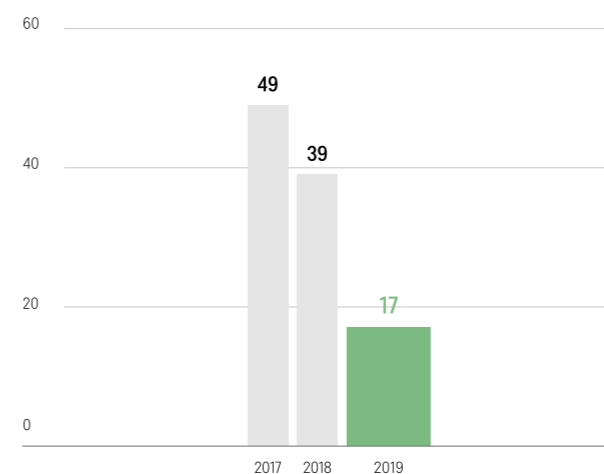
when building stable relationship with them regarding non-commercial aspects. The programme establishes relations between the Company and consumers through regular direct communication and feedback, which helps improve product performance and increase customer loyalty.

An analysis of the main causes behind recurring complaints and the remedial actions taken to address these causes falls under the remit of the heads of RUSAL facilities. Teams were organised to resolve recurring complaints (variability reduction teams). These teams apply the Six Sigma methodology under the DMAICR format (define-measure-analyse-improve-control-replicate) to resolve issues related to the quality of products and processes. The status of resolving issues with respect to recurring complaints and the lessons learned are regularly reviewed by the Quality Steering Committee.

Number of consumer complaints<sup>5</sup>, 2017–2019



Number of recurring complaints, 2017–2019



## Training employees in quality

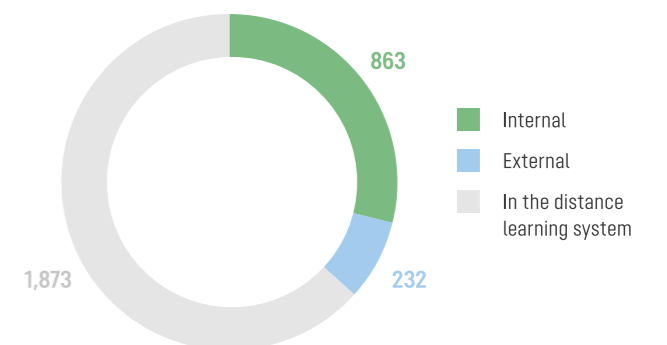
The Company set up the RUSAL Quality Academy, which aims to develop employees and the personnel reserve in terms of the practical application of quality approaches and tools, and the development of professional competencies. All newly hired employees are required to pass mandatory training in a basic quality course.

Personnel training is carried out on a regular basis in accordance with international ISO and IATF standards, as well as quality tools such as the Failure Mode and Effect Analysis (FMEA), Statistical Process Control (SPC), Measurement System Analysis (MSA), and Advanced Product Quality Planning (APQP).

In 2019, staff training was held on 23 topics, including the requirements of the international standards ISO 9001 and IATF 16949, quality tools, and the methodology of projects for "perfect processes".



Number of employees trained in quality, 2019



## Plans for 2020 and the medium term

The Company sets both qualitative and quantitative goals to track progress in the Quality Management System, including indicators related to responses to complaints, how promptly consumer complaints are reviewed, the development of "perfect processes", and a focused improvement programme for customers.

2. For more details see the RUSAL corporate website: <https://rusal.ru/en/clients/product-quality/>.  
 3. The function of maintaining and improving the QMS at Russian production facilities is centralised in the Management Company: 21 production facilities are accredited under a single certificate. Overall the system ensures a consistent approach to quality assurance.  
 4. For more details see the RUSAL corporate website: <https://rusal.ru/en/clients/product-quality/>.

5. Data relate to the Aluminium Division.

# 1.4 SUPPLY CHAIN

## Interactions with suppliers

GRI 102-9, GRI 103, HKEX Aspect B5

As one of the world’s largest producers of aluminium, RUSAL works with a large number of suppliers, including suppliers of electricity and fuel products, raw materials, equipment and technology, as well as suppliers of services, including contractors directly operating at the Company’s production facilities.

### Supply chain structure

The main suppliers of the Company are FSC JSC and EuroSibEnergo-Hydrogeneration LLC (electricity and power), Russian Railways OJSC (rail transportation), and ENRC Marketing AG (alumina). Most of these publish regular sustainability reports or have good key sustainability governance practices.

In turn, RUSAL acts as supplier to companies working in such industries as engineering, automobile production, metallurgy, chemical, transport, construction, electrical, food, and packaging. The Company also interacts with organisations that provide intermediary services (distributors and wholesalers, commodity exchanges, and electronic trading platforms).

There were no major changes to the organisation of the supply chain in 2019. *GRI 102-10*

### Business Partner Code compliance

RUSAL is open to cooperation on a long-term basis with organisations that share its commitment to high standards of business ethics, quality, and production effectiveness, as laid out in the Business Partner Code. The Company adopts a risk-based approach when working with suppliers, including tools for managing social and environmental risks. Suppliers are made familiar with the Business Partner Code through the official RUSAL corporate website. Employees entering into transactions notify suppliers about the Business Partner Code and recommend in writing that they join the Business Partner Code.

In 2019, six suppliers of raw materials joined the Business Partner Code, and in total more than 40 suppliers have joined.

## Procurement of raw materials and supplies to produce core products

GRI 204-1

The nature of RUSAL’s production implies that the quality of 80% of final products depends on suppliers. Hence the quality and timing of supplies of raw materials and supplies for the production of core products are critical factors. All supplied products must comply with respective contracts and regulatory documents, and the QMS of suppliers must comply with RUSAL’s requirements.

In 2019, RUSAL worked with over 110 producers of raw materials for the production of main products, the bulk of which were Russian and Chinese companies. 36% of purchases were from local suppliers of raw materials for the production of core products<sup>6</sup>. *HKEX KPI B5.1*

In the procurement of raw materials and supplies satisfying the requirements of the Company, suppliers from Russia and other CIS countries are preferred, and working relationships are built based on long-term contracts. In the event of there being insufficient supplies, the deficit is sourced from abroad.

In 2019, internal procurement regulations were updated in order to make the procurement process more transparent. This included:

- Open sampling — information on this was made available on the Company’s website
- The minimum period for collecting initial offers was established and information about selections was posted on the Company’s website
- An extended (additional) list of information, which must contain tender documentation
- Additional requirements for in-person bidding and rebidding processes.

6. The specified share is calculated from the budget for the procurement of raw materials for the main production, carried out by the Directorate for Business Support and the Alumina Division.

Supplier procedures cover the full cycle of working with suppliers, from informing new and potential organisations to assessing collaboration results with long-term RUSAL suppliers.

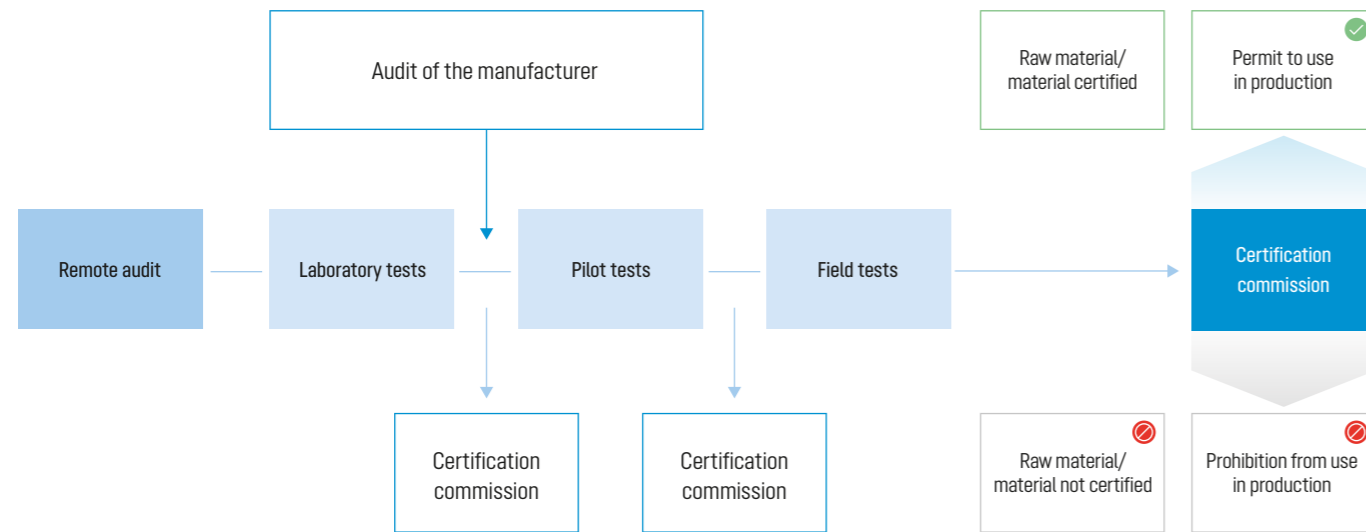


## Supplier certification

GRI 308-1, HKEX KPI B5.2

In order to manage supply chain quality and technology risks, the Company certifies suppliers in accordance with IATF 16949, using the APQP approach (PPAP).

### Certification stages



The certification stages for suppliers of raw materials and materials used in the production of primary products are as follows:

The Company conducts audits of potential, new, and existing suppliers. Prior to the start of certification tests and audits, a supplier questionnaire is sent to suppliers. This questionnaire contains an Implementing the Basic Principles of Sustainable Development section, which includes the status of accession to the Business Partner Code, as well as questions about the implementation of sustainable development principles by the supplier, based on the Business Partner Code.

The supplier's questionnaire also contains questions covering environmental protection, labour protection, health protection, and industrial safety, and determines the existence of certified environmental management systems (ISO 14001) and industrial safety and health systems (OHSAS18001 / ISO45001).

If a supplier does not fully meet the requirements of RUSAL, the Company can provide it with related support.

Audit results have a beneficial effect on supplier development: they help address suppliers' identified weaknesses and optimise their processes, which assists in certifying their management systems, and they also offer them new opportunities.

In 2019, the audit checklist was supplemented by questions that assessed the sustainable development of suppliers. Furthermore, a process to remotely audit suppliers was introduced, which also includes questions on compliance with the principles of sustainable development.

In 2019, 54 supplier audits were conducted, including 24 of suppliers of raw materials and materials to produce basic products.

Based on the results of the previous year, a rating assessment of existing suppliers is carried out annually, which includes a comprehensive assessment of suppliers in five areas of activity and 15 criteria. Based on the results of this assessment, 67% of suppliers received the category A (Reliable), while 33% received the category B (Conditionally reliable).

A special area of interaction with suppliers of services and works is Health, Safety, and Environment (HSE), whose requirements are also emphasised during assessments. The existence of risks in this area at the production facilities of suppliers is considered by the Company to be a critical factor that can determine whether a working relationship is successful. Therefore, compliance with health and industrial safety standards is enshrined in service contracts. These are similar to requirements for production facilities and for RUSAL employees. In the event of a contracting organisation violating the terms of a contract they are subject to penalties, including termination of the relationship. The main criteria used to assess contractors are: qualification level, the provision of personal protective equipment (PPE), and competences vis-à-vis the safe conduct of work. The Company conducts investigations into all incidents. The injury rate among contractors' employees is based on the requirements of the corporate regulation on the single reporting on health, industrial, and fire safety.

## Interaction with consumers

HKEX Para 12, HKEX Aspect B6

The main consumers of RUSAL are companies from Russia, CIS, Europe, America, and Asia.

One of the Company's strategic objectives is to build long-term relations with consumers by actively participating in the development of new products, and offering a wide variety of alloys tailored to the specific needs of each client.

RUSAL does its utmost to comply with customer needs and to reduce the number of complaints, using various tools and techniques. In order to ascertain customer needs, the characteristics of their production, and development priorities, the Company sends teams of representatives from production and service units to the production facilities of its customers. The Company's production facilities regularly undergo onsite audits by customers to evaluate production processes and the existing quality management system, and respective recommendations are elaborated. Key customers participate in joint trials.

In order to spread information about approaches and results regarding the application of advanced production and environmental technologies and to foster interaction with stakeholders and business partners (including buyers of metal products, equipment producers, and suppliers of various materials), the Company participates in an international congress and various exhibitions.

To improve the consumer complaints management system and accelerate the introduction of the most popular products to the market, the Company interacts directly with the representatives of consumers, as part of focus improvement programmes. Under this initiative direct interaction with key consumers has already been established.

### Product responsibility

HKEX KPI B6.5

With product health and safety part of its product responsibility policy, RUSAL adopts a two-stage approach, by using innovative technology and quality management systems to manage potential health and safety risks pertaining to its products.

As part of its product responsibility policy, RUSAL respects the confidentiality and responsibly treats the protection, storage, processing, and transmission of personal data. The Company complies with all regulatory requirements relating to promotional activities.

To protect personal data during the marketing of products, the Company applies the Information Security Policy and the Regulations on the Protection, Storage, Processing, and Transfer of Personal Data.

The health and safety services of RUSAL provide assistance to suppliers in order to improve compliance with the Company's requirements, including:

- Training in health, industrial, and fire safety and first aid
- Preliminary and periodic medical examinations
- Monitoring working conditions
- Special audits of working conditions
- Repair and construction work (as part of monitoring HSE compliance)
- Transport
- Elaborating internal HSE regulatory documents
- Examining industrial safety
- Providing PPE and working clothes, cleaning and repairing such items.

Also, in 2019 the base of alternative suppliers was expanded, suppliers with issues were excluded, and a supply chain automation project was launched.

### Plans for 2020 and the medium term

The Company has set the following goals related to procurement processes:

- Introducing an automated counterparty assessment system
- The purchase of alternative pitches when new technologies are introduced
- Launching a procurement system optimisation project
- Replacing tanks with tankers and tank containers during the transportation of raw materials
- Introducing an APQP approval process with suppliers in order to enhance the certification process.

## Labelling products

GRI 417-2, HKEK Aspect B6

Finished products produced at the Company's operations are automatically labelled in accordance with state requirements. A label includes the trademark or name of the producer, the aluminium grade or alloy brand, the melting number, and other information.

In 2019, the Company was in compliance with applicable laws and regulations that have a significant impact on the Company in terms of the labelling of its products; no significant complaints were recorded in connection with product labelling.

## Analysis of customer satisfaction levels

GRI 417-1

The main indicator of quality within the Company's interaction with customers is the level of customer satisfaction. A survey is conducted annually, containing 30 questions in six areas of interaction. The results of the survey help ascertaining opportunities for improvement and are taken into account when developing future action plans.

In 2019, in addition to the Russian and CIS markets, Europe and Asia were added to the survey. Based on 160 customer responses, the overall satisfaction score was 8.5 out of 10. The survey also indicated that delivery performance, commercial arrangements, and technical support require attention.

### General customer satisfaction level with RUSAL<sup>7</sup>, 2019

Overall rating	8.5
Relationship	8.4
Technical support	8.2
Product quality	8.8
Commercial arrangements	8.2
Delivery performance	8.1
Business partnership	8.6
Valued customer	8.4

## Achievements in 2019

In 2019, RUSAL observed growing demand for low-carbon aluminium (LCA) from consumers and end users across all market segments, including automotive OEMs, beverage and packaging, building and construction, and technological multinationals. Growing interest in reducing the carbon footprint of products is determined by companies' sustainability agendas as well as external factors,



such as national and global policy developments and regulatory frameworks.

The focus of engagement with customers has primarily been on low-carbon transitions. RUSAL has directed its efforts towards raising awareness among customers about the LCA offering, promoting demand for LCA, and pushing for carbon footprint transparency in the supply chain (thereby stimulating action and progress in the aluminium supply chain and the industry to decarbonise), and, finally, providing solutions with its LCA ALLOW brand.

RUSAL organised presentations and workshops to raise awareness of its LCA and ALLOW brand materials for a wide range of stakeholders, including end users, distributors, consumers, and financial organisations across all its regions of operations.

## Plans for 2020 and the medium term

The key areas of focus for 2020 and the medium term comprise:

- The continued certification of the Company's facilities under both Aluminium Stewardship Initiative (ASI) standards: the ASI Performance Standard and ASI Chain of Custody Standard
- Preparing environmental product declarations, with assessments of the product life cycle, in order to increase the transparency and traceability of materials
- Elaborating plans within the framework of Science-based Targets (SBTs)
- Continued regular disclosure of information under the UN Global Compact and CDP
- Further expanding availability of LCA for consumers
- Further building decarbonisation partnerships throughout the value chain, by stimulating the consumption of low-carbon materials and increasing the availability of LCA for consumers and end users in all market segments through marketing partnerships and accredited partnerships with the ALLOW brand
- Continued active work in industrywide decarbonisation initiatives (the ASI, the International Aluminium Institute, and its Greenhouse Gas Emissions Pathways Working Group, the World Economic Forum's Aluminium for Climate Initiative, the London Metal Exchange, and the Organization for Economic Co-operation and Development).

7. The maximum value for each criterion is 10 points.

# 1.5 INNOVATION

One of the strategic goals of RUSAL is to become the most efficient and environmentally friendly producer of aluminium in the world. To achieve this goal, the Company invests in its own engineering and technology base, which includes developing innovative technologies and products and retrofitting production facilities. Investments promote:

- An increase in the share of value-added products (VAP)
- Improvements to product quality
- A reduction in the energy intensity of production
- Improved environmental safety
- Enhanced raw material self-sufficiency
- Expansion of product output.

As part of the Company's innovation development, the Engineering and Technology Centre (ITC) has for many years carried out a full range of research and development (R&D) activities to enhance existing and new aluminium production technologies and related processes. The key areas of work carried out by the ITC are energy and resource saving, developing heavy-duty reduction cells, reducing negative impacts on the environment, boosting the efficiency of alumina production, labour protection, and industrial safety.

In 2019, a large amount of research and development (R&D) to develop and create new types of products based on aluminium was carried out by the Institute of Light Materials and Technologies of RUSAL (ILM&T), set up in 2017. A number of projects have been implemented in collaboration with leading Russian universities.

The ILM&T became the second research centre of the Company that develops and markets new types of aluminium-based products and materials. As part of its activities, innovative solutions in the field of high-strength aluminium powders for additive technologies, economically alloyed scandium materials to be used in shipbuilding and space technology, and aluminium alloys with high corrosion resistance for rail transport and construction were successfully developed and produced. A number of materials successfully passed testing and certification.

The Company makes active use of technological scouting, by engaging contractors to identify new directions and ideas. In addition, an expert council has been set up within the Company, which evaluates ideas received and decides on a respective project before R&D activities begin.

The Company's specialists are guided by the precautionary principle, and always comprehensively assess any potential danger to the environment or human health. *GRI 102-11*

In 2019, the Company's investments in R&D were up by USD4 million on 2018, and stood at USD18 million.

## Waste project

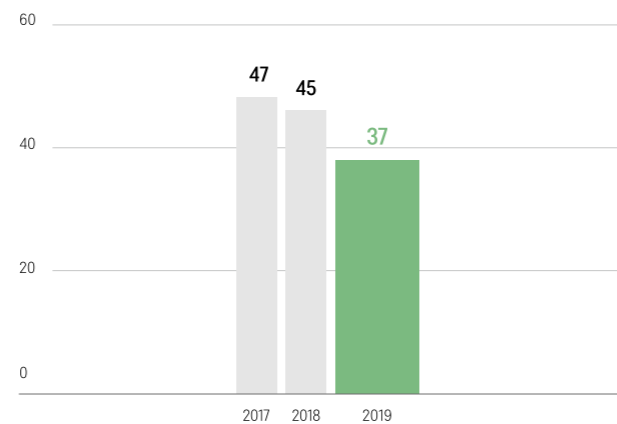
The Company is testing technologies to process bauxite residue (a waste product of alumina production), which contains valuable metal oxides, including scandium. According to estimates, RUSAL has over 300 tonnes of pure scandium accumulated bauxite residue.

## Value-added products

RUSAL carefully adapts its product line to customers' needs and current demand trends in the industry, continues to implement renovation and retrofitting projects at production facilities, and expands the range and quality of its products.

In 2019, sales of value-added products (VAP) stood at 1,547 thousand tonnes, while the share of VAP in the total sales structure fell to 37%, due to sanctions, which hampered the conclusion of long-term contracts.

Share of value-added products, 2017-2019, %



The increased output of value-added products is ensured by the development and production of new products.

## Environmental approach

As part of the Eco-Soderberg development, the Company has created improved gas collection sections, with enhanced features to reduce emissions, and an automated tracking system to monitor seals, which further boosts the effectiveness of covering panels. Centralised production was organised at RUSAL's iron casting facilities to facilitate improvements in the design of the cell degassing system, and in turn lowered costs.

The automatic raw materials feeding systems that RUSAL has developed for its reduction cells (as well as production process control systems), a reduction in cell tending equipment (new machines for loading alumina into MZGV reduction cells and systems that remove dust in MPU pot rooms), and innovative comprehensive gas scrubbing process have reduced emissions of the main type of fluoride-based contaminants (F, fluorides) by a factor of 3.5 relative to the standard Soderberg process. This has brought the environmental performance of the Eco-Soderberg process close to that achieved by a reduction in baked anodes.

The Company continued with the installation of state-of-the-art fume treatment centres designed by RUSAL at its aluminium smelters. RUSAL has developed and implemented in the aluminium reduction process its own advanced and innovative fume treatment system, based on the absorption of fluorides with alumina and applying a unique absorber reactor, while providing the option to return captured fluoride to the aluminium reduction process. The new technology has high efficiency in terms of capital expenditure (reduced capex on equipment of over 30%) and improved fluoride capture efficiency — over 99% (SO<sub>2</sub>: over 96.5%). In terms of environmental indicators, the fume treatment centres have no equivalent anywhere the world, as pot gases are treated in two stages, dry + wet — this is the most efficient scheme applied in global practice. This treatment process allows not only fluorides to be captured, but also sulphur (SO<sub>2</sub>).

To ensure raw material safety and to secure Eco-Soderberg in the status of Ecological Technology for the polyaromatic components of emissions, a technology has been developed to produce eco-friendly hybrid and compound pitch with petroleum ingredients and a low coke content (less than 30–40%). Together with partners, over 200 thousand tonnes of pilot batches were produced and pilot tests successfully conducted. There are no equivalents anywhere in the world of this technology, which greatly reduces the content of benzopyrene by replacing coke and coal pitch with petroleum ingredients. The pilot production of pitch and testing confirmed the quality of the pitch obtained, and demonstrated the high economic efficiency of its production.

## New high-capacity and resource-saving reduction cells

The Company has successfully been developing resource-saving reduction cells. Super high-capacity RA-550 cells are operating in a pilot pot room at the Sayanogorsk Aluminium Smelter, and have good indicators of 1) energy efficiency: power consumption is less than 12,800 kWh/t, 2) performance: current efficiency stands at 96%, and 3) environment-friendliness: the level of fluoride emissions is less than 0.15 kg/t. RA-550 project solutions are applied to existing Company equipment to achieve high indicators. At the same time, work continued as part of a programme to switch existing cell designs to energy-efficient ones, featuring eco-friendly linings using bulk materials. Super high-capacity RA-300 and OA-300 cells have achieved the world's highest indicators for these types of cells: 12,600 kWh/t and 12,800 kWh/t of Al, while for other types of cells electricity consumption was reduced by 200–400 kWh/t of Al. The Company has already switched over 2,600 cells to an energy-efficient design and more than 800 cells to an eco-friendly lining. In addition to the environmental benefits of this lining (which reduces aluminosilicate lining waste by 60 to 80%), the use and recycling of bulk carbon materials lowers the cost of relining cell cathodes by 20 to 30%.

## Inert anode technology

RUSAL is actively developing the state-of-the-art inert anode technology. Its introduction to the production process will completely eliminate emissions of greenhouse gases and polyaromatic hydrocarbons. The technology will also reduce operating expenditure by more than 10%, through the reduced consumption of anodes, while capital expenditure on new projects will decline by over 30%.

The Company continuously strives to minimise its carbon footprint. RUSAL is currently testing inert anodes in pilot cells at the Krasnoyarsk aluminium smelter. However, before this technology is rolled out on an industrial scale, major efforts are needed to improve its technical and economic indicators, design a fundamentally new logistics scheme for raw and other materials, and draw up options for transitioning from carbon to inert anodes.

# 2. ETHICS AND HUMAN RIGHTS

CONTRIBUTION TO UN SDG



## KEY FIGURES

# 24%

of employees are women

## > 3,300

conflicts of interest declarations applied

## > 300

messages were received through the Signal trust service

## 2.1 MANAGEMENT APPROACH

HKEX Para 9, HKEX Para 10, GRI 103

RUSAL takes a responsible approach to the issues of ethics and respect for human rights in relation to employees, counterparties, and local communities in the regions where the Company operates.

### Who is in charge?

- The Directorate for Control, Internal Audit and Business Coordination
- The Security Directorate
- The HR Directorate
- The Compliance Department
- The Communication and Social Projects Department

### Which guidelines do we follow?

- The Corporate Code of Ethics
- The Company's Anti-Corruption Compliance Policy
- The Regulation on Preventing and Resolving Conflicts of Interest
- The Business Partner Code
- The Human Rights Policy

In this regard, employees of all the Company's business units must adhere to the ethical principles of behaviour set forth in the Company's policies and regulations.

RUSAL understands that, as a member of society, it is obliged to implement responsible business practices. This includes a wide range of issues that creates a picture of the Company in the mind of the public, and consequently impacts its business reputation — from intolerance towards corruption and openness in communications to respecting everyone's human rights, from employees and shareholders to all categories of external stakeholders.



## 2.2 PROMOTING ETHICAL BUSINESS CONDUCT

GRI 102-16

The Corporate Code of Ethics establishes the mission and values of the Company. In accordance with the Code, production facilities authorise Ethics Officers to work with employee appeals related to labour safety issues, compliance with labour laws, internal interaction issues, and other topics. The principal task of the officers is to communicate directly with employees in challenging situations and to find and implement a coordinated solution to the problem.

The Company is currently working on reviewing its approach to managing issues related to business ethics. In order to determine the necessary areas of work, in 2019 RUSAL assessed its ethical infrastructure and the work of Ethics Officers. Work also included an evaluation of employee awareness and understanding of the Corporate Code of Ethics and corporate values. Around 3,500 employees from the Company's main production facilities took part.

In 2020, RUSAL plans to review and update the Corporate Code of Ethics in order to ensure that it conforms to the latest changes in the Company and business environment.

RUSAL strives to comply with high ethical corporate standards and to promote ethical business practices. In addition, it actively interacts with other organisations and participates in various events dedicated to the issue of ethical values, in order to create a community of companies interested in developing business ethics in Russia.

RUSAL is currently working, in collaboration with the SKOLKOVO Moscow School of Management, on creating a Faculty of Business Ethics. RUSAL also participates in creating business ethics educational programmes aimed at both RUSAL employees and external users. In particular, an Ethical Leadership course for Ethics Officers and the Company's managers is now being prepared. The course will help effectively communicate to managing employees the Company's goals and expectations in the area of business ethics.



### Skolkovo Ethics Day

SKOLKOVO Ethics Day is an international initiative which took place on 16 October 2019. The day was organised by RUSAL in collaboration with the SKOLKOVO Moscow School of Management. The event was attended by 250 participants; most were CEOs, heads of HR and corporate culture departments, compliance-officers, and ethics ombudsmen of major Russian and foreign companies.

SKOLKOVO Ethics Day is an annual conference devoted to discussing the most pressing issues vis-à-vis applying and developing ethical principles in business, and promoting ethical leadership values. The event is aimed at facilitating building a professional community in the field of business ethics in Russia.

# 2.3 HUMAN RIGHTS

HKEX Para 9, HKEX Para 10, GRI 103, GRI 102-16

RUSAL pays close attention to ensuring respect for human rights at all stages of its operations, and continuously carries out necessary measures in this regard.

## Approach to human rights management

In recent years, RUSAL has been working steadfastly to develop and implement first-in-class processes pertaining to human rights management. ASI Standards have become the chief driver and source of methodological support in this process.

Responsibility for human rights management is distributed between the heads of primary functions, which ensure respect for human rights in day-to-day activities and in interactions with key stakeholders.

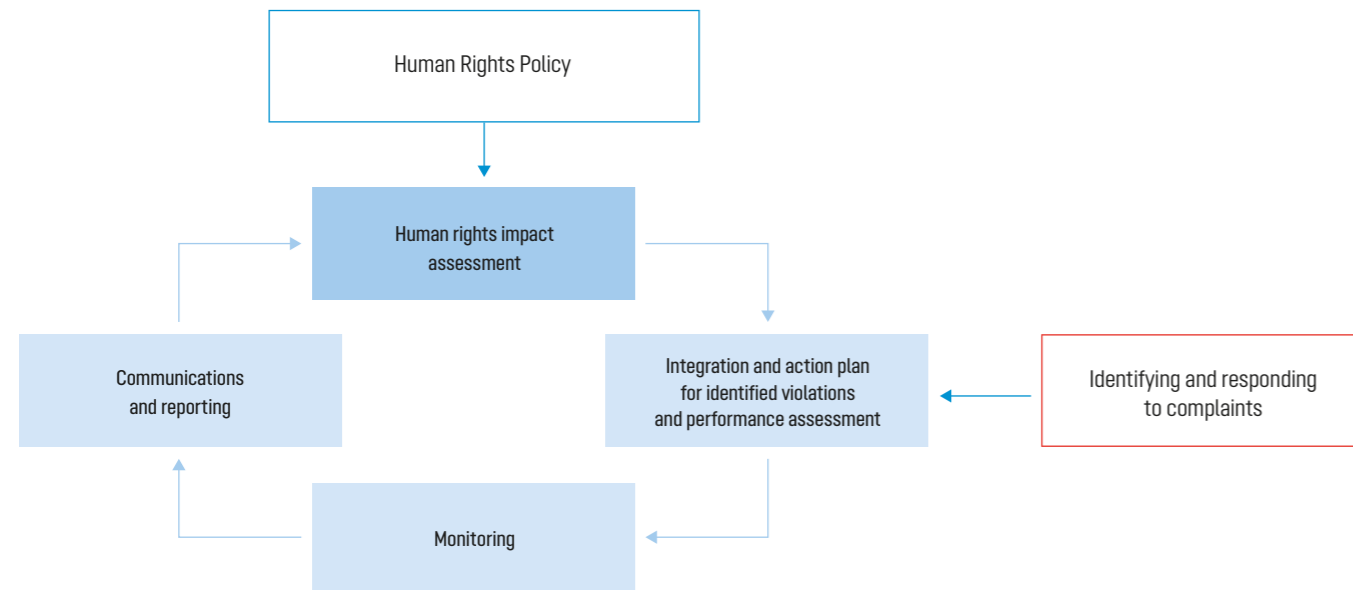
All human rights activities are based on the RUSAL Human Rights Policy. Drawing on the principles stated in the policy, RUSAL regularly performs human rights due diligence, whose results in turn

help determining the course of further work to be carried out and the necessary measures to be undertaken. *GRI 412-1*

Human rights monitoring procedures are included in the standards of RUSAL, the Company's internal documents (labour contracts, corporate policies, labour safety regulations, etc.) and more extensive procedures that ensure compliance with respective legal requirements.

RUSAL works to raise awareness surrounding human rights issues. The Company is currently developing a remote training course on Human Rights for its employees.

## Approach to human rights management *GRI 412-2*



## Human Rights Policy

The Human Rights Policy was approved by the Board of Directors of the Company in 2018 and was implemented in 2019. It can be accessed on the Company's website<sup>8</sup>.

The policy was elaborated in accordance with the Universal Declaration of Human Rights, the International Labour Organisation Declaration on Fundamental Principles and Rights at Work, the UN Global Compact, and a number of other international standards in the area of human rights. It is also based on the principles of the ASI Performance Standard.

## Human rights due diligence

The Company applies a risk-orientated approach to human rights management. In order to perform human rights due diligence and to evaluate potential risks, in 2019 RUSAL developed and introduced a Human Rights Assessment tool, which determines whether the risk level in the facility is low, average, or high. The tool was developed based on recommendations from the Danish Institute for Human Rights and the Social Accountability 8000 standard.

The assessment tool consists of 16 criteria, eight of which address general human rights, and eight labour rights.

## Principles of the RUSAL Human Rights policy

1. Non-discrimination on the grounds of gender, race, and/or religion.
2. Rejecting the use of child and forced labour.
3. Providing working conditions that do not endanger the life or health of workers, measures to prevent industrial injuries.
4. Intolerance towards corporal punishment, mental or physical coercion, harassment, and abuse.
5. Compliance with regulations relating to hours of work and rest, overtime, salary, working hours, etc.
6. Compliance with the codes and regulations of business ethics and law.
7. Implementing measures necessary to reduce production impacts on the environment.
8. Respecting the cultural characteristics of the countries and regions where the Company operates.
9. Respecting the right of employees to freedom of association, including the right to collective bargaining.
10. Ensuring the protection of personal data of all employees and other stakeholders.
11. Respecting the civil rights of workers and recognising their right to participate in political activity as private individuals.

<sup>8</sup> <https://rusal.ru/en/sustainability/approaches/>



### Human Rights Assessment tool criteria

General human rights criteria
Woman's rights
Indigenous peoples
Free, prior, and informed consent (FPIC)
Cultural and spiritual heritage
Resettlement
Local communities
Conflicts and high-risk areas
Security

Labour rights criteria
Freedom of association and the right to collective bargaining
Child labour
Forced labour
Non-discrimination
Communication and interaction
Disciplinary measures
Salary
Working hours

The right to safe labour is also regulated and assessed under the Company's H&S management system, while the right to a favourable environment is regulated and evaluated by the environmental management system.

### Diversity and equal opportunities

*HKEX Aspect B1*

As RUSAL appreciates that having a diversity of employees results in greater operational productivity, the Company adheres to the principles of diversity and equal opportunities. RUSAL's wage system (for more information, see Motivation and remuneration, p. 59) does not include a gender component when determining the level of salary, thereby ensuring equal pay for equal work for all employees.

### Position on child and forced labour

*GRI 408-1, GRI 409-1, HKEX Aspect B4*

Child and forced labour are prohibited by law in most countries where the Company operates. RUSAL strictly complies with this principle at all its facilities and production facilities, including those located in countries where prohibition is not stipulated by law. This commitment is enshrined in the Corporate Code of Ethics, the Human Rights Policy, and the Business Partner Code. The Directorate for Control, Internal Audit and Business Coordination

is responsible for overseeing this issue. Employees of the directorate regularly hold respective inspections and internal audits. Since the establishment of the Company, there have been no infringements of laws and regulations relating to child and forced labour. *HKEX KPI B4.1 HKEX KPI B4.2*

### Fostering human rights protection through the supply chain

Through the development and implementation of corporate instruments and controls, RUSAL promotes respect for human rights, both in its own activities and in the activities of its partners.

The Company will not accept or tolerate any violation of this principle by any of its business partners, including suppliers and contractors. The Company monitors entities in its supply chain comply with legal requirements related to child and forced labour through carrying out audits of suppliers. Since the introduction of the Business Partner Code in 2015, no infringements have been found within the supply chain of laws or regulations relating to child and forced labour.

The Business Partner Code, which covers issues related to human rights, can be accessed on the Company's website. By participating in the selection process, a supplier undertakes to comply with this document.

For more information, see the section Supply chain. Interactions with suppliers, p. 34.

## 2.4 ANTI-CORRUPTION AND COMPLIANCE



### Anti-corruption

*HKEX Para 9, HKEX Para 10, HKEX Aspect B7, GRI 102-16*

RUSAL is committed to conducting business with integrity, and adopts a policy of zero tolerance towards corruption and fraud of any form, including bribery, extortion, and money laundering. RUSAL adheres to the principles of Transparency International<sup>9</sup> and the EITI (the Extractive Industries Transparency Initiative).

The Company complies with respective anti-corruption laws in various jurisdictions of its operation, including the US Foreign Corrupt Practices Act (FCPA) and the UK Bribery Act.

The Company's Global Compliance Officer, the Directorate for Control, Internal Audit and Business Coordination and the Resource Protection Directorate are responsible for ensuring compliance in the area of anti-corruption.

In order to ensure consistency with anti-corruption laws and regulations, all contracts concluded in the Company contain anti-corruption provisions. In cases of suspected violations of anti-corruption norms, employees and third parties can contact the Signal trust service (for more information, see The Signal hotline, p. 51). *HKEX KPI B7.2*

The minimum standards of integrity for the Company's employees are set out in the following internal RUSAL documents:

- The Anti-Corruption Compliance Policy
- The Corporate Code of Ethics
- The Business Partner Code
- The Code of Conducting Securities Transactions by Relevant Officials of the Company
- The Regulation on Preventing and Resolving Conflicts of Interest
- The Violation Information Policy.

<sup>9</sup> A non-governmental international anti-corruption organisation aimed at combating bribery.

Corruption risks are incorporated into the Company's Risk Map, and corruption risk assessments are conducted at all the Company's business units. In 2019, no significant individual corruption risks were detected<sup>10</sup>. *GRI 205-1*

For more information on the existing risk management system, see the section The Sustainability risk management system, p. 18.

During the reporting year, no legal cases relating to corrupt practices were brought against the Company or its employees. *HKEX KPI B7.1*

In 2019, as part of implementing Anti-corruption Compliance Policy principles, anti-corruption trainings were held at the SAZ, BoAZ<sup>11</sup>, IrkAZ, UAZ, and Boksit Timana production facilities, in which over 200 employees took part. In 2020, the training will be conducted for all employees, through the Company's e-learning system. Also, in 2019 a training course in the field of information security was introduced, which is planned to cover 1,500 employees. *GRI 205-2*



## Compliance

RUSAL understands the importance of complying with applicable laws, regulations, standards, and other requirements, and continuously carries out measures to enhance its compliance function. Internal regulations and periodically updated, and responsible employees are regularly trained. *GRI 102-16*

The main objectives of the Company's compliance function consist of developing and implementing policies and procedures to ensure compliance with applicable requirements, and organising compliance-related trainings. Another important goal is the promotion and development of an appropriate compliance culture in the Company, which ensures that employees engage in ethical behaviour and that they are assisted in fulfilling their obligations to abide by applicable requirements.

In RUSAL the compliance function falls within the remit of the Compliance Department. The department monitors all transactions carried out in the Company. In particular, it examines the reliability of suppliers and verifies their compliance with human rights and anti-corruption laws and requirements. The Company inspects transactions to ensure that they are in compliance with applicable laws and regulations.

In order to prevent conflicts of interest, the Company has an automated multi-level system in place to monitor connected transactions. In 2019, 3,500 Company employees underwent a training entitled Declaring conflicts of interest by Company employees, and over 3,300 electronic declarations were received from employees via a portal for declaring conflicts of interest.

## 2.5 THE SIGNAL HOTLINE

*HKEX KPI B7.2, GRI 103, GRI 102-17*

RUSAL recognises the importance of constantly monitoring potential violations of the Company's principles in the areas of ethics, anti-corruption, and respect for human rights.

In order to address these issues, the Company has a communication mechanism in place called the Signal hotline. The hotline is available 24/7 on the RUSAL website for all the Company's internal and external stakeholders, in both in the Russian and English languages. The Signal trust service is anonymous and confidential. RUSAL promotes an anti-blame policy in relation to the hotline.

Messages relating to alleged violations can be submitted via email (signal@rusal.com), mail (by sending a letter to the address provided on the hotline webpage), a free-of-charge hotline number (+7 800 234 5640, toll-free within Russia, or +7 495 221 3372, for calls from other countries) or through popular messaging services (by sending a message to the number +7 915 224 5640). All reported cases are thoroughly investigated, and appropriate measures taken if necessary.

All reports received through the Signal hotline are sent to the Department of Control and Special Audits and entered into a register. Reports are then investigated by the Department of Control and Special Audits independently, or with the involvement of the Security Directorate, or are transferred to the Security Directorate. The results of an investigation are recorded, and necessary measures are taken based on the recommendations contained in the results of the investigation.

In 2019, actions were taken to promote the hotline among the Company's employees, which led to a significant rise in the number of submitted inquiries. In 2019, the Signal Trust Service received over 300 requests. For all inquiries received, with the exception of messages unrelated to the Company's business, investigations were carried out and, where necessary, remedial measures were taken (including disciplinary sanctions and dismissals). Some of the messages received resulted in measures being adopted to improve working conditions, resolve conflicts of interest, and prevent misappropriations of goods and materials.

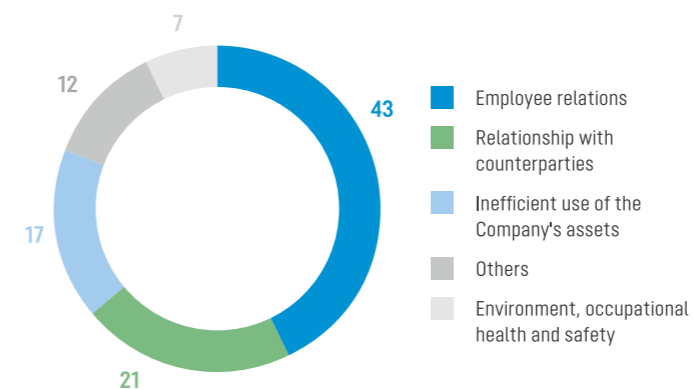
In 2019, the Signal Hotline received 46 complaints about unethical behaviour on the part of colleagues and management. Based on the results of an audit, seven cases were confirmed. Disciplinary measures were taken, and talks conducted to deter the recurrence of such behaviour.

### Plans for 2020 and the medium term

In the following year the Company plans to continue to develop its practices in the field of business ethics and respect for human rights, by:

- Reviewing and updating the Code of Ethics
- Updating the Human Rights Assessment tool
- Training all employees in combating corruption and fraud in RUSAL, using the e-learning system.

Categories of all hotline inquiries, 2019, %



10. The company considers risks with an estimate of more than USD10 million significant.  
11. The smelter is part of the Boguchany Energy and Metals Complex (BEMO), a project jointly implemented by RUSAL and RusHydro.

# 3. EMPLOYEES



## CONTRIBUTION TO UN SDG



### KEY FACTS

# Each talent matters

RUSAL is always striving to be a better employer and to create a highly effective professional team. The Company works constantly to build partnership relations with employees and to maintain a comfortable working atmosphere that encourages diversity and supports dynamic growth within the Company.

# 3.1 MANAGEMENT APPROACH

GRI 103, HKEX Para 9, HKEX Para 10, HKEX Para 12, HKEX Aspect B1



RUSAL recognises the important impact employees have on growth and performance. Accordingly, the Company performs continuous measures to develop and improve its personnel management practices.

RUSAL complies strictly with the laws of the countries where it operates, as well as with international law norms and generally accepted principles in the area of personnel management.

The Company has a HR policy in place, which sets out basic corporate principles in relation to respecting employees' human rights. In 2019 the policy was updated.

RUSAL adopts a functional strategy in the area of personnel management. This comprises measures aimed at increasing staff engagement, loyalty, and satisfaction.

## Boosting the efficiency of internal processes

In 2019, a general HR service centre, called the General Service Centre, was launched at the Company. The centre exercises functions related to personnel administration, personnel selection, and remuneration, which previously were performed by each facility independently. The transfer of these functions to the General Service Centre is currently under way, and will allow basic processes to be unified and reduce the burden of HR functions at main assets.

Around 15 thousand employees are already covered by the service centre, and there are plans to cover the majority of the Company's employees by the end of 2020.

### Who is in charge?

- The HR Directorate

### Which guidelines do we follow?

- The HR Policy
- The Regulations on Training and Education of Personnel
- The Regulation on the Talent Pool
- The Regulation on Non-Financial Motivation

# 3.2 PERSONNEL STRUCTURE

GRI 102-8; HKEX KPI B1.1, KPI B1.2

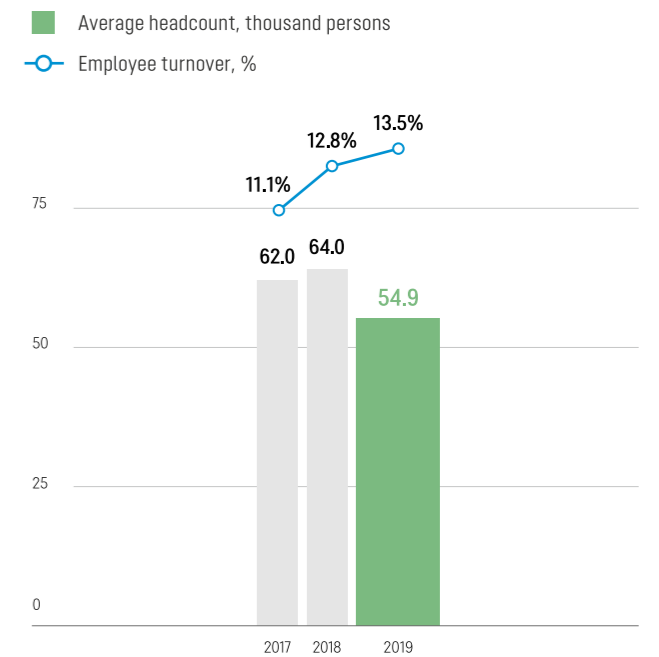
In 2019, we employed almost 55 thousand people at over 40 assets around the world. 82% of our people work in Russia. In the reporting year the average RUSAL headcount declined by 14%, due to a restructuring of the Company's assets.

The vast majority of personnel (92% in 2019) have permanent contracts. In recent years, the share of part-time and freelance employees has stood at less than 1%.

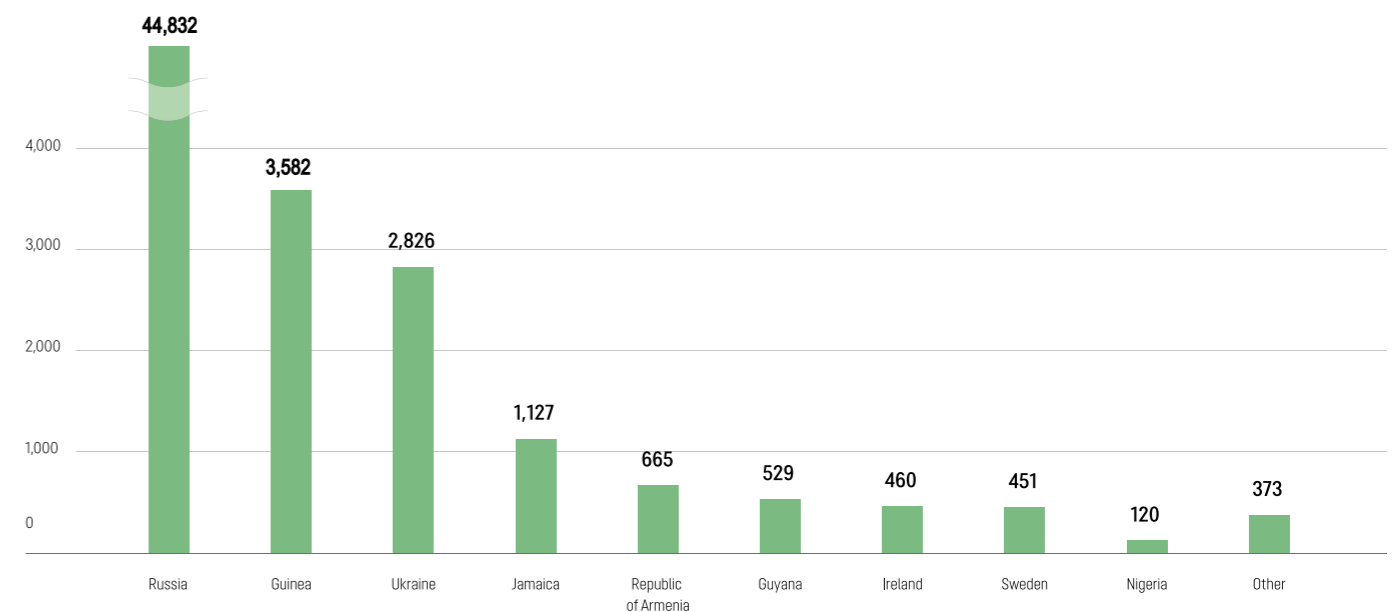
In 2019, the employee turnover rate in Russia stood at 14.7%, while in other countries where the Company operates the figure stood at 8.3%. The employee turnover rate has reduced by 1.6% in the Company's foreign facilities as compared with the previous year, however, the rate in Russian facilities was increased by 1.3%. The reasons for this increase included the restructuring of the Company.

RUSAL takes active measures to ensure staff retention and to avert growth in employee turnover. As part of these measures, a three-year wage-raising programme was launched in 2019 (for more information, see Motivation and Remuneration, p. 59). As a result, the employee turnover rate is expected to decline in the next few years.

Average headcount and employee turnover, 2017-2019 GRI 401-1 GRI 102-8

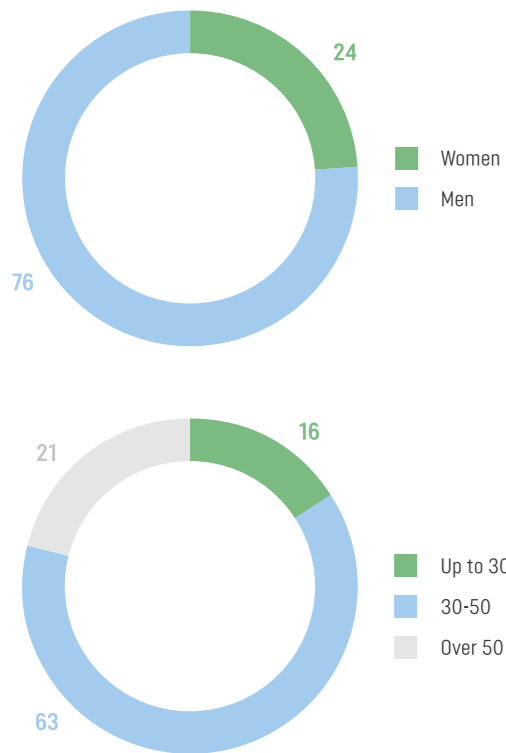


Average headcount by country, 2019



Age and gender composition has remained unchanged in recent years. Due to the nature of the Company's operations, male workers make up the majority of the workforce. In terms of age composition, the main workforce of the Company comprises employees aged 30–50 (63%). The majority of the Company's employees are men (76%).

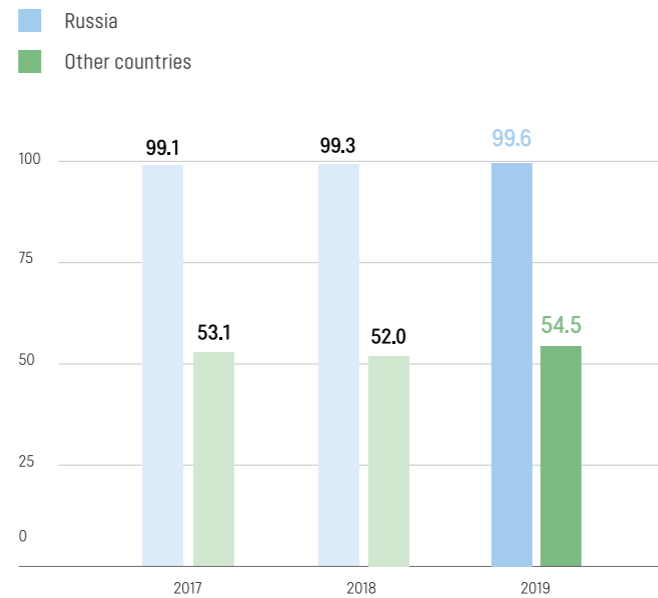
**Employee structure by age and gender, 2019, %**  
GRI 405-1, HKEX B1.1



Employee breakdown by category shows that the largest proportion of workers is engaged in production. Top management makes up 1% of total headcount, and 85% of top management are men.

The Company seeks where possible to hire local staff, including to its management teams. That said, RUSAL requires candidates of a high calibre and, if we cannot find the appropriate level of skills and experience locally, we consider candidates from other regions.

**Share of senior managers recruited from the local population in Russia and other countries, 2017–2019, %**  
GRI 202-2



### 3.3 STAFF RECRUITMENT

RUSAL recognises that a significant part of the Company's development and success depends on its professional team. For this reason, the Company carefully manages staff recruitment issues and is continuously striving to attract new talent.

During the employment process, RUSAL ensures that information provided to candidates is as complete as possible. In 2019, as part of setting up the General Service Centre, a unified standardised recruitment process was created for all the Company's Russian facilities.

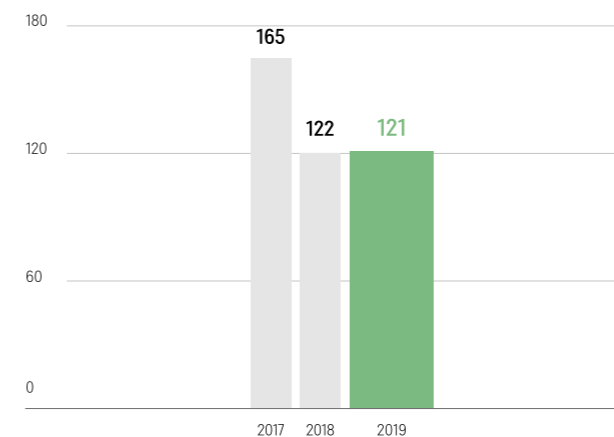
#### Attracting young talent

RUSAL strives to provide its facilities with young engineers who are well-educated and have the appropriate level of qualifications. For this reason, the Company collaborates with universities to promote the education of students in Company relevant specialties, and elaborates a targeted student education programme.

The Company collaborates with more than 10 of the largest Russian universities and colleges, including the Siberian Federal University, the Irkutsk State Technical University, and the Ural Federal University.

The Company pays for the students' education and annually organises internships at its production facilities. The most successful participants are awarded RUSAL scholarships. After graduating, the students are obliged to work at RUSAL facilities for a period of at least three years.

**Number of students participating in targeted programme, 2017–2019**



#### New Generation internship programme

In 2019, RUSAL continued to successfully implement the new generation internship programme (launched in 2017) for young specialists. The programme attracts young professionals with high potential: participants are selected from among the best graduates of the Company's target universities. During the selection process, factors such as average grades, English language skills, and a willingness to be relocated are taken into consideration.

Within the programme each intern works with a mentor and a responsible representative from the HR department, who develop an individual development plan and help the intern adapt to the new working environment and set and achieve professional goals.

Internships last for six months, and during this period participants work on complex and challenging projects. Interns then present the results of their work to a committee, made up of the management of their department and the head of the HR department. If they give a successful presentation, a full-time job offer is made. In 2019, the programme attracted 100 participants, with over 85% successfully completing their internships and becoming permanent employees of the Company.

## International targeted education programme for students from Guinea and Jamaica



### Project:

International targeted education programme for students from Guinea and Jamaica

### Stakeholders:

Young professionals from Guinea and Jamaica

In order to provide the Company's foreign facilities with qualified educated employees, RUSAL implements an international education programme, aimed at training young professionals from Guinea and Jamaica in Russian educational institutions and getting them acquainted with the Company's production technology and corporate culture. All expenses associated with education and staying in Russia are covered by RUSAL. Upon graduation, the participants return to their home countries and are employed by RUSAL production facilities.

In 2019, 78 students from Guinea were enrolled in bachelor's degree programmes, 17 entered secondary special education programmes, and three joined residency programmes. 123 foreign students from Guinea and Jamaica are currently studying in Russia.

In foreign countries, the Company's HR policy is targeted at local residents, especially those living in close proximity to production facilities. RUSAL production facilities not only provide timely information about open vacancies, but also conduct preliminary training for those seeking employment. Teachers are hired from local educational organisations to deliver trainings.



## Hiring people with disabilities

Under Russian labour law, the Company is required to allocate jobs to disabled individuals (at least 3% of the average headcount). This number does not include jobs associated with harmful working conditions. As a rule, jobs allocated in RUSAL are for specialist positions: storekeepers, laboratory assistants, etc.

On a monthly basis RUSAL provides information about open vacancies that are suitable for people with disabilities to the Employment Service in Russia, and every candidate sent by the Employment Service is given a job, provided that their competencies are commensurate with the proposed position.

## 3.4 MOTIVATION AND REMUNERATION

### Remuneration

The Company's remuneration system is based on a unified wage regulation for all facilities, which determines all components of employee salaries. The salary comprises a fixed part, a monthly bonus, compensation payments (e.g., for working nightshifts, or working in harmful conditions), regional wage coefficients and the northern indexes<sup>12</sup>. *GRI 102-35*

For managing positions, the bonus part of the salary depends entirely on the attainment of set goals and KPIs. The efficacy of workers is measured based on their performance of daily tasks: if all daily tasks are completed and there have been no disciplinary penalties in the past month, the employee is entitled to receive a bonus. *GRI 102-36*

Basic monthly salary of senior management and workers broken down by gender, 2019, \$ *GRI 405-2*

	Russia	Other countries
<b>SENIOR MANAGEMENT</b>		
Men	11,203	9,776
Women	5,689	6,839
<b>WORKERS</b>		
Men	854	681
Women	682	672

Additional year-end bonuses are also given to employees that contribute to implementing business system development projects, improve production technology and investment projects, and to those employees who receive awards (corporate, state, or departmental awards). Workers who participate in social projects organised by production facilities also receive additional bonuses at the end of the year. In addition, the heads of production facilities may allocate bonuses to the best employees based on the recommendations of managers at production facilities.

Under law, the size of the northern index paid to an employee increases as the length of service in northern regions increases. However, the Company pays employees maximum northern coefficients from their first working day.

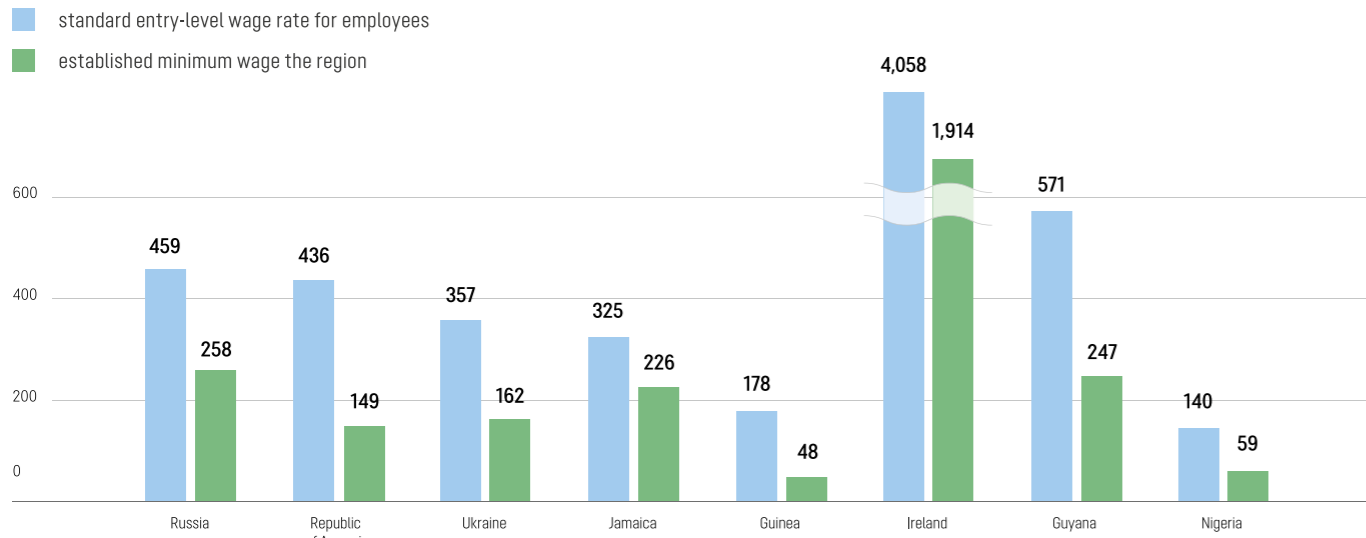
### Three-year wage-raising programme

As part of executing the RUSAL strategy to increase employee remuneration, the dynamics of the ratio of employee salaries to the established minimum wage in the regions of operation were analysed.

As a result, a three-year wage-raising programme was developed and launched in 2019, which is chiefly aimed at industrial personnel. Even though the programme is planned to be completed in 2021, it has already delivered significant results: the average salary of RUSAL employees rose 10.7% compared to 2018.

12. The northern index refers to a fixed percentage that multiplies the wage and a certain number of other types of income of a citizen in order to cover the high expenses necessary for a comfortable stay in a territory where harsh conditions prevail.

Standard entry level wage rate for employees and established minimum wage in key regions where the Company operates, 2019, \$ *GRI 202-1*



## Social support

*GRI 401-2*

Social programmes in the Company are implemented in areas including health care, sports, and trips to health resorts and summer camps for employees and their children. Under the RUSAL Social programme a range of benefits are provided to employees, including:

- Providing free meals and milk to workers
- Opportunities to engage in sports and attend sporting events

## Housing programme

In 2019, significant work was carried out to prepare for the launch of a housing programme, which is planned to be introduced in March 2020 in seven cities where RUSAL has a presence. Within the programme, employees will be provided with preferential 10-year mortgages without down payments to help them buy apartments. The Company will compensate 50% of respective monthly payments.

The programme is aimed at ensuring staff retention, increasing loyalty, and raising the social security of employees. Participation is open to employees of all positions. To select employees for participation in the programme, a special points system is adopted.

- Obtaining on a preferential basis vouchers for treatment and rehabilitation in health resorts and medical centres located in the Russian Federation (for employees and their families). The employee's share of pay does not generally exceed 10% of the fare
- Voluntary medical insurance policies, which enable employees to use a wide range of out-patient and in-patient care services, at a preferential corporate price
- Transporting employees to and from work
- Celebrating holidays at production facilities, for example the day of the metal industry (for employees and their families)
- Providing financial assistance in challenging circumstances
- Annual New Year celebrations and gifts for all the children of employees under 14 years old.

In addition, in order to publicly recognise the employees of RUSAL facilities in various fields of endeavour, the Company introduced the Provision on non-financial motivation.

All RUSAL employees are entitled to free medical care at the corporate medical centre.

In 2019, 576 trips to a corporate health theme camp in Sayanogorsk and 80 trips to a daytime camp in Krasnoturinsk were organised, in which children underwent vocational guidance within a specially developed corporate programme entitled Expedition to the planet RUSAL.

In addition, sport events are regularly held, the Company's facilities rent gyms and pools for their employees.

# 3.5 TRAINING AND DEVELOPMENT

*HKEX Aspect B3, HKEX Para 9, HKEX Para 10, GRI 103, GRI 404-2*

While working in the Company employees can avail themselves of various opportunities to continue their training, which increases their demand in the labour market and helps them formulate future employment plans, which is valuable in view of the rapid changes in technology taking place and increasing obsolescence of knowledge and skills in advanced production.

By implementing educational programmes, RUSAL contributes to the achievement of Sustainable Development Goal SDG 4: Quality education.

RUSAL contributes to the career development of employees who are motivated and have high potential. These employees demonstrate stable and high-quality performance and successfully complete periodic certifications of minimum professional knowledge requirements.

RUSAL is continuously carrying out measures to improve its corporate training programmes and organises them in line with business objectives. In the next few years the Company plans to review its entire approach to corporate education and to develop a new automated system, where both the employee and management can access statistics on each employee's training.

The RUSAL modular training system is being actively developed. For example, in 2019 an educational programme for commercial personnel was created and the first two modules implemented. Employees attended trainings on facility economics management, working capital management, and project programme management.

In order to facilitate the professional development of RUSAL employees, training centres operate at facilities, employing both external teachers and experienced and qualified Company employees who share knowledge after the working day is over.

To ensure that employees maintain a decent level of skills, a minimum level of required knowledge is determined for each area of the Company's activities. Employees' respective knowledge is periodically assessed through computer-based testing using the Company's e-learning system. *GRI 404-3*

## Functional academies

Functional academies give employees an opportunity to upgrade skills in professional areas so as to be able to perform their duties and tasks successfully. In 2019, 305 employees were trained within this programme, with total expenditure standing at USD134 thousand. The approach to staff training within functional academies was revised and new topics were developed. The new approach to the development of topics for functional academies ensures that employees improve their skills in accordance with the Company's goals and strategy.

Over 25 training programmes were developed in various areas of the Company's activities, covering over 400 employees. These include training programmes on inventive problem solving, IT services, and international and internal quality standards.

## E-learning system

RUSAL has an e-learning system in place, which allows employees to do training courses both in the workplace and remotely. It contains over 300 electronic courses in various fields of study relevant to RUSAL employees, and allows remote employee assessments to be conducted, the performance of the educational process to be tracked, and course feedback to be received. In 2019, 36,835 employees from 57 facilities and departments attended trainings using the system.

In the reporting year, an audit of training courses and an assessment of employees covered by the e-learning system were conducted. *GRI 404-3*

In 2019, the RUSAL Engineering and Technology Centre, together with the Krasnoyarsk Aluminium Smelter, began developing a computer system for personnel training based on a realistic 3D technology. The system is scheduled to be launched in March 2020.

## Training employees at higher education institutions

When required, RUSAL employees receive training at the Company's partner universities: they study on undergraduate and graduate programmes, and also do courses to boost professional skills.

As at the end of 2019, over 115 RUSAL employees were enrolled in undergraduate programmes in branches of the Ural Federal University, the Siberian Federal University, and the Siberian State Industrial University in the following areas:

- Electrical installations and systems
- Metallurgical machinery and equipment
- Metallurgical science: non-ferrous metals
- Metallurgical science: non-ferrous, rare, and precious metal
- Foundry technology
- Metallurgical science: fusible/refractory metals.

For managing employees, metallurgical science master's programmes are available in non-ferrous metals at the Siberian Federal University. In 2019 more than 70 employees were doing master's programmes, and over 30 received advanced training.

Also, in 2019 the Company continued its collaboration with a key partner university, the Siberian Federal University, in the advanced training of engineering personnel under the following programmes:

- Energy saving and recycling secondary energy resources
- Labour protection
- Energy inspection
- Advanced resource-saving technologies for aluminium electrolysis.

## Internal talent pool

The Talent Pool programme is aimed at achieving a critical strategic goal of the Company: to prepare a pool of professional, highly qualified employees for all managing positions. A list of key positions that have the maximum impact on Company performance has been approved, and the positions are assessed to determine the likelihood of vacancies becoming available. Succession candidates are evaluated to identify how ready they are to work in a higher position. Then, based on the results of evaluations, bespoke training plans are elaborated for each participant.

Succession candidates are assessed to determine their level of readiness to work in a higher position. Then, based on the results of the assessments, training plans are elaborated for each participant individually. *GRI 404-3*

In 2019, 425 participants of the talent pool programme BS-250<sup>13</sup> were trained in managing competence. The trainings topics included public speaking, goal-setting (tools and practice), and inspirational leadership.

In addition, 338 reservists were trained in other areas, including:

- Strategic team-building
- Public speaking under pressure
- Systemic thinking
- Metallurgy economics
- Team-building and work
- Focusing on business results
- Leadership.

In 2019, 63 BS-250 programme graduates were enrolled in the BS250+ programme, which is aimed at fostering the further development of BS-250 graduates and organising trainings on project management and strategic management.

13. Note that BS stands for Business System.

## 3.6 SOCIAL PARTNERSHIP

*GRI 102-41*

RUSAL provides various benefits and social guarantees, whose level is determined with the active participation of trade unions. Collective bargaining agreements (in Russia) and similar agreements in other countries where the Country operates regulate such matters as hours of work and rest, the health and safety of workers, the wage system, social guarantees and benefits, and partnerships with trade unions.

The majority of the Company's Russian facilities are covered by collective bargaining agreements, and 85% of employees work under such agreements.

The management authority of the social partnership is the RUSAL Social Council, which annually evaluates social partnership results and discusses the Company's work and plans, as well as employee adherence to the terms of collective bargaining agreements. The council comprises both Company and employee representatives.

Council meetings are held at least once a year, and focus on discussing the Company's plans, implementing the terms of collective agreements, and other issues related to labour relations, social security, and benefits and guarantees. In 2019 one meeting was held.

Within the framework of collective bargaining agreements the Company fulfils the following obligations:

- A minimum wage in excess of statutory levels
- Wage indexation
- The procedure and terms of paying wages
- Providing subsidised health resort treatments
- Providing financial assistance to employees and unemployed production facility retirees
- Cultural and sports events
- The transportation of workers to/from work
- Providing quality meals to workers
- Compulsory and periodic medical examinations, medical insurance.

### Industry tariff agreement

RUSAL is a member of an industry tariff agreement (ITA) for the mining and metallurgical complex of the Russian Federation. Parties to the agreement are representatives of employers united in the Association of Industrialists of the Mining and Metallurgical Complex of Russia (AMROS) and the Mining and the Metallurgical Trade Union of Russia (MMTUR), which represent employees. Under the industry tariff agreement, issues such as improving socio-economic and working conditions and providing benefits and guarantees are discussed. RUSAL fulfils ITA requirements at all its production facilities in Russia.

On 20 December 2019 the ITA for 2020–2022 was signed. The document is publicly available. On the basis of this agreement, new standard collective agreements have been developed, and all changes enshrined in the ITA are reflected in collective agreements.

### Plans for 2020 and the medium term

In RUSAL the year 2020 has been declared to be the year of automating HR processes. The Company has set the goal of creating a consolidated automated system of HR processes, which will unite all existing separate systems (goal setting, staff selection, compensation of benefits, etc.)

The Company's main plans for 2020 in this area are:

- Continuing the implementation of the wage-raising programme
- Continuing to extend the coverage of the General Service Centre
- Launching the housing programme
- Launching specialised centres in Bratsk and Achinsk to prepare students for admission to key RUSAL universities
- Integrating the development of an automated system for corporate education, as part of the digitalisation of the Company's HR processes.



# 4. HEALTH AND SAFETY

## CONTRIBUTION TO UN SDG



### KEY FIGURES

**100%**

of employees are covered  
by the Health and Safety  
management system

**by 26%**

drop in the number  
of occupational disease cases

**96**

emergency response  
drills conducted

# 4.1 MANAGEMENT APPROACH

HKEX Para 9, HKEX Para 10, GRI 103, HKEX Aspect B2

RUSAL operations are conducted in strict adherence to the health and safety legislation of the countries where the Company operates, as well as internal corporate regulations.

## Who is in charge?

- The Health, Safety, and Environment Committee of the Board of Directors
- The Health, Safety, and Environmental Protection Department

## Which guidelines do we follow?

- The Occupational Safety Policy
- The Cardinal Rules of Work Safety
- The Industrial and Fire Safety Policy Statement
- Occupational, Industrial, and Fire Safety Management System Guidelines
- The Regulations for Accounting, Investigating, And Analysing Production Safety Incidents
- The Regulations on Managing Contractors in the field of HSE
- Other HSE regulations and guidelines

A set of domestic and international laws, global standards, guidelines, RUSAL corporate policies, and operating procedures and systems create a framework that protects people and drives further safety improvements in occupational health and safety (OHS).

To ensure that all that corporate OHS regulations are aligned with the latest Russian legislative developments and leading international standards and practices, the Company fully revised OHS-related policies and procedures in 2019. As a result, the entire body of RUSAL regulations was improved, including the development and implementation of the Occupational Safety Policy and the Industrial and Fire Safety Policy Statement.

RUSAL operations are guided by objectives and principles set forth in the Occupational Safety Policy and the Industrial and Fire Safety Policy Statement.






Objectives:

- Strive to eliminate injuries and occupational diseases
- Ensure the safety and health of employees in the workplace, constantly improve the OHS management system and working environment
- Ensure protection against accidents at hazardous production facilities and related consequences
- Eliminate the occurrence of incidents, accidents, and fires at hazardous production facilities
- Comply with accident and incident prevention measures at hazardous industrial facilities, and perform related remedial measures. *HKEX KPI B2.3*

With respect to the approach outlined above, the Company has implemented and continuously improves the RUSAL HSE Management system (a vertical system for managing health, industrial, and fire safety). RUSAL carries out work to develop the safety culture and engage employees in health and safety management. The Company invests in new technologies and projects that enhance the overall safety of working environments and the industrial safety of facilities.

All RUSAL employees and contractors are responsible for ensuring a safe working environment and culture. In everyday operations RUSAL applies a simple and clear set of safety rules — the Cardinal Rules of Work Safety. These are mandatory for all employees and contractors. The Cardinal Rules describe how workers should behave in order to prevent accidents, and form an integral part of the RUSAL HSE management system.

## Cardinal Rules of Work Safety

-  Do not stay in places where harmful and hazardous production factors are present without prescribed personal protection equipment
-  Do not enter a hazard zone marked with banners, tapes, signs, or markings
-  Do not perform repair work on equipment that has not been de-energised, halted, or fenced off
-  Do not carry out hazardous work without a work permit
-  Do not operate faulty or uninspected lifting structures
-  Do not work at heights without fall management equipment, or with faulty and/or non-stationary scaffolding
-  Do not attend the workplace in a state of intoxication from alcohol, narcotics, or any toxic substance
-  Do not use electronic mobile devices when operating machines/mechanisms



## RUSAL's joint Vision Zero initiative

RUSAL's initiatives in occupational health and safety and its efforts to achieve a zero level of fatalities have been received warmly by the international community. The Company is an active member of the Health Committee of International Aluminium Institute and the Russian Union of Entrepreneurs and Industrialists (RSPP).

In April 2019, RUSAL launched the joint Vision Zero initiative run by the International Social Security Association (ISSA). A Vision Zero certificate was awarded to RUSAL during the fifth All-Russian Safety Week.

## Management system

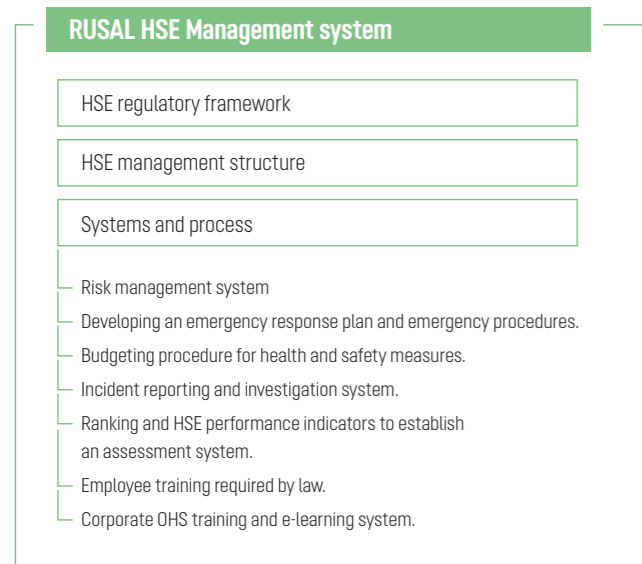
A key Company priority is to accurately manage health and safety aspects. The RUSAL HSE Management system is a prime vehicle through which the Company administers the highest workplace safety standards and implements safety management and OHS training for employees. *GRI 403-1, HKEX KPI B2.3*

The HSE Management system covers all facilities and 100% of the RUSAL workforce. The system is designed in such a way that all Company employees and contractors are engaged in its processes, and all necessary measures are implemented in the most efficient way possible. *GRI 403-7, GRI 403-8*

RUSAL applies a vertical HSE management structure. In total, 183 people work in the Company's health and safety services, including as a graduate member of International Aluminium Institute Confidential Return (UK).

In order to better monitor the safety performance of energy services and contractors, RUSAL appointed 18 electrical inspectors and 23 contractor safety supervisors.

### RUSAL HSE Management system elements



In all its production facilities and operations RUSAL has implemented a four-level monitoring system of the performance of the HSE management system: *GRI 403-4*

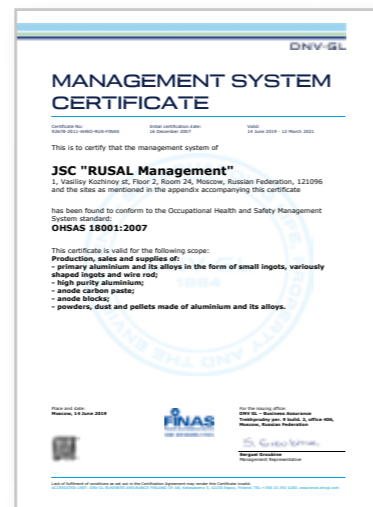
- First level: monitored by line managers (production supervisors) during daily production activities
- Second level: monitored by middle management (superintendents) during periodic audits

- Third level: monitored by division managers during regular audits
- Fourth level: monitored by representatives of the HSE Department during regular internal audits.

The Company strives to empower all employees to identify, monitor, or eliminate risk. Under RUSAL procedures, any employee can identify hazardous situations. Information can be communicated to line-management directly, via a hotline, or through a corporate portal. All information is processed accordingly and necessary measures taken. *GRI 403-2, GRI 403-4*

RUSAL continuously monitors the efficiency of the system by:

- Performing internal and external audits, developing and implementing of remedial actions
- Auditing the management system in accordance with international certifications
- Weekly informing members of the company's executive board about accidents in the field of occupational safety, industrial, and fire safety in order to allow timely remedial actions to be taken to prevent similar accidents recurring in the future.
- Regularly analysing (monthly/quarterly/annually) statistical data on injuries, based on a set of safety performance indicators. *HKEX KPI B2.3*



RUSAL holds a certificate of compliance with international occupational health and safety standard OHSAS 18001:2007. In 2019, the Company underwent recertification in the HSE Management system under the OHSAS 18001:2007 standard. *GRI 403-1*

In 2019, RUSAL updated all corporate OHS-related regulations, aligning them with the international standard ISO 45001. In 2020, the Company plans to begin preparations on ISO 45001 standard certification.

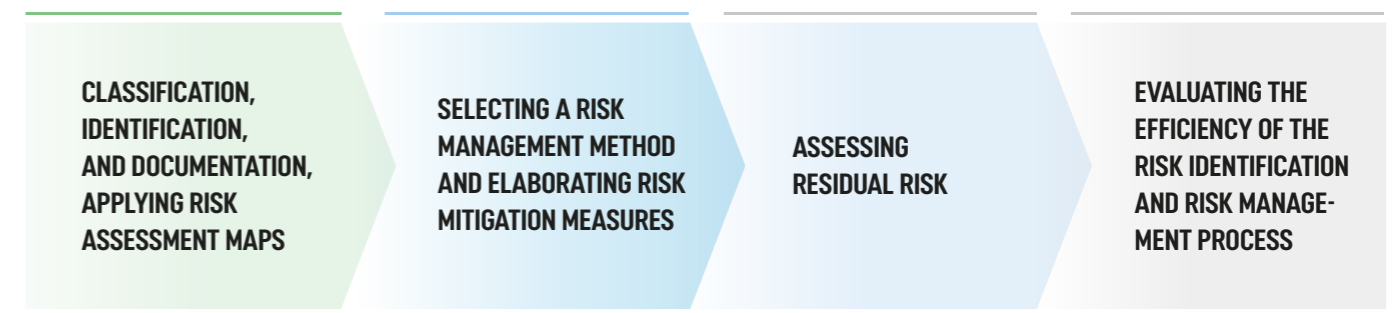
## 4.2 RISK IDENTIFICATION AND MANAGEMENT

*GRI 403-2*

Effectively managing safety risks is essential to protecting our workforce and the communities in which we operate. RUSAL is focused on identifying, understanding, and controlling risks associated with hazards in the workplace and its production operations. *GRI 403-7*

During the process of identifying and managing safety risks the Company is guided by the provisions and requirements of the regulatory acts of the countries where it operates. In Russia these acts include instructions from the Ministry of Labour, Rostekhnadzor (Federal Environmental, Industrial and Nuclear Supervision Service), Rospotrebnadzor (the Federal Service for Monitoring Consumer Rights Protection and Human Wellbeing), and state standard requirements (GOST). The Company also has internal regulations that control activities related to risk identification.

### Risk management process *GRI 403-2*



Risk management is monitored by production facilities on a quarterly basis, reflecting the quarterly changes in the risk map of the Company's business units and the corporate risk map. The Directorate for Control, Internal Audit and Business Coordination each quarter reports to the management and Board of Directors of the Company on any changes introduced as well as any risk mitigation measures being carried out.

Risk assessment maps are updated regularly:

- Within the period established by the organisation, but at least once every five years
- In the event of changes in operations or applicable legal safety requirements, and in the event of changes in other stakeholder requirements

RUSAL's health and safety risk management system has been designed to cater for vulnerable groups of employees (with health issues, language barriers, etc.). All corporate regulations have been translated into the official languages of the countries where the Company operates and made available to employees.

Hazards are identified based on classifications of hazard indicators and operational specifics. The risk management method and the measures adopted to manage risks are selected based on the respective severity level. *GRI 403-2*

- After an accident (including microtraumas, occupational diseases, and emergencies) has occurred
- If any discrepancies are identified
- When contracting a new entity
- When revising safety instructions
- In the event of technological changes or the introduction of new technical devices.

**Risk assessment procedure for production hazards** *GRI 403-2*



The selection of the risk assessment method depends on the complexity of the activity involved and the degree of human participation. The risk assessment method chosen should correspond to the respective activity and be sufficient to evaluate all significant risks associated with the activity.

For the same identified hazard, a number of measures can be taken to eliminate or diminish the risk. Remedial actions are developed, taking into account the severity of the risk:

1. High (the risk level is unacceptable and cannot be justified in any situation).

2. Medium (the risk level must be reduced to an acceptable level, taking into account related costs).
3. Low (the risk level is acceptable and no further action needs to be taken).

The prevention of hazards and emergencies using a risk-orientated approach forms one element of a special assessment of working conditions (SAWC) conducted in the Company. All risks are identified, documented, and communicated to staff. Also, risk mitigation measures are elaborated and deadlines for their implementation set.

**Launch of the Look Around programme to identify hazards**

*GRI 403-2*

In line with the risk-orientated approach, RUSAL has launched the Look Around programme. This initiative seeks to engage each employee in the process of identifying and reporting potential hazards, with a view to subsequently eliminating them.

In March 2019, the programme was launched in the Downstream Division. During the year, 701 employees of the division took part

in the initiative, identifying 13,591 hazards, including 3,429 (25%) that were potentially lethal. Thanks to the wide participation of the workforce, 12,492 (91%) of the identified hazards were eliminated.

As a result, the Downstream Division improved its safety performance indicators. For example, its lost time injury frequency rate fell 51.8% compared to 2018.

**4.3 SAFETY AUDITS**

The Company uses a number of performance measurement and assessment tools, including safety audits of its production facilities. Each year RUSAL conducts regular health and safety internal audits; 50 were performed in 2019, covering 100% of RUSAL facilities. Also, in compliance with Russian law the Company conducted a special assessment of working conditions (SAWC) at all production facilities.

The audit results confirmed compliance with all applicable laws and regulations, and no significant violations were identified of laws and regulations related to providing a safe working environment and protecting employees from occupational hazards.

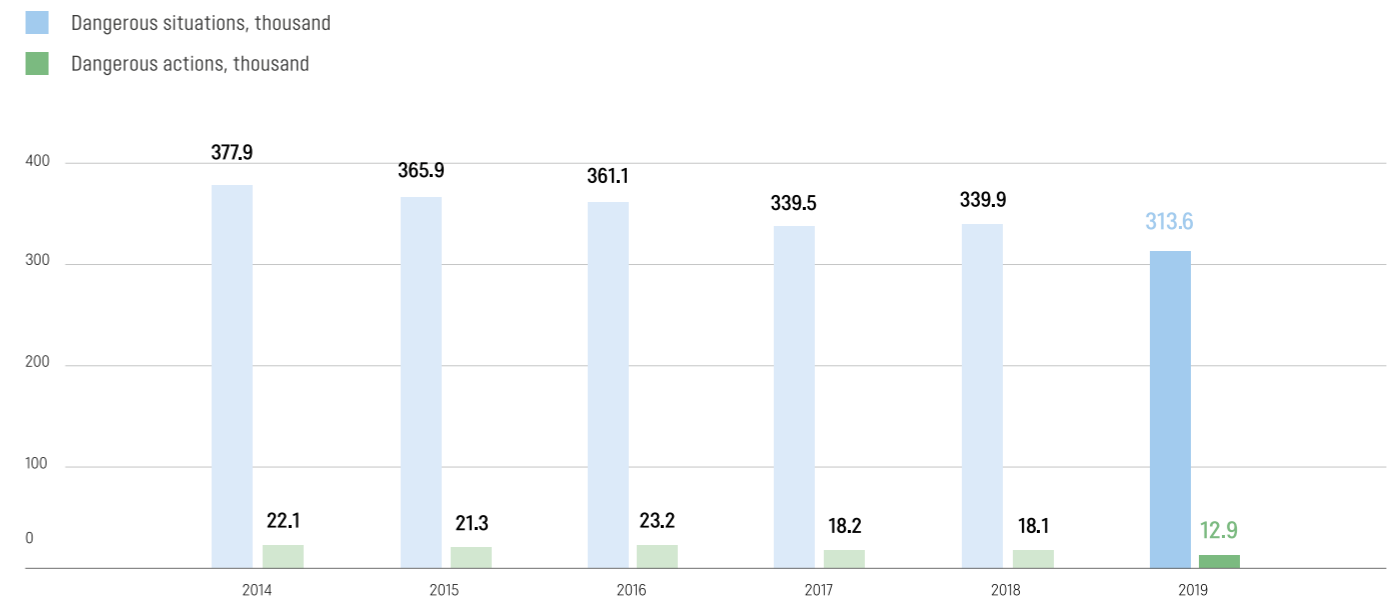
Since 2014, RUSAL has regularly conducted behavioural safety audits to ascertain the safety culture among employees. For many years, the number of identified hazardous situations and actions has been gradually declining. In 2019, there was an 8% drop in the

number of hazardous situations and a 28% drop in hazardous actions compared to 2018. Measures were taken to resolve all cases identified. *GRI 403-4, HKEX KPI B2.3*

Behavioural safety audits also identified the most common hazardous situations and actions.

- The main types of hazardous situations were in the danger zones of operating equipment and vehicles and inappropriately isolated and designated hazardous areas, or related to production technology violations.
- The main types of hazardous actions comprised violations of safety requirements when preparing for and performing work, working with faulty or non-standard tools, using non-designated routes, and being in hazardous areas.

**Hazardous situations and actions identified, 2014–2019**



One of the ways to improve safety performance indicators is through enhancing the safety behaviour of employees. In 2020, the Company will launch the Safety culture project. As part of this project, safety audits and audits of the safety culture will be conducted at RUSAL facilities. Three-to-four facilities will be chosen

to study the safety culture level, and employees from workers to top management will be involved in this process. The selected facilities will also propose measures to enhance occupational health and safety and the safety culture. *HKEX KPI B2.3*

## 4.4 PERFORMANCE RESULTS

RUSAL tracks and analyses all safety incidents. By doing this, the Company can assess the effectiveness of our approach to safety management and facilitate continuous improvement. Investigations of work-related incidents are performed in compliance with respective legislation as well as internal corporate procedures, including the Regulations on the internal investigation and analysis of accidents in the field of labour protection, industrial, and fire safety, and the Regulations on the accounting, investigation, and analysis of production safety incidents. *GRI 403-2*

In 2019, the Company targeted a lost time injury frequency rate (LTIFR) of 0.19. However, this goal was not reached. In 2019, the LTIFR stood at 0.22 per 200,000 hours. The Company will carefully analyse the causes for this and implement all necessary measures to improve safety performance. One cause that is known is a 20% decline in 2019 in total hours worked, due to RUS-Engineering Company leaving the RUSAL business structure. *GRI 403-9, HKEX KPI B2.2*

### LTIFR per 200,000 hours, 2017-2019 (excl. contractors)

*GRI 403-9, HKEX KPI B2.2*

	2017	2018	2019
LTIFR	0.15	0.16	0.22

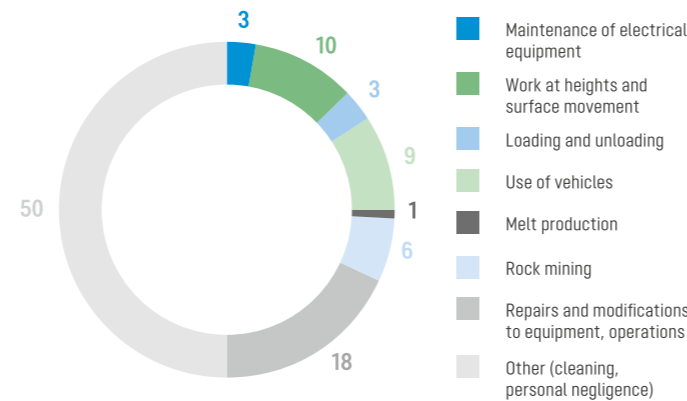
Nevertheless, the Company made significant progress in this area, overseeing a more than threefold reduction in injuries related to work at heights, a 150% decline in injuries related to equipment repairs and modifications, and a 56% drop in transport-related injuries.

In 2019, injuries were mostly as a result of personal negligence and owing to operations such as equipment repairs and modifications.



### Main types of high-consequence work-related injuries and fatalities,

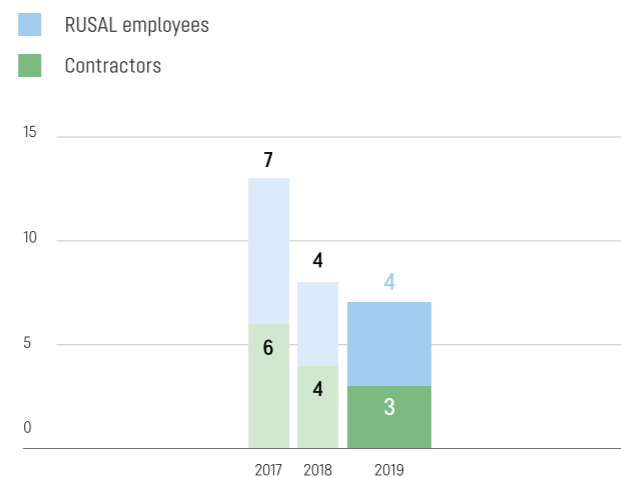
%, 2019 (excl. contractors) *GRI 403-9*



The Company is very sad to report that seven colleagues, four RUSAL employees and three contractors, were fatally injured in 2019. RUSAL wishes to express deep condolences and sympathies to the families and friends of the deceased, and to state that the families of the deceased were paid the appropriate level of material compensation. All these tragic incidents were investigated in accordance with the laws and regulations of the countries in which they occurred, and comprehensive measures will continue to be taken to achieve a level of zero injuries — the ultimate Company goal in the field of employee health and safety. In 2020 a range of additional measures will be implemented in this area, including the Safety Culture educational project and conducting independent audits of the OHS management system at four Company facilities. *HKEX KPI B2.1*

### Number of fatalities among employees and contractors, 2017-2019

*GRI 403-9, HKEX KPI B2.1*



## 4.5 TRAINING

The Company holds safety trainings that are required by the law as well as corporate courses and trainings that provide employees with the knowledge and skills they need to perform their work safely. *HKEX KPI B2.3*

At RUSAL training is provided for all employees, including compulsory safety briefings for new joiners, and regular, targeted, and ad-hoc employee briefings. Personnel in charge of operating, servicing, and monitoring hazardous production facilities must undergo compulsory industrial safety training. RUSAL also provides e-learning training via the Company's corporate e-learning system. *GRI 403-5*

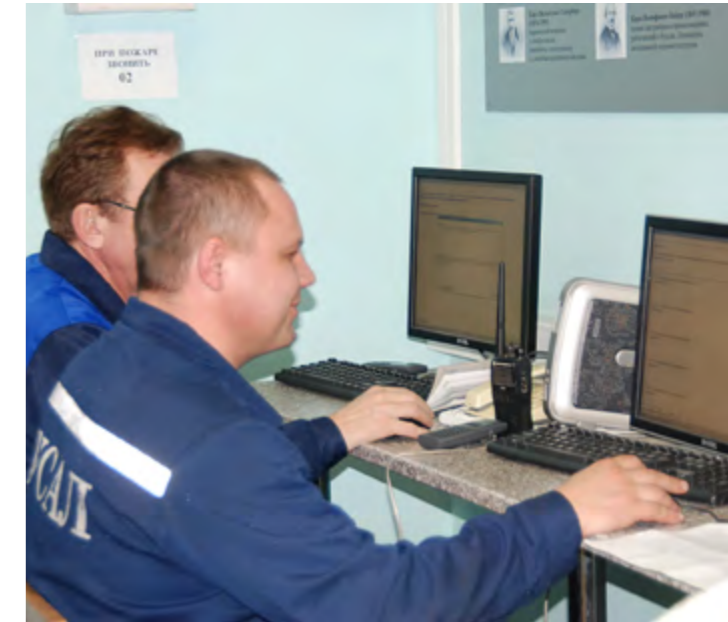
RUSAL frequently monitors and evaluates the safety skills of personnel. All employees undergo an examination of occupational safety at least once a year and industrial safety every three years.

The Company applies mentoring practices to help new employees work safely. Each new worker is supervised by an experienced professional who oversees their actions based on HSE requirements and helps workers develop an appropriate level of safety behaviour.

RUSAL is constantly developing the skills of HSE services staff. These employees undergo special OHS training and certification under the National Examination Board in Occupational Safety and Health (NEBOSH<sup>14</sup>) and enrol at NEBOSH to study and obtain an International Diploma in Occupational Health and Safety.

RUSAL holds special trainings on targeted HSE projects and programmes. In 2019, in line with preparing for the commercial operation of the AIS Safety of Production Activities, 962 employees were trained in OHS and fire safety, industrial safety, civil defence, and emergency situations.

In 2019, special trainings were accompanied by promoting the proper use of hearing protection devices. Tests demonstrated that trained personal use earplugs and headphones correctly, and are therefore not exposed to harmful levels of noise. *GRI 403-5*



### State-of-the-art training equipment

RUSAL production facilities are equipped with state-of-the-art simulators and training equipment, including:

- Training simulators for forklift truck drivers
- Training simulators for crane operators
- Training simulators for operators of motorised equipment.

These simulators create a workplace and virtual environment by using special software, monitors, and VR glasses.

For trainings related to work at heights, safety, and lifting equipment RUSAL facilities use specially designed modern training facilities provided with simulators and training equipment.

14. NEBOSH is an independent UK-based examination board offering a wide range of globally recognised qualifications in health, safety, and environmental management.

## 4.6 SPECIAL SAFETY PROGRAMMES AND PROJECTS

RUSAL has for many years been implementing a number of safety initiatives to improve safety in the workplace. These initiatives comprise short-term, medium-term and long-term programmes and projects.

In 2019, the Company continued with the implementation of safety programmes such as Work at heights safety, Transport safety, Hazardous area visualisation, Lock-out tag-out, and also initiated new initiatives targeting other specific issues. *HKEX KPI B2.3*

### Pedestrian safety around overhead cranes

RUSAL production facilities are equipped with warning light systems to improve the safety of overhead crane operations and increasing safety awareness among pedestrians working close to heavy and hazardous equipment. A laser beam creates a square box around the load/hook on the ground below, indicating an obvious danger area. The system also significantly improves operators' control over loads, especially when exact positioning is required.

### Crane operator health and safety

Overhead cranes at production facilities, where work conditions are potentially harmful for operators' health, have been upgraded with remote control (RC) operation systems. At the KrAZ and BrAZ facilities crane operators now work in a safe office environment, operating overhead cranes remotely.

As part of efforts to provide safer working environment for crane operators, the Company has equipped crane cabins with personal escape systems and installed horizontal lifeline systems.

### Transport safety

As part of efforts to minimise traffic accident risks at production facilities and their premises, spherical mirrors have been installed to assist drivers and pedestrians.

Another smart solution has been implemented to increase the safety of loading and unloading work and to boost its productivity: mobile loading and unloading bridges. These are used at premises where loading docks are not present or there are obstacles to performing typical loading / unloading operations.

### Hazardous area visualisation

The visualisation of hazardous areas at electrolysis and foundry facilities can be difficult, due to the heavy use of transport equipment and the presence of abrasives on the floor. In general, painted markings cannot weather such harsh conditions for more than two months. The Company uses durable cold plastic markings to clearly designate hazardous areas at electrolysis and foundry facilities.

### Digital worker

The Digital worker project was launched in 2019. During the year, heavy equipment at production facilities was equipped with special sensors to alert employees when machinery was approaching. In 2020, RUSAL employees will use special wearable devices to report any nearby hazardous areas. This technology will also be used to track the health conditions of workers with heart problems and to alert medical personnel if an employee falls ill.

### Hand and finger safety

Minor injuries to hands and fingers were identified as being an issue at RUSAL production facilities in Africa. To address this problem, in 2019 the Company initiated an information awareness campaign. A set of visual aids was created, including training presentations and videos, to inform employees about hazards related to hand and finger injuries and to enhance safety behaviour. *GRI 403-5*

## 4.7 EMERGENCY PREPAREDNESS

*GRI 403-7, HKEX KPI B2.3*

RUSAL implements all necessary measures to prevent emergencies, whether they be natural or technological. Hazard identification and emergency risk evaluation is conducted on a regular basis.

In line with national legislative requirements, Action Plans for the Localisation and Liquidation of the Consequences of Accidents are annually elaborated by all RUSAL production facilities. These plans contain information on possible emergency situations that can occur at facilities and the measures to be taken if an accident occurs.

In compliance with national regulation, all hazardous production facilities and hydraulic structures are insured against emergencies and possible harm to employees, third parties, and the public. In the event of emergency, RUSAL can also activate a special emergency fund to finance all required operations. Sufficient emergency funds are allocated at each facility.

Our production facilities are equipped with emergency warning systems. In the event of an emergency accident the system is activated to inform employees, residents and authorities, as well as special rescue services.

Regular theoretical and practical trainings are conducted at all facilities. Ninety-six emergency response drills were conducted at RUSAL production facilities in 2019.



### AIS Safety of production activities

In 2019, RUSAL continued to implement measures and solutions to enhance capabilities in the area of preventing, responding, and mitigating the consequences of incidents and emergency situations. One of these is an automated information system, AIS Safety of Production Activities. The system is designed to provide remote safety monitoring, assess operational risks, implement unified OHS business processes, unified data sources, and enhance the efficiency of functional units. The project was initiated in 2018, and in 2019 the Company began operational testing of the system at the Krasnoyarsk Aluminium Smelter and Achinsk Alumina Refinery. Also, technical requirements for extending the system were prepared, and preparations made to roll out the system at other RUSAL production facilities.

## 4.8 CONTRACTOR ENGAGEMENT

The Company endeavours to promote safety among its contractors and implements measures to ensure that their operations at RUSAL production facilities are conducted in accordance with national legislation and corporate regulations, including the Occupational Safety Policy, the Industrial and Fire Safety Policy Statement, the Regulations on Managing Contractors in the field of HSE, and the Cardinal Rules of Work Safety.

The Company engages with contractors that can demonstrate compliance with respective legal and RUSAL health and safety requirements. Before signing a contract, all companies are required to go through a health and safety screening by completing a special HSE checklist and providing documents verifying their compliance. When selecting contractors, the Company also ensures that

contractors' workers have the necessary qualifications and have undergone required occupational health and safety trainings.

To ensure that applicable requirements have been met and work is performed safely during contract execution, RUSAL includes relevant HSE clauses in all contracts. In addition, the Company appointed 23 contractor safety supervisors to oversee their operations at production facilities. Companies that do not comply with or violate safety requirements are given fines and penalties, including contract termination.

As part of ensuring safety performance, RUSAL provides occupational health and safety trainings to all contractors' workers before they commence work.



## 4.9 HEALTH PROTECTION

RUSAL considers maintaining health in the workplace to be one of the most important aspects of corporate business operations. The Company implements a number of measures to prevent occupational diseases and seeks to operate a healthy and safe working environment for all employees.

In the reporting year RUSAL's occupational medical services concentrated on implementing a range of proactive measures and initiatives, including: *GRI 403-7*

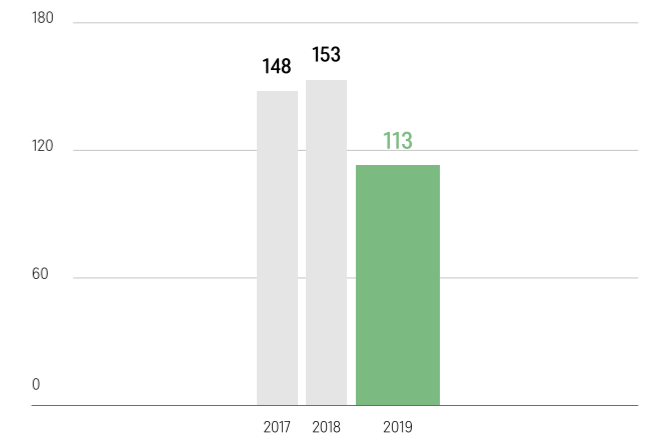
- A programme to assess and manage health risks for employees of aluminium production facilities for 2019–2020
- An interdepartmental risk management programme for occupational diseases, in collaboration with Rospotrebnadzor, the social security fund, and regional centres of occupational pathology
- Targeted measures to reduce the risk of occupational diseases
- Medical examinations of employees
- Medical support and rehabilitation for employees
- Assessing whether an individual is suitable for a position
- An initiative to improve the psychophysiological testing of operational personnel
- Working with the scientific community to prevent, detect, and treat occupational diseases.

### Performance results

The Company carries out stringent work to enhance working conditions and improve occupational medicine, and organises various awareness-raising campaigns. These activities led to a reduction in the number of occupational disease cases in 2019; compared to 2018, the number of cases was down by 26%. Since 2015, the number of occupational diseases has seen a twofold reduction.

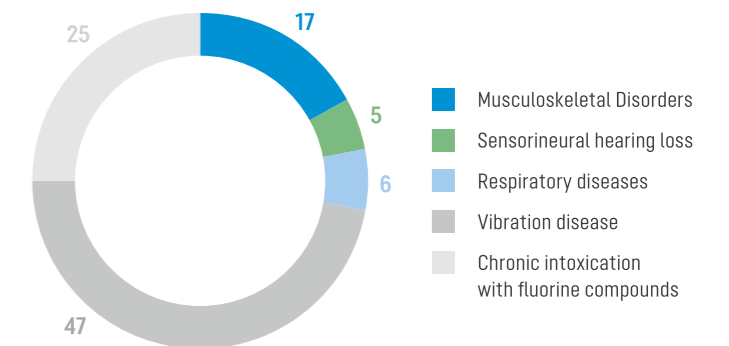
*GRI 403-10*

Dynamics of occupational disease cases, 2017–2019 *GRI 403-10*



Although the structure of registered occupational diseases has stayed the same, in 2019 RUSAL recorded positive dynamics for all disease groups, due to the ongoing implementation of the occupational diseases prevention programme. The most significant improvements compared to 2018 were achieved in sensorineural hearing loss (the number of cases saw a fourfold decline), respiratory diseases (the number of cases fell by 86%), and musculoskeletal disorders (the number of cases fell by 16%).

Structure of registered occupational diseases, 2019



## Improving working conditions

The positive dynamics achieved in 2019 are testament to the efficiency of measures taken to improve working conditions.

### Measures to prevent occupational diseases

Occupational diseases	Preventive measures taken
Vibration disease	<ul style="list-style-type: none"> <li>Implementing the most efficient personal protective equipment (PPE) against vibrations</li> <li>Reducing harmful effects from vibrations</li> <li>Proper selection and use of PPE by employees</li> </ul>
Respiratory disease	<ul style="list-style-type: none"> <li>Reducing impacts from harmful factors in working areas</li> <li>The procurement and use of powered air respirator systems</li> <li>Use of semi-face respirators</li> </ul>
Sensorineural hearing loss	<ul style="list-style-type: none"> <li>Evaluations of PPE use</li> <li>Testing that employees know how to use PPE correctly</li> <li>Noise monitoring</li> <li>Identifying workplaces with harmful noise levels and workplaces where workers are required to communicate</li> <li>Testing and implementing headphones for communication</li> </ul>

In 2019, RUSAL initiated a project to reduce physical exertion levels for electrolysis production workers. One measure was the introduction of a back-support belt to reduce pressure on the spine during work. Another was the introduction of special knee and elbow pads to support joints during heavy physical work. In order to provide better conditions for employees during rest periods, recreation rooms were renovated and fitted with new furniture, appliances, and equipment. The Company bought special stretching apparatus and developed training exercises to stretch the spine after periods of hard physical labour. RUSAL also began piloting the use of exoskeletons by workers; 10 of these devices have been tested at the production facilities.

## Treatment of occupational and non-occupational diseases

GRI 403-6

A programme to prevent temporary disability has been in place at the Company since September 2018. As part of this, an awareness-raising campaign is organised and restorative and local physiotherapy treatments provided.

For frequently and chronically ill personnel, the Company runs a dedicated initiative to have each case reviewed by a medical commission and to visit sick people at their homes and give them medical examinations. In September 2019 RUSAL launched a new programme to prevent work-related diseases.

The RUSAL cardiovascular disease prevention programme has already demonstrated its effectiveness. Based on a survey conducted, the number of high-risk ill employees has dropped to 0.35% (vs. 0.42% in 2018).

The Company also joined the Interdepartmental Risk Management Programme for Occupational Diseases, run in cooperation with Rospotrebnadzor, the Social Security Fund, and regional centres of occupational pathology.

## RUSAL medical services

GRI 403-3, GRI 403-6, HKEX KPI B2.3

Corporate medical services play a leading role in the prevention of occupational and work-related diseases and in providing medical treatments to RUSAL employees. All the Company's medical units are equipped with modern medical equipment. Medical examinations and other treatments are provided to RUSAL employees free of charge by skilled medical personnel.

The RUSAL Medical Centre (RMC) in the Russian Federation provides various medical services and periodic medical examinations, in accordance with respective legislation. RMC manages 14 medical institutions located in the regions where the Company operates, and also provides medical services to local residents.

All RUSAL production facilities in Guinea have their own medical service. Compagnie des Bauxites de Kindia (CBK) has two early treatment centres and three 24/7 medical posts that examine workers before shifts and provide, if necessary, emergency medical care. In accordance with a collective agreement, personnel from early treatment centres provide services to employees and their family members free of charge. The centre also provides emergency aid to residents.

The medical service of the Friguia Bauxite and Alumina Complex (Guinea) consists of two health centres and a hospital. The hospital has surgical and therapeutic departments, and a maternity hospital equipped with incubators. Based on a collective agreement, a hospital in Friguia provides medical services to workers and their family members, women in labour, first aid facilities, and other services to residents free of charge. Each year the hospital serves around eight thousand people.

Medical services are also available at facilities in Guyana, Nigeria, Ireland, and Jamaica.

## Plans for 2020 and the medium term

The Company plans to focus on the following tasks in the next few years:

- Implementing AIS Safety of Production Activities across RUSAL production facilities
- Launching the Culture of Safety project
- Further developing the Digital worker project, including introducing wearable equipment
- Initiating and implementing computer vision and virtual reality projects
- Further execution of the project to reduce physical exertions for electrolysis production workers
- Continuing to upgrade overhead cranes at production facilities with remote control operation systems.



## Russian-Guinean epidemiology centre

In February 2019, the Russian-Guinean epidemiology centre, set up by RUSAL and Rospotrebnadzor, was equipped with a new laboratory.

The laboratory was delivered as part of the Russo-Guinean partnership to combat infectious diseases. The new mobile laboratory will boost the efficiency of the Russo-Guinean epidemiology and infectious diseases prevention centre, providing fast and accurate diagnoses of dangerous infections and improving the national health care system of the Guinean Republic.

The clinical and diagnostic research centre of epidemiology and microbiology was built and fully equipped by RUSAL in the Kindia Region in 2015, at the height of the Ebola epidemic, to help prevent the spread of this deadly virus in Guinea. RUSAL invested over USD10 million in the construction of the new centre. Today the Russian-Guinean research centre stands as a unique facility in Western Africa.



# 5. ENVIRONMENTAL PROTECTION



CONTRIBUTION TO UN SDG



## KEY FIGURES

**\$95.9 MILLION**

spent towards environmental protection

**93.2%**

of total water reused

# 5.1 MANAGEMENT APPROACH

HKEX Para 9, HKEX Para 10, GRI 103, HKEX Aspect A1, A2, A3, ASI 3.1

RUSAL's approach to managing environmental issues comprises improving environmental performance and at the same time considering practical possibilities and socio-economic factors. *HKEX KPI A3.1*

## Who is in charge?

- The Health, Safety, and Environment Committee
- The Health, Safety, and Environment Department
- Environmental Regulation and Control Units

## Which guidelines do we follow?

- The Environmental Policy
- The Environmental Management System

The Company strives to organise the operations of its facilities in such a way that they meet the legislative requirements of countries of operation, as well as corporate regulations and procedures and voluntary obligations. RUSAL aspires to comply with sustainable development principles and seeks to ensure that its activities conform to international standards.

The RUSAL Risk Management Regulations and Guidelines for the Environmental Management System establish the approach to managing environmental risks. Environmental risks are identified at the level of the Company's facilities. Also, the Environmental Regulation and Control Unit, together with the Directorate for Control, Internal Audit and Business Coordination consolidate the identified risks at Company level. The dynamics of environmental risks are monitored annually.

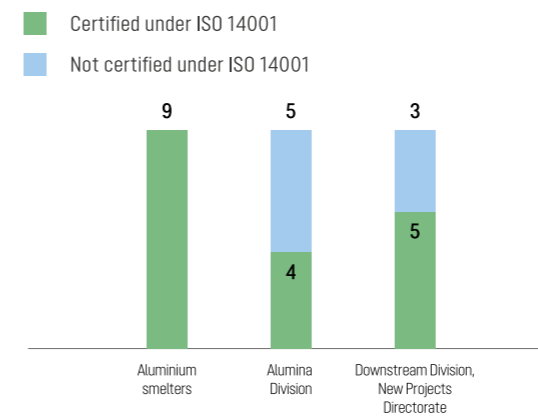


## Environmental management system

HKEX Para 11

RUSAL is continuously improving its environmental management system, in particular through compliance with the requirements of ISO 14001. In the reporting period, the environmental management system's compliance was confirmed with ISO 14001 at 18 of the 26 RUSAL production facilities, which supply products to the market.

Compliance between the Company's operations and ISO 14001 standards, 2019<sup>15</sup>



## Expenditure on environmental protection

To improve the Company's environmental performance, RUSAL allocated USD95.9 million towards environmental activities in the reporting period. Key areas included the implementation of Eco-Soderberg technology, the development of inert anode technology (achieving complete elimination of greenhouse gas and polyaromatic hydrocarbons emissions), developing an alternative binder, and ensuring safe disposal of waste.

For more information, see the Air emissions subsection of this chapter and the Innovation subsection of the Operational efficiency and innovations chapter, pages 91 and 41 hereto.

## Strategic goals in the area of environmental protection

1. RUSAL production facilities attaining by 2025 air emission standards established by the laws of the countries where the Company operates.
2. Protecting the Company's interests during the regulation and reduction of greenhouse gas emissions.
3. Establishing by 2025 closed water supply systems for key production processes at the Company's production facilities.
4. Ensuring the safe disposal, processing, and use of industrial waste, taking into account technical capabilities and market needs.
5. By 2022, completely stop using equipment and exclude waste containing polychlorinated biphenyls (PCBs).
6. Compliance with obligations to rehabilitate disturbed land.
7. By 2020, certification under the ISO 14001 standard of management systems at all production facilities selling products on the market.
8. Promoting the creation of an advanced legal and regulatory framework for the protection of the environment during the production of aluminium and alumina.

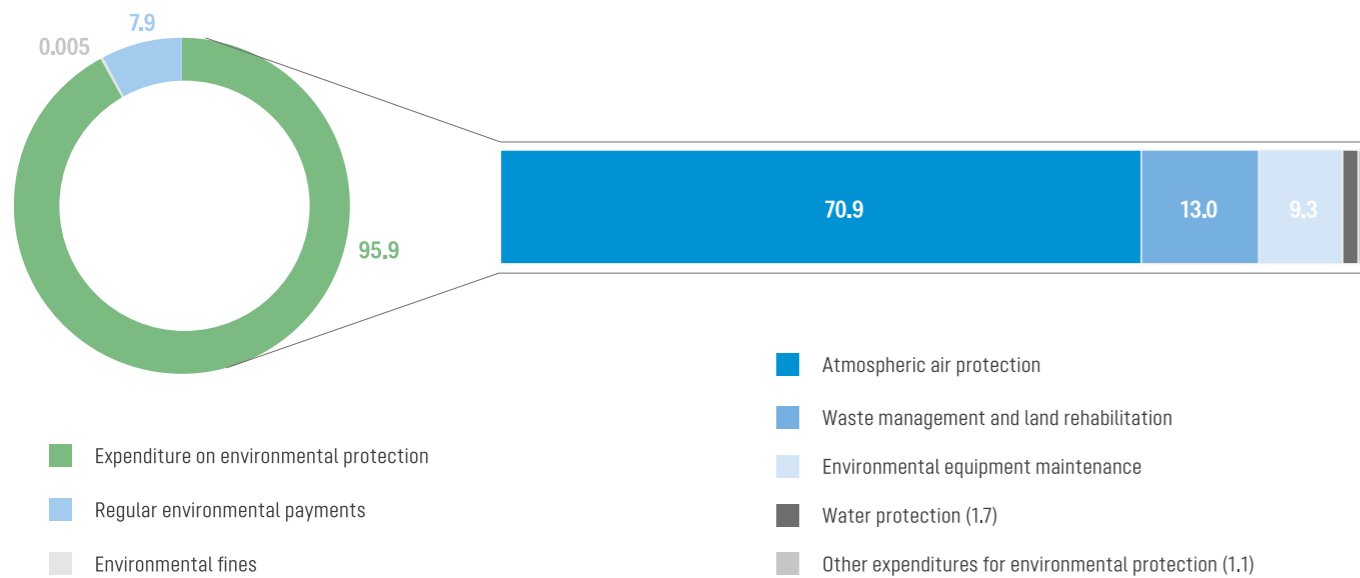
15. Excluding mothballed facilities.

In accordance with the environmental laws of the countries where the Company operates, including Russia, Ukraine, and Armenia, RUSAL makes regular environmental payments. These payments relate to emissions of pollutants from stationary sources, the discharge of pollutants into surface waters, and waste disposal. In 2019, RUSAL's spending in this area totalled USD7.9 million.

In 2019, the Company recorded no significant issues of non-compliance with environmental regulations. No significant incidents vis-à-vis air, water, or soil pollution were logged, and there were no related significant fines or lawsuits. The total monetary value of fines fell from USD18 thousand in 2018 to USD5 thousand in 2019. *GRI 201-2, GRI 307-1, ASI PS 3.2*

For more information, see Appendix 2. Additional quantitative data, p. 129.

Environmental protection expenditure, regular environmental payments and fines, 2019, million USD<sup>16</sup>



16. The total amount of environmental protection expenditure in 2019 stood at USD95.9 million; the difference between this figure and the figure presented above is due to rounding.

## 5.2 WATER RESOURCES

RUSAL pays considerable attention to water resource management and aspires to reduce discharges of wastewater. The creation of a closed water supply system at production capacities is one of the Company's strategic objectives in this area.

RUSAL divisions are located in regions where a large amount of natural water is available. No significant water-related risks were recorded in 2019, and there were no issues in sourcing water that is suitable for the Company's production processes. *ASI PS 7.3, HKEX KPI A2.4* The Company does not operate in regions where water is scarce. *GRI 303-3, 303-4, 303-5*

The Company takes steps to efficiently manage water resources, by:

- Using recycled water
- Conducting regular inspections of water supply facilities to prevent leakage or wastage
- Monitoring water usage.

RUSAL facilities adhere to water withdrawal and discharge limits that are established taking into account the water body properties and chemical compositions of discharges. In the reporting period there were no significant violations in this area.

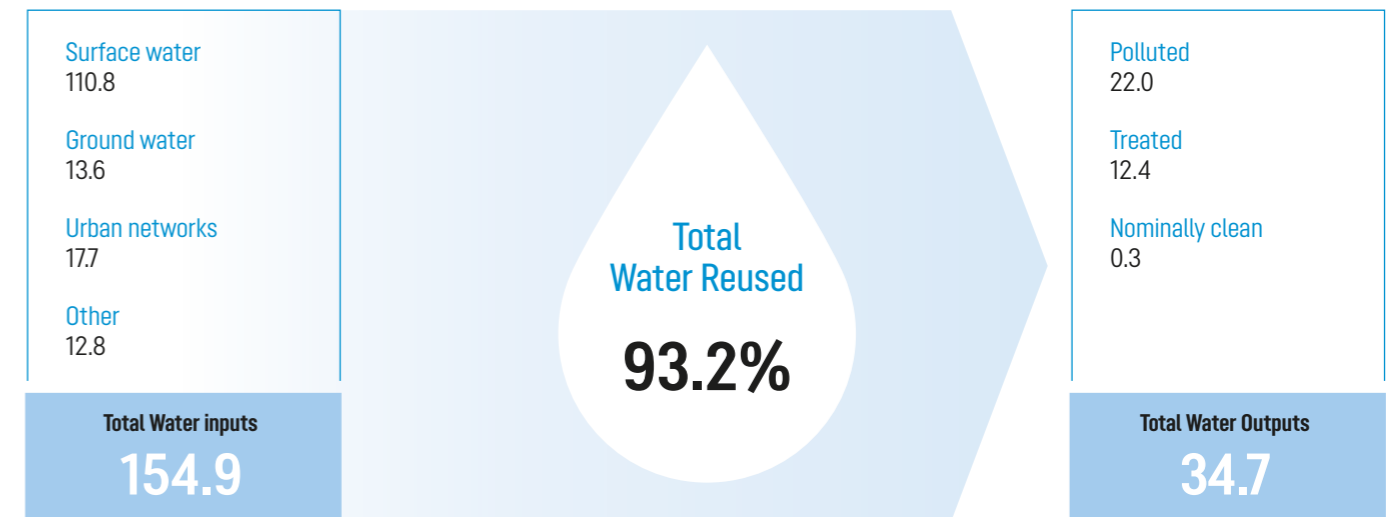
The structure of RUSAL's water consumption based on types of sources used remains constant year-on-year. In 2019, fresh water was primarily drawn from surface water facilities: 72% of the total. Seawater was used at the KUBAL production facility for cooling purposes in foundry operations and to facilitate clean air emissions.

In 2019, fresh water consumption, excluding seawater, across RUSAL was up by 5% compared to the previous reporting period, due to the launch of production at Friguia.

Alumina refineries remain the main consumers of water resources, due to the specific technologies used in alumina production. Alumina Division facilities account for 80% of fresh water consumption across the Company, while the Aluminium Division accounted for 17% of RUSAL's water consumption in the reporting period.

*HKEX KPI A2.2, HKEX KPI A2.4, GRI 303-5*

Water inputs and outputs<sup>17</sup>, 2019, million cubic metres *GRI 303-3, GRI 306-1, ASI PS 6.2, 7.1, HKEX KPI A2.2*



17. Data excludes quarry, mine, drainage, and storm waters (119.7 million cubic metres) and seawater (29.1 million cubic metres), which are not used in the production process. There is also no data for the Bauxite Company of Guyana, the Bauxite Company of Kindia (Guinea), and the Friguia Bauxite and Alumina Complex, which do not have water metering systems.

### Promoting clean rivers

Since 2011, RUSAL has, in collaboration with the Russian Geographical Society, conducted public activities to draw public attention to the issue of river pollution. This work has included creating a regional festival called Yenisei day, named after the Russian river Yenisei, the fifth-longest river system in the world.

In 2019, the Company established a new environmental project, called The River Day, in 12 Russian towns in order to expedite river water purity. Around 3,000 volunteers took part in this project. Over 30 tonnes of waste was collected from the banks of rivers, some of which was recycled.



### Roundtable discussion on microplastics

RUSAL took part in a roundtable to discuss the issue of microplastic pollution. The event Microplastic is an Invisible Threat on a Global Scale was held on 18 December 2019 at the UN Information Centre in Moscow. The roundtable was attended by representatives from the business community, the State Duma, the Russian Ministry of Natural Resources and the Environment, the Russian network of the UN Global Compact, WWF Russia, Russian environmental NGOs, and leading Russian research institutions. The roundtable issued a resolution, including a number of conclusions and recommendations that highlight the great importance of this issue and the need to find solutions.

In 2019, the intensity of fresh water consumption at aluminium smelters was 6.9 cubic metres per tonne of aluminium, including 3.3 cubic metres of water used directly for production needs per tonne of aluminium. The average intensity of fresh water use across the entire aluminium production chain reached 41.4 cubic metres per tonne of aluminium produced, including 25.1 cubic metres of water used directly for production needs per tonne of aluminium. *HKEX KPI A2.2*

RUSAL does its utmost to reduce its water intake from natural sources and to increase water reuse. The Urals and Bogoslovsk Alumina Refineries are implementing a project to create a closed water supply system at production facilities to reduce water discharges. In 2019, the share of circulating and recycling water supply stood at 93.2%.

In 2019, industrial wastewater discharges into surface water increased slightly (by 3%) compared to the previous reporting period, and stood at 34.7 million cubic metres. *ASIPS 6.2*

## 5.3 WASTE MANAGEMENT

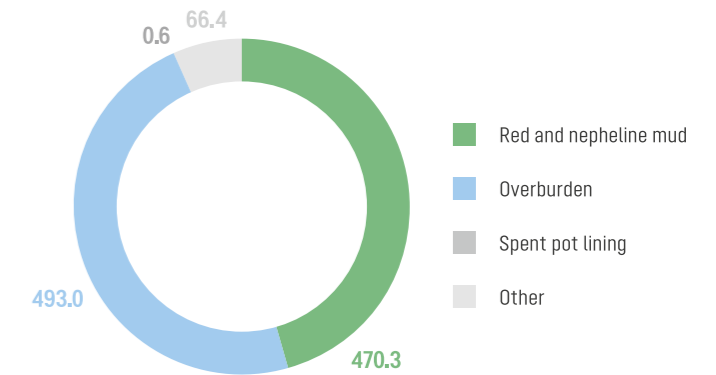
The optimisation of waste management is a core issue for RUSAL. Our strategic goals are to increase the recycling and reuse of waste and to provide for the safe storage and disposal of waste. Equipment containing polychlorinated biphenyl (PCB) is no longer used by the Company, and the disposal of PCB waste is an important issue for the Company.

RUSAL carefully manages all types of generated waste. The actions that the Company performs to improve its waste management practices comprise:

- Conducting research and development (R&D) in the field of waste recycling technologies, both for the Company's activities and in other areas, such as road building and the cement industry
- Building and using up-to-date, high-quality waste disposal facilities
- Conducting waste management internal trainings.

As at the end of 2019, 1,030 million tonnes of waste had been generated by the Company's production facilities. The amount of non-hazardous waste in total waste generated reached 1,029 million tonnes, including red and nepheline mud (45.6%) and overburden rocks (47.9%), which are classified as waste under Russian law. Also, RUSAL facilities accumulated 640 thousand tonnes (0.06%) of spent carbon pot linings (in 2017 and 2018 this figure stood at 726 and 632 thousand tonnes, respectively). *GRI MM3*

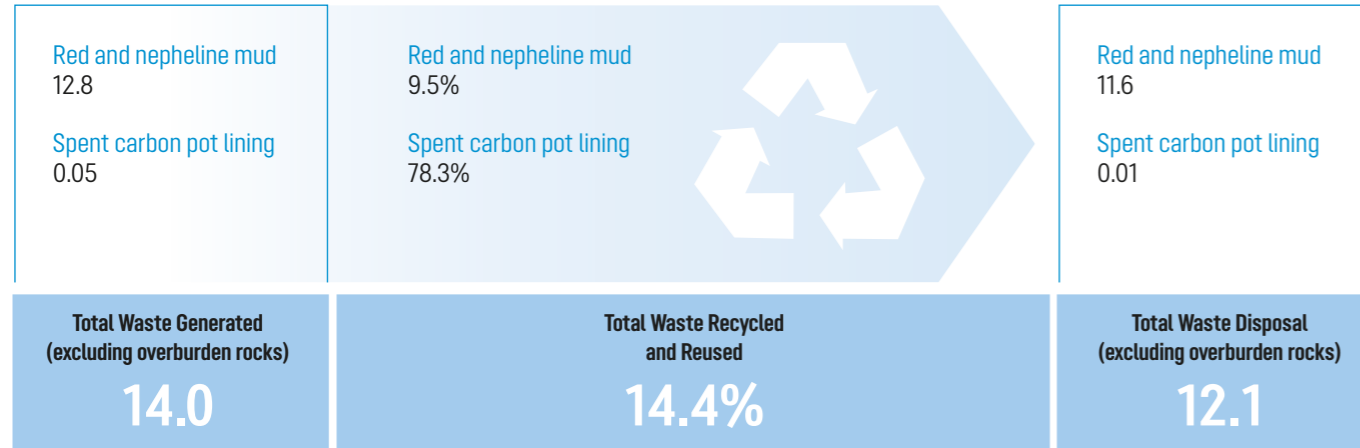
Accumulation of non-hazardous waste as at 31 December 2019, million tonnes *GRI MM3*



The total amount of generated waste without overburden rocks was unchanged year-on-year and stood at 14 million tonnes in 2019. The share of recycled waste also did not change, and amounted to 14.4%. Trends in the generation, disposal, and recycling of waste, excluding overburden rocks, are disclosed in the Appendix 2. Additional quantitative data (see page 129 of the Report).

In 2019, 0.3 million tonnes of hazardous waste and 13.7 million tonnes of non-hazardous waste (excluding overburden rocks) were generated.

**Waste, 2019**, million tonnes *GRI 306-2, HKEK KPI A1.3, A1.4, ASI PS 6.5*



Hazardous waste was only transported by officially recognised entities under applicable law. In 2019, the Company did not perform any cross-border movements of hazardous waste. *GRI 306-4*

RUSAL facilities use a small amount of packaging material, chiefly in the Downstream Division. *HKEK KPI A2.5*

In 2019, 7.4 tonnes of PCB containing waste were recycled.

In the reporting period there were no significant spills or risks associated with spills. *GRI 306-3, ASI PS 6.4*

## Specific waste

RUSAL operations generate the following specific types of waste:

- Red and nepheline mud from alumina production
- Spent carbon pot linings.

Red and nepheline mud are classified as non-hazardous waste. In 2019, the total volume of this type of waste was 12.8 million tonnes, and its recycling rate was 9.5%, compared to 10.1% in 2018.

Spent carbon pot linings are the second most important type of industrial waste generated at RUSAL facilities. In 2019, the volume of spent carbon pot lining generated declined from 48.1 thousand tonnes to 41.6 thousand tonnes, and the share of recycled spent carbon pot linings rose by around 17.6% compared to the 2018 level, and amounted to 78.3%. *ASI PS 6.5*

In cooperation with R&D organisations, the Company develops and applies new methods to reduce specific waste from its alumina refining and aluminium smelting operations.

Residual volumes are directly related to production dynamics and other factors, such as the alumina content present in processed nephelines and bauxites.

In order to increase the share of processed waste, RUSAL recycles spent refractory pot linings and spent carbon pot linings, removing sulphates from gas treatment facilities (pilot plants are in operation at the Krasnoyarsk and Novokuznetsk aluminium smelters), and extracting scandium oxide from bauxite residue and nepheline mud.

Like all the world's leading aluminium companies, RUSAL continues to search for cost-efficient technologies in the use of industrial waste, including nepheline mud. In cooperation with the Nanotechnology Centre of the Tatarstan Republic, RUSAL is developing a project to use waste from alumina production in sulphur-polymeric concrete. The concrete can be used in road building, kerbstones, etc., but is limited to the local market because it is expensive to transport.



## Responsible resource use

**Project:** Aughinish Alumina Ltd waste management initiatives  
**Geography:** Aughinish Island, Ireland  
**Stakeholders:** local communities, customers, and suppliers

The management of a bauxite residue disposal area at Aughinish in Ireland is a prime example of best practices in waste management applied by RUSAL. Aughinish implemented best available

technologies to treat residue, by using an industrial mud farming process. One of the Company's priorities is to develop ways to recycle bauxite residue.

Aughinish Alumina (AAL) is a partner of EIT RawMaterials, funded by the EIT (European Institute of Innovation and Technology), a body of the European Union. AAL is participating in the RECOVER project, launched in 2016, to develop a new technology to recycle bauxite waste in the production of technically complex products, such as inorganic polymers. Experimental and industrial tests are planned for the start of 2020 at the AAL site.

The Company strives to not only increase the share of recycled waste, but also to sell some waste to other companies, for use as a raw product. RUSAL recycles around 10% of red and nepheline mud and is exploring using innovative technologies to process bauxite residue comprising high-valued metal oxides such as scandium. The Urals Aluminium Smelter launched the industrial production of scandium concentrate from bauxite residue, using a proprietary solution.

In the past 10 years RUSAL has on average recycled and sold over 50% of waste generated at its aluminium smelters. The Sayanogorsk Aluminium Smelter, Russia's largest producer of aluminium alloys, already recycles or sells over 90% of the waste it generates.

## 5.4 USE OF HYDRAULIC STRUCTURES

GRI 403-7, HKEK KPI B2.3

The specifics of RUSAL operations require the construction and use of waste disposal facilities, which also includes hydraulic structures. At RUSAL production facilities there are 28 residue storage areas, and five ash-disposal areas.

In 2019, there were a number of tragic accidents in the world involving hydraulic structures. The Company closely monitors such events and analyses their causes in order to learn lessons and to prevent similar accidents from occurring at its own facilities.

The Company applies a systematic approach to ensuring the safety of hydraulic structures at all stages of their life cycle, complying with the Russian Federal Law on the Safety of Hydrotechnical Structures, as well all corporate regulations. Independent audits conducted at foreign facilities and audits of state supervisory authorities indicated no adverse effects on the environment from hydraulic structures.

### Safety life cycle of hydraulic structures



RUSAL's hydraulic structures are operated by skilled personnel. All employees undergo compulsory professional and industrial safety trainings. RUSAL also conducts trainings and courses for staff on how to deal with emergencies involving hydraulic structures.

In 2020, RUSAL plans to start design and survey works to phase in the dry stacking of bauxite residue filter cake technologies, which use press filters, and to make a gradual transition from current hydraulic transport technology and mud disposal (a high-density slurry with a solid content of 50%) to using filter press technology (70% solid content). This will boost the efficiency of bauxite residue disposal and storage operations, eliminate the impact of the liquid phase on the safety of mud disposal areas, and increase the timescale for filling residue storage areas.

## 5.5 AIR EMISSIONS

Reducing air emissions is one of RUSAL's stated strategic aims, as laid out in the Environmental Policy. The key actions taken by RUSAL to reduce air emissions and to monitor air quality include: *HKEK KPI A1.5*

- Monitoring atmospheric air conditions through automatic monitoring systems and mobile laboratories
- Using modern gas treatment facilities, including units engineered by RUSAL's design and scientific departments (at the Bratsk Aluminium Smelter, Irkutsk Aluminium Smelter, Novokuznetsk Aluminium Smelter, KUBAL Smelter, Urals Aluminium Smelter, Silicon Smelter, Urals Silicon, and Achinsk Alumina Refinery)
- Conducting R&D activities and implementing the results
- Applying the Eco-Soderberg technology (at the Krasnoyarsk, Bratsk, Irkutsk, and Novokuznetsk aluminium smelters)
- Using best available technologies to reduce air emissions
- Upgrading aluminium smelters.

RUSAL uses advanced gas treatment facilities that capture up to 99.8% of both hydrogen fluoride and solid fluorides present in exhaust gases at a smelter's reduction area. Such gas treatment facilities reduce emissions from production facilities and allow captured materials to be reused in production.

The total volume of air emissions, excluding greenhouse gases, stood at 347.5 thousand tonnes. Information on greenhouse gases produced by the Company can be found in the section Climate change and energy (page 96). The bulk of air emissions comprised low-hazard carbon monoxide (CO). In 2019, RUSAL discharged into the atmosphere 232.2 thousand tonnes of CO, which made up 67% of total air emissions. Not including CO, the total volume of air emissions stood at 115.3 thousand tonnes, 4% less than in 2018.



### Participation in the Ecology national project

Since 2018, the Company has been executing a comprehensive plan to reduce emissions in Russian industrial cities as a part of the federal Clean Air project, which is part of the Russian national project entitled Ecology. The Bratsk, Novokuznetsk, and Krasnoyarsk aluminium smelters take part in the project, whose main focus is to effect by 2024 a reduction of at least 20% in total emissions of pollutants into the air in 12 Russian industrial centres.

Under the scope of the project, smelters are implementing measures to reduce negative impacts on the atmosphere. Specifically, the new efficient Eco-Soderberg technology is being introduced at aluminium smelters on a scheduled basis, as well as modern gas treatment facilities.

Company facilities contribute to the project's goal of reducing total air pollutant emissions in Krasnoyarsk, Bratsk, and Novokuznetsk by no less than 20% in 2024 compared to the 2017 level.

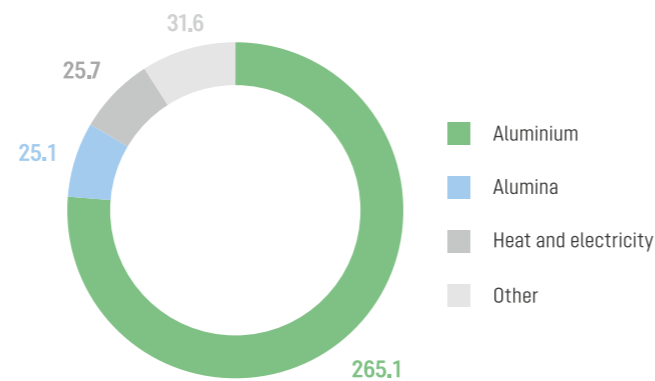
Emissions of pollutants into the atmosphere (excluding CO), 2017-2019, thousand tonnes<sup>18</sup> *GRI 305-7, HKEK KPI A1.1, ASI PS 6.1*

	2017	2018	2019
PM (except Fsolid, tarry substances, B(a)P)	41.9	37.6	37.3
Sulphurdioxide (SO <sub>2</sub> )	36.2	36.4	42.0
Sum of Nitric oxides as nitrogen dioxide (NO <sub>2</sub> )	20.9	19.6	19.5
Other emissions	10.4	10.0	10.0
Total fluoride (gaseous and solid fluoride)	7.3	7.0	6.6
Benzpyrene	0.0041	0.0040	0.0039

Aluminium production accounts for the bulk of air emissions: in 2019 the share of reduction units of aluminium facilities in total emissions (excl. greenhouse gases) was 76%.

The overall trend in terms of reducing air pollution is positive, due to all the various measures that RUSAL is taking. As some projects are long term in nature and require a significant amount of time to complete, the main effects are projected to be achieved in 2024.

Air emission by type of production (excluding greenhouse gases), 2017-2019, thousand tonnes



18. The total volume of air emissions in 2019 stood at 115.3 thousand tonnes; the difference in the total summary of emissions presented in the figure is due to rounding.

## 5.6 LAND AND BIODIVERSITY

### Land resources

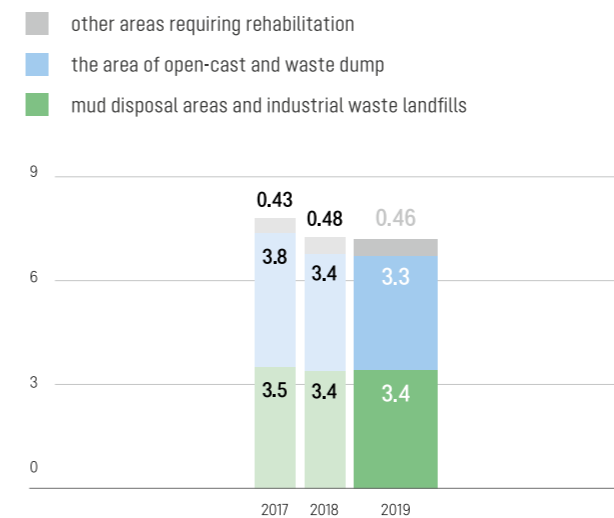
The rehabilitation of disturbed land and contributing to the conservation of biological diversity are significant aspects of RUSAL's environmental strategy. In accordance with the RUSAL Operational Policy Decommissioning Assets and Restoring the Environment: Requirements for Organising Work and Assessing Obligations, the Company adheres to:

- Uniform corporate approaches and requirements to restore disturbed land
- Unified rules to assess obligations to decommission facilities and rehabilitate the environment.

RUSAL carries out land restoration works after the completion of mining activities and the restoration of lands disturbed by waste dumping. In 2019, the total amount of disturbed land declined by 1% compared to 2018, and reached 7,198 hectares. *GRI MM1*

In 2019, as a result of RUSAL mining activities, 53.9 million tonnes of overburden rocks were generated, and 52.8 million tonnes of this amount were disposed of. The Alumina Division was responsible for more than 99% of overburden rocks generated. *GRI MM3*

Total amount of disturbed land, 2017-2019, thousand hectares *GRI MM1*



In 2019, the ratio of rehabilitated land to disturbed land (reclamation coefficient) was 0.04. The excess of disturbed land over rehabilitated land is mainly due to development activities at the Dian Dian (Guinea) and Timan Bauxite (Russia) mines. The amount of land disturbed and rehabilitated in 2019 is disclosed in the Appendix 2. Additional quantitative data (see page 129 of the Report).

The Company's financial outlay to decommission facilities and rehabilitate disturbed land was estimated at USD371 million at the end of 2019. RUSAL has no reclamation debt. *GRI MM1*

In 2019, land reclamation measures were implemented at the Achinsk alumina plant, sludge reservoir №1 at the Bratsk Aluminium Smelter, and abandoned quarries at the Glukhovskiy quartz rock quarry and near the city of Fria in Guinea. The total amount of land reclaimed was 18.6 hectares.

### Biodiversity

*GRI 304-1, 304-2, 304-3, ASI PS 8.2, 8.4*

Biodiversity conservation is a global environmental issue that is demanding greater attention every year. Global trends in the area of sustainable development are requiring businesses to re-examine their approaches in the area of conserving biodiversity.

The RUSAL approach is to be actively engaged in international sustainable development initiatives and to implement international standards in this area as well as established best practices in biodiversity.

The Management Company and three RUSAL production facilities were certified against Aluminium Stewardship Initiative (ASI) Standards, which lay particular emphasis on biodiversity conservation. The ASI obliges participants of the initiative to comply with sustainable development requirements and to pay special attention to biodiversity – one module alone covers biodiversity conservation. Requirements are based on best global practices and approaches. ASI Standard requirements cover the entire supply chain – from ore mining to aluminium production.

RUSAL also works with the Biodiversity and ecosystem services working group and other environmental non-profit organisations, such as the International Union for the Conservation of Nature and Natural Resources (IUCN), Fauna & Flora International (FFI), and the Chimbo Foundation.



## Krasnoyarsk Region, Russia

With support from various scientists and experts the Krasnoyarsk Aluminium Smelter is carrying out the following research:

- **Krasnoyarsk Stolby Nature Reserve.** In this reserve the Company has since 2012 investigated components of ecosystems, such as water, vegetation, soil, and the condition of snow covers. An integrated approach to studying the chemical composition of various ecosystems allows pollutants introduced into the natural environment from outside to be identified (from industry, transport, fuel energy, etc.)



- **Pine plantations in forest-steppe zones.** In collaboration with the Sukachev Forest Institute of the Siberian Division of the Russian Academy of Sciences, RUSAL conducts research into the stability of pine plantations in forest-steppe zones.

The results demonstrated a trend towards forest regeneration, a decline in anthropogenic impacts on pine phytocenosis, and the adaptation of forest communities. The analysis of reforestation dynamics showed that in pine plantations in the Krasnoyarsk suburbs there has been no decline in the restoration of dendrocenosis.

## Protecting vulnerable areas

**Project:** Monitoring protected areas  
**Geography:** Khakassia, Russia  
**Stakeholders:** Non-governmental organisations, local communities

With support from the Khakassky Regional Division of the Russian Geographical Society, the Sayanogorsk Aluminium Smelter runs projects in the field of biodiversity conservation:

- **Ecological monitoring project.** The Company implements this project (Monitoring protected natural areas) in collaboration with the Khakassky Regional Division of the Russian Geographical Society, the Strana Zapovednaya National Fund, the Shushenskiy Bor National Park, and the Khakassky and Sayano-Shushenskiy nature reserves. Monitoring is carried out in the southern regions of the Republic of Khakassia and in the administrative regions of the Krasnoyarsk Territory, both within and outside the area of potential impacts of the Sayanogorsk Aluminium Smelter.

As part of this project we assess the condition of cedar pine forests and study recreational impacts on territories adjacent to protected areas. Based on the monitoring results, no significant impacts from the facility were identified.

- **Snow leopard and woodland reindeer.** In order to facilitate the study and conservation of rare animal species in cross-border protected areas in the Altai-Sayan Ecoregion, populations of snow leopard and forest reindeer are monitored. Based on the results of many years of study, a conclusion was reached that poaching is primarily responsible for the decline in the number of snow leopards.

## Komi Republic, Russia

In collaboration with the Institute of Biology of Komi Science Centre of the Ural Branch of the Russian Academy of Sciences (IB FRC Komi SC UB RAS), the monitoring of aquatic biological resources of the Vym River at the Timan Bauxite development is conducted.

An analysis of the monitoring results demonstrated that the constantly low level of the population of commercial fish species is due to overfishing, which is not associated with RUSAL activities.

In 2019, the Timan Bauxite facility, together with Komi branch office of the Federal State Budgetary Institution the Main Basin Department for Fisheries and Conservation of Aquatic Biological Resources (FSBI Glavrybvod) implemented a project to reproduce at fish-farm aquatic biological resources: 10,000 Thymallus fingerlings were released into the Vym River.

In the area of biodiversity RUSAL strives to adhere to best global practices and approaches. The Company assesses potential risks to biodiversity during all stages of a facility's life cycle, and a multi-faceted approach is adopted, which allows areas of focus to be determined, biodiversity issues to be rationally managed, and stakeholders' opinions to be considered.

The Company's facilities are located in various regions and countries around the world, while its main production capacities are situated in Siberia, a region with unique flora and fauna. In the spirit of sustainable development principles and the Environmental Policy, the Company organises a number of voluntary initiatives to help ensure the maintenance and conservation of biological diversity.

RUSAL assesses the condition of the environment and, if it is considered necessary, initiates respective environmental protection activities. *ASI PS 8.2*

The KUBAL smelter introduced the annual monitoring of vegetation around the plant, as part of a voluntary initiative. Various tree species are monitored.

The Company does not perform activities in protected areas or in World Heritage Site areas. *GRI 304-1, ASI PS 8.4*

The results of ongoing biodiversity monitoring allow us to assess the current state of the environment and, if necessary, to adjust environmental activities in order to reduce negative impacts. No significant risks to biodiversity from the activities of RUSAL facilities were identified as a result of monitoring.

The research materials constitute a unique, regularly updated scientific database of the natural territories of the regions where the Company operates, which in the future can be referred to assist in implementing effective biodiversity conservation measures.

## Plans for 2020 and the medium term

The Company plans to focus on the following tasks in the next few years:

- Introducing best available technologies at new smelters
- Upgrading smelters (using the Eco-Soderberg technology) and gas treatment facilities
- Contributing to lowering air emissions by continuing to implement initiatives under the Ecology national project
- Continuing work to rehabilitate disturbed land.



# 6. CLIMATE CHANGE AND ENERGY

CONTRIBUTION TO UN SDG



## KEY FIGURES

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# 11%

reduction in direct specific greenhouse gas emissions from existing aluminium smelters compared to the 2014 level

# Over 1,000,000

trees planted as part of the largest forest restoration and protection project in Russia

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# 6.1 MANAGEMENT APPROACH

GRI 103, HKEX Aspect A1, A3, HKEX KPI A 3.1, Para 9, 10

## Who is in charge?

- The Health, Safety, and Environment Committee
- The Health, Safety, and Environment Department
- The GHG Emissions Control unit

## Which guidelines do we follow?

- The monitoring and reporting rules of the European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MRR), General guidelines for installations
- IPCC Guidelines for National Greenhouse Gas Inventories (2006)
- The Greenhouse Gas Protocol: A corporate accounting and reporting standard
- The RUSAL Methodology for determining direct greenhouse gas emissions in primary aluminium production (2017)
- The RUSAL Methodology for determining direct greenhouse gas emissions in alumina production (2017)
- The RUSAL methodological guidelines on quantitatively estimating greenhouse gas emissions from the production of electric power supplied from the Russian energy system (2017)
- The Aluminium Carbon Footprint Technical Support Document of the International Aluminium Institute (2018)

Climate change is one of the most pressing challenges that industry is currently facing, and it is also a high priority area for RUSAL. Significant environmental activities carried out by the Company include:

- The provision of reliable access to clean renewable energy sources
- A commitment to reduce the carbon footprint of its products.

RUSAL continuously seeks opportunities to improve its greenhouse gas reduction performance indicators. Since the adoption of the Strategy for a Safe Future initiative in 2007, the Company has been working hard to cut GHG emissions. The results of RUSAL actions to lessen impacts on the climate, in terms of reducing the total volume of greenhouse gas emissions, as well as the carbon footprint of its products, are monitored and regularly reviewed at all management levels.

The strategic goal of reducing GHG emissions is stated in the **Environmental Policy**<sup>19</sup> of RUSAL. Other documents regulating the principles and approach to GHG emission calculations include external industry specific documents and internal documents of the Company. In 2020, RUSAL plans to revise internal guidelines regulating the methodological approach to calculating GHG emissions.

RUSAL pays special attention to climate risk assessment. Various natural hazards associated with climate change exist in the regions where RUSAL operates, especially the Siberian Federal District. Potential risks stem from dangerous hydrometeorological phenomena. In 2019, RUSAL continued working with its partner on climate risk assessment according to the Task Force on Climate-related Financial Disclosures (TCFD) and plans to finish this work in 2020.

The attitude adopted by employees towards climate change is of great importance within overall Company efforts to foster an inclusive corporate approach to reducing greenhouse gas emissions. The Company has introduced a number of initiatives to raise the engagement level of employees in this area:

- A set of KPIs related to reducing GHG emissions were introduced across all management levels. For example, top managers are responsible for total GHG emission reductions, while plant staff are responsible for the frequency of reducing anode effects, which has a direct effect on greenhouse gas emissions.
- The Clean Step corporate training programme was launched to raise the awareness of employees on such topics as consequences of the climate change, sources of GHG emissions and the importance of responsible behaviour at all levels.

19. The document is publicly available for stakeholders at: <https://rusal.ru/about/policy/>.

# 6.2 CLIMATE STRATEGY

RUSAL determines the primary drivers behind the Company's climate strategy implementation to be:

- Growing market demand for low-carbon products
- Market competition among key aluminium producers in response to customer needs
- Business leaders making both short- and long-term commitments to minimise impacts on the climate
- The adoption of the Paris Agreement in December 2015.

As part of its goal-setting ambitions, RUSAL has introduced seven target indicators for climate change, which touch on various aspects of the issue.



## RUSAL strategic climate change goals up to 2025

Nº	Goal	Results in 2019
1	Purchase at least 95% of their electricity from hydroelectric power plants and other types of carbon-free power generation for aluminium smelters.	The Company achieved the goal ahead of schedule. In 2019, the share of electricity bought from hydroelectric power plants for aluminium smelters was 98.3%. 0.1% of this comprised nuclear energy and 0.5% other renewable energy.
2	Reduce direct specific greenhouse gas emissions by 15% in existing aluminium smelters vs. the 2014 level.	In 2019, the reduction in specific GHG emissions was 11% compared to 2014.
3	Reduce direct specific greenhouse gas emissions by 10% vs. the 2014 level in existing alumina smelters.	In 2019, the reduction in specific GHG emissions was 2.6% compared to 2014.
4	Reduce specific electric power consumption by aluminium smelters by 7% vs. the 2011 level.	In 2019, the reduction of 4% was achieved compared with 2011.
5	Achieve the average of specific direct and indirect greenhouse gas emissions by a reduction of no more than 2.7 tonnes of CO <sub>2</sub> equivalent per tonne of aluminium.	The goal was achieved in 2017. In 2019, the value reached 2.2 tonnes of CO <sub>2</sub> equivalent per tonne of aluminium.
6	Use an internal carbon price when making strategic and investment decisions, starting in 2017.	Since 2017, the Company has been applying an internal carbon price in the process of making strategic and investment decisions.
7	Support Russian and international initiatives and associations advocating actions to prevent climate change and backing carbon prices, provided they are aligned with the Company's strategic goals.	The Company actively participates in a number of climate initiatives. For more information, see the International and national initiatives and projects section below.

## Economic evaluation of GHG emissions GRI 201-2

RUSAL has integrated the accounting of GHG emissions (by converting emissions into monetary value, the internal carbon price of USD20/tonne CO<sub>2</sub>) into project efficiency assessment procedures, as well as the overall efficiency of the Company:

- We evaluate the potential impact of GHG emissions on the financial and economic models of projects and overall economic performance
- We include the internal carbon price in the financial and economic long-term model of RUSAL, which is used to make strategic decisions vis-à-vis the development of the Company and its divisions.

# ALLOW

## Aluminium with a low carbon footprint

Since 2017, RUSAL has been promoting its new low-carbon aluminium brand, ALLOW. Aluminium under the ALLOW brand has a declared carbon footprint of less than 4 tonnes of CO<sub>2</sub>-equivalent per tonne of aluminium produced (direct and indirect energy emissions from aluminium smelters are taken into account). The global average value is around 12 tonnes of CO<sub>2</sub>-equivalent per tonne of aluminium produced.

The ALLOW brand has passed independent verification. The product is especially in demand among companies seeking to ensure that their products meet high environmental requirements during all stages of the production chain.

In the reporting year RUSAL also organised the verification of its greenhouse gas emissions: TÜV Austria performed a review of calculations made by the Company, and confirmed compliance with respective requirements and methods, including in relation to the ALLOW brand.

RUSAL takes sequential steps to implement its strategic goals into daily operational activities. Efforts are made to reduce greenhouse gas emissions in the following areas: *HKEX KPI A1.5, ASI PS 5.3*

- Modernising production facilities. The Company develops modernisation projects at existing facilities, introducing the best available technologies, e.g. advanced electrolysis
- Enhancing operational performance (organisational measures). This includes providing additional incentives for staff at facilities in order to improve operational processes
- Compensation projects. In 2019, RUSAL placed special emphasis on its forest projects campaign.

Through the forest projects campaign the Company demonstrates its commitment to:

- Contributing to the principles of sustainable development, such as reducing negative impacts on the environment and promoting biodiversity conservation in territories where the Company operates
- Reducing GHG emissions in the carbon balance of the Russian Federation, by boosting the potential for CO<sub>2</sub> absorption
- Striving to create carbon neutral products.

## Recognition from the expert community

The results of 2019 are testament to the extensive work that RUSAL has carried out in order to reduce its GHG emissions. Our efforts have been highly rated, both at international and national levels:

- Since joining the Carbon Disclosure Project (CDP) global initiative in 2015 RUSAL has annually submitted reports on GHG emissions: for 2019 we received an overall 'B' rating score. Also, RUSAL was recognised by the CDP Supplier Engagement Leaderboard as being a global leader in supply chain engagement on climate change issues. Out of 4,800 companies assessed, RUSAL was among the 160 corporations on the leaderboard this year, and the Company achieved the highest score among aluminium producing companies for 2019. This demonstrates RUSAL's successful efforts to reduce emissions, manage climate risks, and ensure transparent internal and external communications.



## The Green Million



**Geography:** Krasnoyarsk Territory, Irkutsk Region  
**Stakeholders:** Local communities

In 2019 RUSAL announced plans to plant over one million trees in Russia, as part of its climate strategy to reduce the Company's carbon footprint. The following steps were undertaken by RUSAL to implement the initiative, in collaboration with the Federal Forestry Agency (Rosleshoz) and local governments:

- At the Krasnoyarsk Economic Forum the Company signed a three-party agreement with the Government of the Krasnoyarsk Territory and Rosleshoz to plant trees as part of a voluntary project aimed at reducing carbon emissions. Under the initiative, 500,000 trees were planted in 120 hectares in the region. The project also develops a forest protection scheme for the Lower Yenisei Forestry
- At the St. Petersburg Economic Forum RUSAL, Rosleshoz, and the Irkutsk Region Government signed a three-party agreement to implement voluntary eco-friendly projects, which include planting at least 500,000 trees in 125 hectares in the Kirovskoye forestry area. This target was successfully reached in 2019.

The initiative became Russia's largest forest restoration project. Conservative estimates suggest that over the next 40 years, the forests will on average absorb 1,250 tonnes of CO<sub>2</sub> per year.

RUSAL's forestry initiative contributes to the UN's target to restore 350 million hectares of forests around the world by 2030, in response to the damaging effects of climate change.

As part of the RUSAL forest project we are partnering with the Krasnoyarsk Aerial Forest Protection Centre to conduct an aerial protection of forests. The project involves restoring and constructing aerial forest protection bases, purchasing fire-fighting equipment, and recruiting and training new aerial fire fighters. Based on conservative estimates these efforts will result in 505,000 tonnes of CO<sub>2</sub> absorption per year.

In 2019 aerial firefighting protection was used over 505 thousand hectares in the Lower Yenisei Forestry in the Krasnoyarsk Territory.

- In the third All-Russian contest Climate and Responsibility 2019, organised with support from the Russian Ministry of Economic Development and the Russian Ministry of Natural Resources and the Environment, RUSAL's achievements in reducing negative impacts on the climate achieved the highest rating. The jury, which included high-ranking officials from Russia's federal ministries and international institutions (e.g. the WWF and UNESCO), awarded RUSAL the top ranking in the Best Organised GHG Emission Reductions nomination.

Support from the market for our commitment to low-carbon aluminium technologies and green aluminium production resulted in another Company accomplishment: signing a new five-year sustainability linked pre-export finance facility.

## 2019 performance results

RUSAL's carbon footprint is one of the lowest in the world, owing to the Company's long-term strategy of fostering a responsible attitude towards climate change. The Company plans to continue work in this area, primarily by increasing the share of products with a minimum carbon footprint in our portfolio. This is the future — not only for the aluminium industry, but for the entire global industry. In 2019, specific greenhouse gas emissions reached 9,711 tonnes of CO<sub>2</sub>-e per million USD revenue. The specific GHG indicator (Scope 1 & 2) per employee reached 511 tonnes of CO<sub>2</sub>-e in 2019<sup>20</sup>. *ASI PS 5.3*

20. The indicator is calculated based on average employee headcount.

## Market pioneers — first sustainability linked syndicated Pre-Export Finance facility in Russia

In 2019, RUSAL achieved a landmark transaction — the Company signed a new five-year sustainability linked syndicated Pre-Export Finance facility for over USD1 billion, the first-ever such facility arranged by international and Russian commercial banks in Russia.

RUSAL appointed ING and Natixis to be the coordinating lead arrangers and bookrunners of the facility. Natixis and Société Générale are acting as sustainability coordinators.

The interest rate is subject to a sustainability discount or premium, depending on whether the Company meets sustainability KPIs, including:

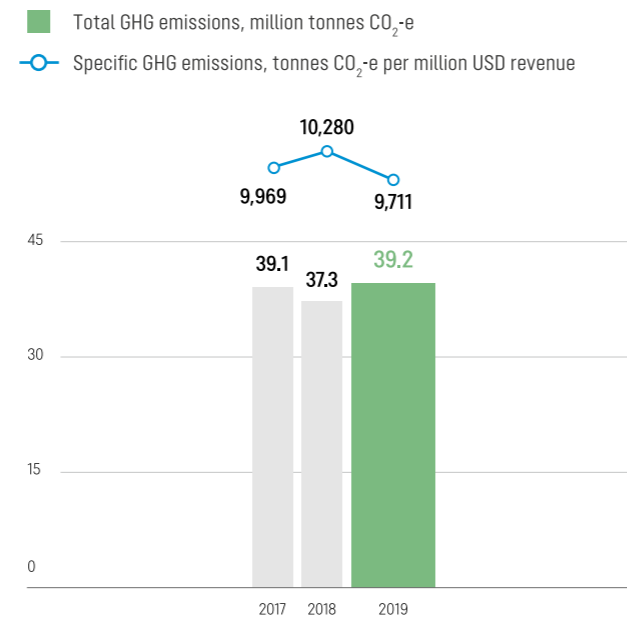
- Growth targets of ALLOW aluminium sales — RUSAL's low-carbon aluminium produced with hydropower
- Reduction in specific direct GHG emissions from electrolysis plants compared to 2017
- Decline in fluoride emissions compared to 2018.

For the first year of lending, sustainability KPIs were achieved. In mid-2020, these indicators will be measured and verified by an independent auditor.

Such high interest from the market also reflects rising global demand for low-carbon aluminium, of which RUSAL is the biggest producer. The sustainability linked pre-export finance facility further proves the Company's consistent focus on prioritising the transparency of green aluminium production.

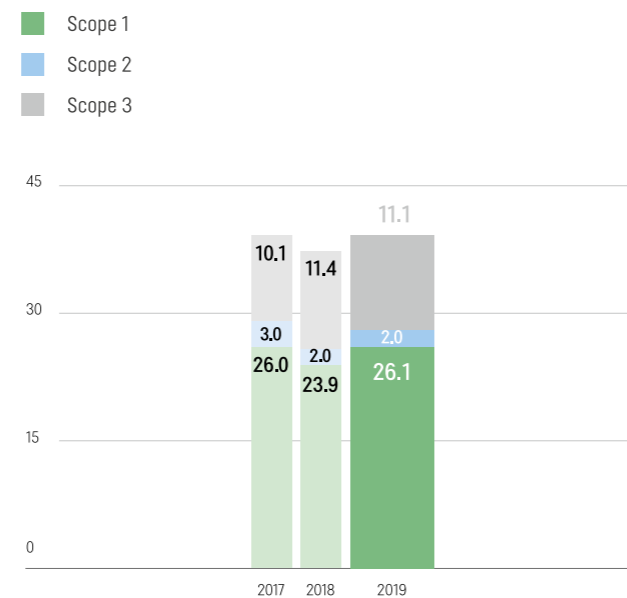
### Total (scope 1, 2 & 3) and specific GHG emissions, CO<sub>2</sub>, 2017–2019

HKEX KPI A1.1, A1.2, ASI PS 5.1, GRI 305-4



### Direct (scope 1) and indirect (scope 2<sup>21</sup> & 3) GHG emissions, 2017–2019<sup>22</sup>, million tonnes CO<sub>2</sub>-e

GRI 305-1, 305-2, 305-3



Direct GHG emissions declined in 2018 is attributable to reduced production, in particular related to the closure of Nadvoitsy aluminium smelter. Increased GHG emissions in 2019 is attributable to increased production, in particular related to the commissioning of new capacities.

21. The figure comprises data on Scope 2 GHG emissions calculated using market-based method.  
22. RUSAL GHG calculations comprise data on CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and perfluorocarbons (PFC).

### GHG emissions by components, 2017–2019, tonnes CO<sub>2</sub>-e

	2017	2018	2019
CO <sub>2</sub>	23,968,746	22,168,033	24,527,119
CH <sub>4</sub>	22,542	21,998	22,420
N <sub>2</sub> O	55,973	49,099	51,450
Perfluorocarbons	1,962,760	1,625,800	1,474,391

In 2019, RUSAL prevented 78 thousand tonnes of CO<sub>2</sub> emissions by taking measures to reduce PFC emissions and anode consumption at aluminium smelters. HKEX KPI A1.5, ASI PS 5.2, GRI 305-5

## International and national initiatives and projects

RUSAL plays an active role in climate change initiatives of regional, national, and international importance. We consider this to be a crucial part of our business activities to promote our climate change position and to share opinions with other parties involved to develop cutting-edge technologies and apply the most up-to-date approaches in our operations.



### List of RUSAL climate change initiatives, 2019

1. The first scientific conference of the Carbon Price Leadership Coalition of the World Bank, Delhi (India).
2. The fourth session of the UN Environment Assembly in Nairobi (Kenya), as part of a delegation of the Global Compact Local Network of Russia.
3. The summer session of negotiations on climate, United Nations Climate Change Conference, Bonn (Germany).
4. Asia-Pacific Climate Week to promote regional climate action, Bangkok (Thailand).
5. The 25th UN Climate Conference — COP-25, Madrid (Spain).
6. Conferences and roundtables organised by the Russian National Committee of the International Chamber of Commerce — ICC Russia (RUSAL is a member).
7. Climate Partnership of Russia events (RUSAL is a member).
8. Activities as part of the Association of Managers of Russia.
9. Business and Industry Advisory Committee (BIAC OECD) and Environmental Policy Committee (EPOC OECD) working groups and meetings.
10. UN Climate Week New York (USA).

# 6.3 ENERGY EFFICIENCY

GRI 103, HKEX Aspect A2, HKEX KPI A3.1, Para 10

Optimising energy consumption across various RUSAL facilities is an important part of the Company's efforts to reduce its impacts on the climate. RUSAL strives to implement modernisation initiatives at its production sites that correspond to best available technologies (BAT) and innovations. *HKEX KPI A2.3*

## Innovative technologies to enhance production efficiency

As part of its strategy to boost production efficiency, RUSAL is developing a process control system for electrolysis using modern approaches based on predictive analytics (BigData). The system will provide an opportunity to diagnose the reasons behind any decline in the productivity of electrolyzers, select optimal conditions (depending on the current condition of equipment), and provide predictive analytics on malfunctions.

This technology could eventually help reduce energy consumption and boost productivity at aluminium smelters. The pilot project is being implemented at a number of RUSAL plants in Siberia.

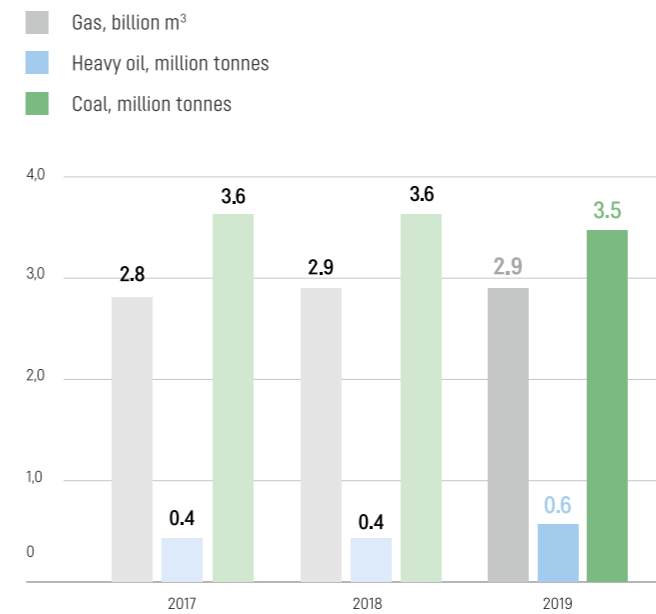
By the end of 2019, we had introduced 660 energy saving electrolysis cells across the Company (2,657 in total since the start of the initiative), which gave the Company total energy conservation of around 183 million kWh. Since 2017, the Company has managed to achieve a total energy conservation of 508 million kWh, thanks to the implementation of this technology. RUSAL also began a project to introduce electrolysis cells with non-formed materials (398 were launched in 2019, with a total of 832). This technology allows us to cut overhaul costs as well. All Aluminium division smelters successfully implemented energy efficiency projects. Energy efficiency measures in 2019 helped reduce the smelters' aggregate energy consumption by 4% vs. 2011 across the Aluminium Division.

*GRI 302-4*

In 2019, the Public Council under the Russian Ministry of Natural Resources and the Environment conducted an assessment of currently introduced BATs at the Krasnoyarsk Aluminium Smelter. The facility received high scores: all three energy efficiency technologies (BAT 2-1, 2-2, and 2-3) are fully implemented at KRAZ.

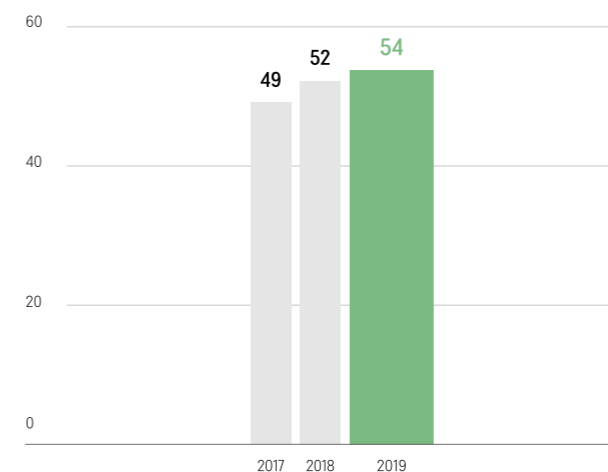
RUSAL's fuel consumption trends saw a decline in coal (3% vs. in 2018), due to the Company's strategic goal of switching to using cleaner energy sources.

Fuel consumption by type, 2017-2019<sup>23</sup>



The total volume of consumption from fuel energy resources reached 54 million MWh in 2019, as against 52 million MWh in 2018 (for a breakdown by type of fuel, see the Appendix 2. Additional quantitative data, page 129 of the Report). *GRI 302-1, HKEX KPI A2.1, ASI PS 5.1*

RUSAL total fuel consumption, 2017-2019, million MWh



23. Data on fuel consumption in 2018 differ from the data disclosed in the Sustainability Report 2018, due to adjustments made after the publication of the latter.

RUSAL places a special emphasis on reducing its energy intensity ratio. In 2019:

- The figures for aluminium smelters and the Bauxite Division were in line with 2018
- The Alumina and Silicium Divisions recorded a good trend in comparison with 2018: 7.1 vs. 7.3 and 15.2 vs. 15.4 MWh per tonne of production unit, respectively. *GRI 302-3, HKEX KPI A2.1*

## Plans for 2020 and the medium term

For 2020 and the medium term RUSAL plans to develop the following initiatives:

- Revising strategic goals relating to climate change, setting Science-Based Targets
- Revising the methodological documents determining the RUSAL approach to calculating greenhouse gas emissions
- Organising air patrols and extinguishing forest fires in 505 thousand hectares of the Lower Yenisei Forest in the Krasnoyarsk Territory
- Determining the volume of absorption from forest project activities, verifying the results, and recording them in the Russian National Cadastre of anthropogenic emissions and absorption of GHG
- Finalising a TCFD project to assess climate change risks.

# 7. DEVELOPING LOCAL COMMUNITIES

CONTRIBUTION TO UN SDG



## KEY FIGURES

**\$30.9 MILLION**

spent on social programmes and charity

**Over 1 million**

beneficiaries of charity initiatives in Russia

**1,163**

volunteer events held, including 486 organised and 677 supported by grants

# 7.1 MANAGEMENT APPROACH

GRI 103, GRI 413-1, HKEX Aspect B8, HKEX Para 9, HKEX Para 10

As a leading global aluminium producer, RUSAL is also an active local community investor, with extensive experience in elaborating and implementing wide-reaching social programmes.

## Who is in charge?

- The Social Policy Committee
- The Social Projects Committee
- The Public Relations Directorate
- Regional Committees on social Investments
- The Centre for Social Programmes (CSP) Fund

## Which guidelines do we follow?

- The Regulation on Social Investments
- The Regulation on Procurements

The social investments made by RUSAL in Russia and abroad are geared towards enhancing the quality of life of residents in territories of operation and in bolstering social initiatives. Local community support programmes are implemented in all territories where the Company operates.

## Managing social investments in Russia

In 2019, significant work was done related to social investment management, in order to boost the transparency and efficiency of the Company's activities in this area. In particular, a new Regulation on Social Investment was elaborated and introduced, which establishes two priorities in the area of social investments: creating comfortable urban environments and developing volunteering initiatives.

The Regulation on Social Investment prescribes the creation of a social investment management system and identifies the following social investment management bodies at corporate level and at the Company's facilities:

A **Social Policy Committee** was set up to improve the effectiveness of social investments, coordinate the activities of the Company's facilities in this area, achieve long-term reputational results, and monitor expenditure in the area of charity and social investments. The Social Policy Committee consists of representatives from the PR Directorate, the GR Directorate, the HR Directorate, the Directorate for Resource Protection, and invited organisations.

At Company facility level, a **Social Projects Committee** works with charitable requests. The activities of the committee are carried out under the direction of the Managing Director (CEO) of the facility, and are coordinated by representatives from the PR, HR, GR, and security departments, the CFO of the facility, and invited organisations.

## Management bodies of the social investment system

### Management Company Level



### Management Company Level or Operational level

#### Social Policy Committee

- Creates and approves the budget, the amount of funding for social programs, content of social programs and projects within the framework of targeted programs taking into account the company's priorities and goals in each of the regions of its presence

#### Public Relations Directorate

- Develops documents for approval by the Social Policy Committee, controls the activities of the CSP

#### Infrastructure project working group

- Provides control over the quality of construction work and expenditure of funds and acts until the completion of the project

### Operational level

#### Committee on social projects in enterprises

- Performs annual and current financial planning of social projects approved by the Social Policy Committee of the Management Company
- Generates and provides reports on the results of projects and activities approved by the Social Policy Committee of the Management Company

#### Regional committees on social investments

- Coordinates the charitable activities of the Company's enterprises in the region and determines the distribution of responsibility between enterprises for various areas of support in all cities of presence in the region

#### Centre for Social Programs

- Selecting and supporting the most useful and promising social initiatives

For projects that enhance social infrastructure, and are involved in upgrading existing or in constructing new facilities, the management of the Company has created an **Infrastructure project working group**, comprising representatives from initiating units/facilities, the construction engineering organisation/division, and the control and audit division.

In order to boost the efficiency of social investments in the regions where several facilities operate, the Company runs **regional social investment committees**. The Regional Committee on Social Investment consists of representatives from all facilities carrying out charity related activities in the region.

The operational management of charity related activities and social investment programmes in the regions where the Company operates is primarily performed by the **Centre for Social Programmes (CSP)**.

In addition, the Regulation on social investments was amended with regard to making decisions on the financing of social investments, the procedure for reporting on the expenditure of funds for

charity and the results of social activities, as well as the procedure for interacting with the Company's structural divisions during the implementation of related projects.

RUSAL views each specific social investment project as being an important element that helps bolster the Company's image and reputation in the region, and which also establishes and strengthens the Company's social partnerships with local authorities and social organisations.

In 2019, the responsibility of facilities to implement projects through the CSP was increased. Facilities are now required to ensure that a facility is actively promoted by beneficiaries through speeches, interviews, and other information materials, as well as the appropriate branding of infrastructure facilities created or upgraded with the financial support of the Company. For each infrastructure project a communication strategy is developed to ensure that communities in regions are aware of RUSAL's social investments through multiple channels of communication administered by beneficiaries and partners, stakeholders, and public opinion leaders.

## Centre for Social Programmes

The main tool for implementing the social policy of RUSAL is the corporate charity fund, the **Centre for Social Programmes (CSP)**<sup>24</sup>. The CSP was first established in 2004, to manage and finance RUSAL social investment projects and programmes. The main office of the fund is located in Krasnoyarsk, and there are also regional offices in the Republic of Khakassia, Volgograd, Irkutsk, Kemerovo, and Sverdlovsk regions, Krasnoyarsk Territory, and Moscow.

In order to boost the transparency and accountability of the CSP the electronic document management system was introduced, the RUSAL Procurement Regulations were put into effect, and a purchasing Manager was appointed. The methodology for managing accounting and creating management reports in relation to CSP activities was also developed.

**The CSP regularly conducts its own internal assessments of its activities and evaluates the implementation effectiveness of the social programmes and projects it funds, in order to comply with the declared principles of social investment management.**

**For many regions and territories, especially in sparsely populated centres, CSP programmes act as a significant resource centre for local residents.**

**1,162**

Partners of the fund

**25**

Number of employees

**7**

Regions

**\$30 million**

More than \$30 million allocated to sponsorship and charity projects in 2019

## Social studies in cities where the Company has a presence

In 2017, RUSAL introduced an integrated approach to the socio-economic development of the regions where it operates, which systematised and combined all social investments made by RUSAL. The programme embraces a phased developmental approach, with the implementation of social policy programmes in cities where the Company has a presence, based on a comprehensive study of the social sphere.

From 2017 to 2019, the Company conducted comprehensive social studies and developed social policy strategies for 12 locations. In 2019, work continued on conducting social research in the Irkutsk Region (Bratsk, Taishet, and Shelekhov). The research included a study of the territories of cities and public institutions, holding focus groups, and meetings with key stakeholders, which included government officials, relevant municipal department representatives, retirees, working residents, young mothers, schoolchildren, and students.

Based on the comprehensive studies performed the Company prepared a summary report of the social sphere in each city where it has a presence, which will act as the key document for all local community investment decision-making. In addition, this research will act as a point of reference in years to come to gauge the efficiency and impacts of social investments made by RUSAL.

## Engaging with local communities

The Company conducts various community engagement studies in order to gather a wide range of stakeholder views, such as focus group interviews, resident polls, and direct dialogue with local residents and city communities, in order to ascertain the priorities of such residents.

Also, the Company conducts on a regular basis a continuation of its stakeholder community engagement discussions, through communication platforms such as forums, seminars, roundtables, masterclasses, and thematic meetings. Stakeholder inclusion in working groups ranges from active citizens, entrepreneurs, and heads of social institutions, NGOs, and government representatives. Maintaining an open and constant dialogue with stakeholders allows the CSP to evaluate and identify social investment priority areas in each region where it operates.

## Relocation programme

GRI MM9

In 2019, the relocation programme for Checkanosky village continued; families from the village moved into apartments built by RUSAL. Alongside the relocations RUSAL is performing demolitions of old buildings and the rehabilitation of land in the Chekanovsky settlement. Since 2014, 546 residential buildings have been demolished, and 396 families have been relocated. The total amount of funding for the programme since 2008 to the current date amounts to over USD17 million.

## Managing social investments outside Russia

Social investment programmes in foreign countries vary, depending on the living conditions. The priority of a programme is to improve local health care and educational institutions. These programmes are often aimed at small indigenous peoples, with a view to providing them with clean water, electricity, and social and health services.

In foreign facilities social project committees have been set up, which include heads of personnel services, finance departments, and PR representatives. The committees accept requests from local community organisations, and include in respective business plans those that meet priority areas of support.

Social investment management is carried out by the Social Projects Department and the PR Department of the Management Company of the Republic of Guinea. Funding is provided by the RUSAL Charitable Foundation in the Republic of Guinea.

In Jamaica, the Senior Information and Public Affairs Officer in the HR directorate of Windalco coordinates the implementation of social projects. In Ireland this is carried out by the HR and Community Affairs Coordinator, in the Recruitment and Public Affairs Department of the Aughinish facility.

RUSAL managers and specialists that are responsible for HR work, public relations, and security issues organise scheduled and unscheduled meetings with representatives from local communities. At these meetings all matters related to interaction between the Company and local residents are discussed, including potential conflicts or disputes with local communities and indigenous peoples. Information on the results of respective negotiations is sent to the relevant directorates of the corporate centre.

## Socio-economic development of Tayozhny village

In 2019, a city planning development strategy for the village of Tayozhny was developed. The strategy is aimed at carrying out the renovation of significant public spaces and objects.

The Bogachansky Aluminium Smelter is a town-forming facility for Tayozhny village. Accommodation for BoAZ<sup>25</sup> employees and social infrastructure for the village was rapidly constructed. Since 2015, BoAZ employees have been provided with 470 apartments, and soon the construction of several blocks of apartments, making 320 apartments in total, will be completed.

Also, by the end of 2019, two kindergartens, each accommodating 250 children, a school, and a hospital were completed in the village. The construction of engineering infrastructure is also taking place. After commissioning, the property will be transferred free of charge to the district municipality.



## Social awards

- In 2019, RUSAL was awarded 'for a systematic approach to social investments' by the Forum of Donors, and ranked fourth in the competition Leaders of Corporate Charity.
- The Vedomosti Conference on Corporate Social Responsibility (CSP information partner).
- The partnership fundraising project Eat. Shared. Loved (Centre for Social Programmes, the Bellini group, Kommersant Publishing House, Otkritie Bank, and the Year of Painting art gallery) won in the Silver Archer — Siberia Communications in Charity nomination.

24. For additional information, see <https://fcsp.ru/>.

25. The smelter is part of the Boguchany Energy and Metals Complex (BEMO), a project jointly implemented by RUSAL and RusHydro.



# 7.2 INVESTING IN LOCAL COMMUNITIES IN RUSSIA

GRI 413-1

As part of social investments made by the CSP Foundation, and in line with social investment priorities, RUSAL is currently implementing three social investment programmes in Russia: RUSAL Territory, Helping is Easy, and School of Urban Change.

From 2013 to 2018 the Company elaborated a Social Entrepreneurship Programme, which since 2019 has formed part of the School of Urban Change Programme e-learning course, while the concluding activities of the broader format of Social Entrepreneurship Programme were, as well, implemented in the reporting period.

All social programmes implemented by the Company are aimed at boosting the overall quality and standard of living and socio-economic development in its regions of operation, and developing and training local community representatives with a view to developing and bolstering project-related competencies and professional

engagement among proactive programme participants and social project leaders.

In addition, RUSAL supports social projects aimed at developing large-scale skiing events, organising cultural events, and popularising science.

These programmes are executed in the following areas where the Company operates: the Krasnoyarsk Territory; the Volgograd, Irkutsk, Kemerovo, Leningrad, Murmansk, and Sverdlovsk regions; and the Republics of Khakassia and Komi.

## The priority areas and programmes: HKEX KPI B8.1, GRI 203-2

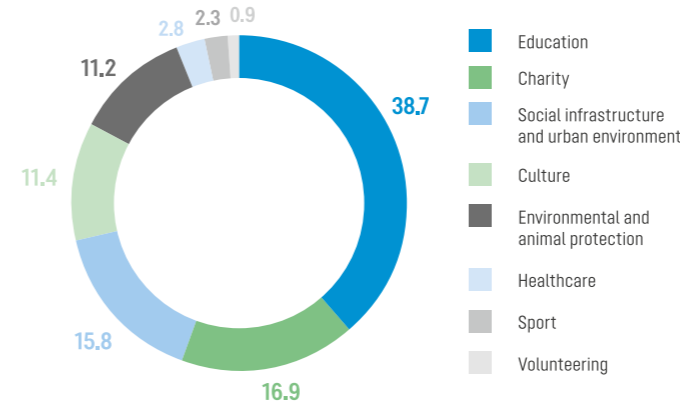
<p><b>RUSAL Territory</b></p>  <p>Participation in creating a comfortable urban environment to support the building and renovation of social infrastructure as well as modern public and recreational spaces.</p>	<p><b>Helping is Easy</b></p>  <p>Promoting corporate volunteering and encouraging the extensive involvement in volunteering of employees and the residents of regions where the Company operates.</p>	<p><b>School of Urban Change</b></p>  <p>Social and educational programmes, combining all educational initiatives with the target groups of all Company social programmes, and developing urban change leaders.</p>
<p><b>Social entrepreneurship</b></p>  <p>Fostering good working conditions for social entrepreneurs. Training residents in entrepreneurial-related activities, as well as the managers of small and medium-sized businesses and non-profit organisations, in technologies for launching, promoting, and developing business projects in the social sphere.</p>	<p><b>Go Skiing! project</b></p>  <p>Promoting healthy lifestyles and engaging employees and local people in cross-country skiing in the regions where the Company operates.</p>	<p><b>RUSAL Festival project</b></p>  <p>Supporting the interests of local residents in culture and art, scientific and technical activities, developing creative skills, and promoting healthy lifestyles by conducting a wide range of socially significant cultural and educational events in local communities.</p>

As part of implementing social programmes, grants are awarded to local community projects deemed to be deserving of support. A special automated platform for submitting and examining grant applications has been developed and commissioned on the CSP website (<http://grants.fcsp.ru/>).

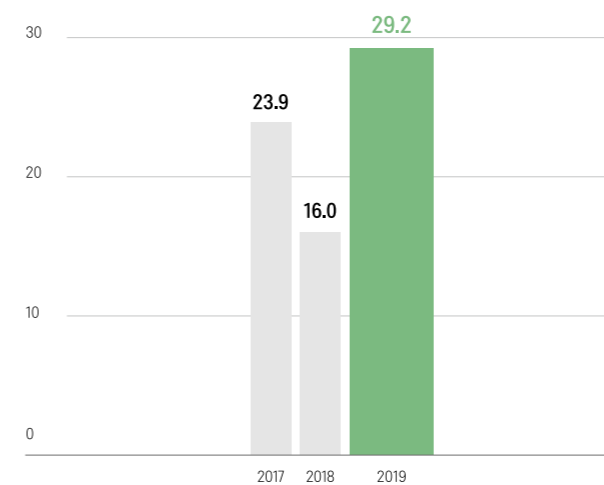
A total of USD29.2 million was invested in 2019 in Russia as part of the Company's social investment programmes. *HKEX KPI B8.2*

The total number of beneficiaries in Russia amounted over 1 million people.

Key areas of social investments, 2019, %



Social Investments, 2017-2019, million USD



### Leaders of Urban Change: restoring a promenade and festival park

The river embankment in the historic city centre of Krasnoturinsk was first developed around 1950, but had recently seen a period of neglect. In 2019, with grant support from RUSAL and federal funding, a two-year renovation project was completed, restoring the former beauty of the city's historic landmark, and creating a comfortable urban environment for residents and visitors, including playgrounds, sports facilities, and bicycle paths.

## RUSAL Territory programme GRI 203-1

The RUSAL Territory programme aimed at fostering the socio-economic development of the regions where the Company operates. The programme adopts an integrated strategic approach, using long-term planning to implement the best infrastructural projects – from an entire city to a housing block.

In 2019, based on the developed Regulation on Social Investments, RUSAL relaunched the RUSAL Territory grant competition in a new

format, aimed at supporting large-scale open public space projects based on social studies and multilateral discussions with stakeholders. Projects participating in the competition should seek to create a comfortable urban environment and infrastructure for large-scale city events in the fields of culture, tourism, and recreation, and offer original solutions related to landscaping and creating social and cultural objects, with the involvement of city residents.

<b>GOAL</b>	<ul style="list-style-type: none"> <li>Improving quality of life</li> <li>Creating new public and cultural spaces</li> <li>Organising cultural, educational, and sporting events</li> </ul>				
<b>KEY FIGURES</b>	<b>RELEVANCE</b> <b>411</b> Number of applications received from residents	<b>QUALITY</b> <b>39</b> Number of supported projects	<b>COVERAGE</b> <b>7</b> Number of regions, in which financed projects are being implemented	<b>SUSTAINABILITY</b> <b>31%</b> Share of co-financing from partners, % of total programme budget	<b>TOTAL AMOUNT</b> <b>\$7 million</b>
<b>KEY RESULTS</b>	<ul style="list-style-type: none"> <li>During the updating of the RUSAL Territory programme format the following results were achieved:                             <ul style="list-style-type: none"> <li>the grant fund was significantly increased (to RUB500 million)</li> <li>applications were collected (26 projects) and online voting was held for the best projects; over 19,000 residents in regions took part</li> <li>there were 11 winning projects, based on the competition results for 2020</li> </ul> </li> <li>The Severny Artek and Metallurg stadiums in Bratsk were renovated</li> <li>Kamensk-Uralsky implemented a project to develop a ski-boat base</li> <li>Renovations of Revolution Square and the Surikov Garden in Krasnoyarsk were completed</li> <li>Work was completed at facilities of the Traktorozavodsky District recreation centre in Volgograd</li> <li>The Start stadium in Krasnoturinsk was renovated</li> <li>Equipment for children’s playgrounds were purchased and installed</li> <li>10 sports, five cultural, and over 30 educational facilities were equipped</li> <li>Nine public spaces were improved</li> <li>A major infrastructural project was carried out in the historic centre of Krasnoyarsk</li> <li>Improved efficiency of infrastructural projects, with support from JSC ISO</li> <li>An urban development strategy was developed for the village of Tayozhny. As part of this, additional in-depth studies of the social sphere and the needs of local residents were carried out, and architectural bureaus were engaged to develop an urban development concept. One of the stages was a competition to create the Culture and Leisure Park Mechta</li> </ul>				
<b>PLANS FOR 2020</b>	<ul style="list-style-type: none"> <li>Implementation of 11 winning projects, supported by the results of the RUSAL Territory contest in 2020, in 11 cities of operation</li> <li>Creating architectural concepts to develop public spaces for the first four winning projects</li> <li>Preparing applications for the participation of the first four winning projects in competitions of the Russia Ministry of the Construction Industry and regional programmes</li> <li>Monitoring infrastructure projects implemented under the RUSAL Territory programme in 2016–2017 and the Charity of industrial sites programme in 2018–2020</li> </ul>				

## Helping is Easy programme

The Helping is Easy programme allows concerned citizens to volunteer and help non-profit organisations, educational and medical institutions, rehabilitation centres, orphaned children, veterans, and the elderly.

The programme operates in the cities where the Company operates, with volunteers annually helping to organise numerous socially

significant events with support from the CSP. The programme is implemented in seven regions of operations, and has over 5,000 partner organisations.

The Helping is Easy programme is carried out as part of volunteer initiatives, such as the Day of Yenisey, Green Wave, and the New Year charity marathon.

<b>GOAL</b>	<ul style="list-style-type: none"> <li>To develop corporate and citywide volunteering</li> <li>To develop and implement technologies that involve volunteers in socially significant activities</li> <li>To train volunteers, including corporate ones</li> <li>To develop and launch an integrated volunteer programme focused on various groups of stakeholders: employees, local communities, and NGOs</li> <li>To create a volunteering ecosystem in local communities to ensure the sustainability of volunteering</li> </ul>				
<b>KEY FIGURES</b>	<b>RELEVANCE</b> <b>698</b> Number of applications received from residents	<b>QUALITY</b> <b>150</b> Number of grants awarded, or interest-free loans issued	<b>COVERAGE</b> <b>7</b> Number of regions, in which financed projects are implemented	<b>SUSTAINABILITY</b> <b>34%</b> Share of co-financing from partners, % of total programme budget	<b>TOTAL AMOUNT</b> <b>\$253 thousand</b>
<b>KEY RESULTS</b>	<ul style="list-style-type: none"> <li>357 events were held in 16 territories, with the involvement of almost 8,000 volunteers, including 625 from RUSAL; 19,241 became beneficiaries</li> <li>The Company supported the participation of the factory workers team in the work of the Universiade 2019 volunteer headquarters in Krasnoyarsk. 11 RUSAL volunteers from Kamensk-Uralsky, Achinsk, Krasnoyarsk, Novokuznetsk, and the Tayozhny village participated in organising international events.</li> <li>RUSAL supported the activities of the National Council for Corporate Volunteering (NCCV; environmental and social activities, an annual forum):                             <ul style="list-style-type: none"> <li>The Volgograd Regional Branch of the NCCV was first launched. NCCV branches in Krasnoyarsk, Bratsk, and Novokuznetsk continued to work with partners as part of major urban events and providing targeted assistance. 450 partners took part in urban events. The total events budget rose by almost RUB2.5 million, and volunteers and additional partners were brought in to help organise them.</li> <li>NCCV became a partner in the nomination in the national award For Promoting the Development of a Culture of Evaluating Social Programmes in Russia.</li> </ul> </li> <li>Donations from employees to help colleagues in challenging life situations:                             <ul style="list-style-type: none"> <li>RUB11.5 million was raised to provide assistance to flood victims in the city of Tulun in the Irkutsk Region; this figure was matched by the Company.</li> <li>Through fundraising events the CSP Foundation raised RUB2.3 million for charities.</li> </ul> </li> </ul>				
	<p><b>The Green Wave environmental marathon</b></p> <ul style="list-style-type: none"> <li>In 17 cities over 5,300 saplings of trees and shrubs were planted</li> </ul>				
	<p><b>Day of Yenisey Environmental marathon</b></p> <ul style="list-style-type: none"> <li>Around 3,000 volunteers collected 30 tonnes of refuse</li> <li>The project was rolled out to 12 cities, where urban environmental events were held under the unifying title “day of rivers”</li> </ul>				

**We Believe in a Miracle, We Create a Miracle! New Year charity marathon**

- Around 9,000 people and 98 organisations received assistance from over 1,000 volunteers in 13 cities. A total of 255 charity events were organised over two months of the project's timespan for large low-income families, children from orphanages, and other vulnerable groups in communities.
- As part of the marathon, volunteers held master classes, organised sports events and theatre performances, and charity fairs. Targeted assistance was provided to children with serious illnesses, the wards of charitable foundations, orphanages, and institutions for the elderly.
- A new feature of the marathon in the reporting period was the final stage, to distribute funds raised. Also, each volunteer team had an opportunity during the marathon to develop and submit to a jury a project idea on how to assist sponsored institutions in the future. 13 winning projects in each city will be implemented in 2020, with support from RUSAL grants totalling RUB2.2 million.

**PLANS FOR 2020**

- The development of corporate volunteering: incentive systems, the inclusion of Company structures in work with volunteers, the participation of volunteers in various other events
- Conducting network projects, increasing the number of participants, and evaluating the results of events
- Holding a large-scale charity marathon From Siberia with Love in Krasnoyarsk, with support from the Company and presidential grant fund

**Corporate volunteering**

RUSAL participates in the National Council for Corporate Volunteering (<http://www.nccv.ru>), a public venue that brings together organisations and companies that have been set up to promote the best corporate volunteering practices within Russia, generate volunteering ideas, and elaborate and develop standards and methodical tools for volunteer programmes. The council pools the experience of over 30 large companies with proven track records in developing corporate volunteering.

The key event in 2019 for all CSP volunteers and managers was the first Siberian conference on corporate volunteering, an idea that was made reality by RUSAL. The conference brought together 90 leading managers from RUSAL, MTS, KFC, Philip Morris, Deloitte, Dixie, Komsomolskaya Pravda, Coca Cola, the Association of Managers of Russia, the Danilovstvy volunteer movement, and others who have

implemented regular corporate volunteer programmes. Also attending were corporate volunteers and representatives from citywide and student volunteer movements from the Krasnoyarsk, Irkutsk, Kemerovo, and Novosibirsk regions. The event was attended by 30 RUSAL volunteers from Achinsk, Sayanogorsk, Taiga, and Krasnoyarsk. The conference programme included knowledge sharing of technologies and practices for implementing corporate volunteering programmes among CSP managers, including presentations, lectures, master-classes on team-building and social aspects, and workshops. The conference concluded with some special events, including a Day of Yenisey environmental quest and an excursion organised for guests at the KrAZ facility. The conference received positive feedback from the guests, who praised how it was organised and the educational programme.

**School of Urban Change programme**

The function of the School of Urban Change programme is to supplement existing RUSAL programmes. The programme trains spear-head groups so that they can resolve current social issues faced in a region, and prepares representatives from local communities for volunteering and social entrepreneurship activities. School of Urban Change e-learning courses are available on the CSP website<sup>26</sup>.

The educational aspects of the programme are managed by the independent nonprofit Centre for Innovation in the Social Sphere (CISS). The CISS was created in partnership with the Agency for Strategic Initiatives, and holds a permanent license to implement educational programmes. The purpose of the CISS is to sponsor and develop business projects in educational, medical, and other social spheres for vulnerable groups.

**GOAL**

To prepare active residents and representatives from creative communities of citizens in the places where the Company operates to develop and successfully implement initiatives and projects related to solving urgent social issues and improving the urban environment.

**KEY FIGURES**

## RELEVANCE

**2,186**

Number of School of Urban Change participants

## SUSTAINABILITY

**74%**

Share of co-financing from partners, % of total programme budget

## TOTAL AMOUNT

**\$17 thousand****KEY RESULTS**

- 89 educational events were held
- The Create. Embody. Esteem Event was held in collaboration with Evraz, with the key topic being creating social projects
- Four remote courses were organised: Social Design, Social Entrepreneurship, Corporate Volunteering, and Communities and Public Spaces. 832 participants passed final certification, and 22 received certificates of professional development
- A meeting of the Leaders of Urban Change was held in Kamensk-Uralsky, attended by 120 participants

**PLANS FOR 2020**

- Introducing and promoting successful social practices and project implementations at a Leaders of Urban Change meeting in Irkutsk, with support from the Presidential Grants Fund (April 2020)
- Creating a new e-learning course, the Ecoinitiative
- Organising educational and motivational events for corporate volunteering teams and municipal management teams
- Implementation of the programme, educational sessions and internships on event fundraising for NGOs and foundations as part of the From Siberia with Love project

**Leaders of Urban Change**

The Leaders of Urban Change is a series of social projects that were implemented with the support of RUSAL. Since 2011, social projects, chiefly initiatives from local stakeholders, have been implemented in the places where the Company operates. Winning projects are selected based on RUSAL's key social investment priorities and criteria. A series of Leaders of City Change projects are selected yearly and have been successful highpoints that serve to inspire new initiatives.

26. <https://fcsp.ru/edu/>.

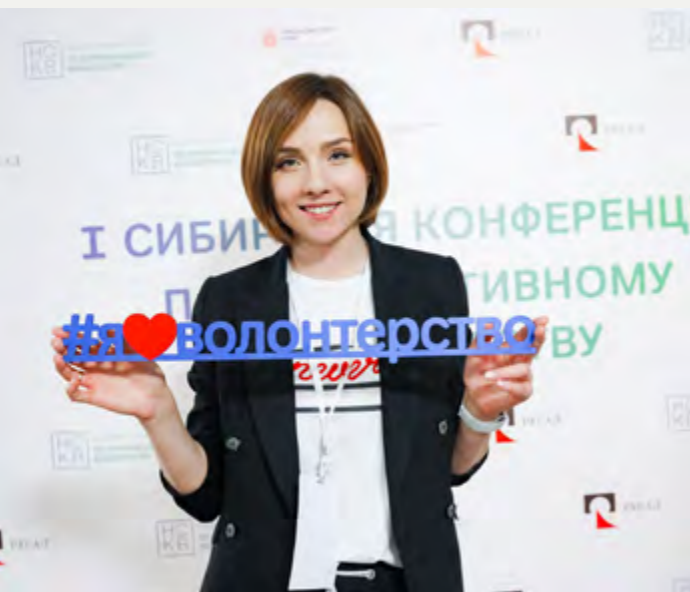
### Leaders of Urban Change: the Romashka inclusive children’s centre

The inclusive children’s centre Romashka in Novokuznetsk is for special needs children. The key idea of the project is inclusion: everyone feels as though they are playing an equal role in proceedings. To develop an inclusive space, it is necessary to educate all those involved: not only the children, but also teachers, parents, and guests of the centre. The centre offers a special educational approach geared towards children with special abilities; the process of education is allowed to be conducted among children with various disabilities and ages, thereby providing them with the opportunity to learn through observation and interaction.



### People for the city, a city for the people

The largest and most significant School of Urban Change occasion in 2019 was a Leaders of Urban Change event entitled People for the city, the city for the people, which was held in Kamensk-Uralsky in April and gathered more than 120 participants from three Ural cities. The meeting brought to an end the School of Urban Change programme, with support from the Presidential Grants Fund for initiatives from Kamensk-Uralsky, Krasnoturinsk, and Severouralsk residents. The event comprised platforms in two formats: an intensive educational platform for local community leaders with the participation of experts from different regions, and a communication platform for representatives from administrations and the heads of the Company’s industrial facilities to discuss comprehensive research in the social sphere, and the outlook for cooperation within the framework of RUSAL’s social policy.



## Social entrepreneurship

From 2013 to 2018 RUSAL elaborated a Social Entrepreneurship Programme, which since 2019 has been included in the School of Urban Change Programme. During the running of the programme the Company provided substantial support to social and entrepreneurial initiatives through various training programmes, loans, and grants.

Following the implementation of the programme in 2019, it was decided to focus on providing open online courses for all School of Urban Change programme participants. 299 people from 16 territories where RUSAL operates were trained in the Social Entrepreneurship course.

In the reporting period projects to issue interest-free loans to social entrepreneurs continued, and the Company supported five winning projects, based on the results of a grant competition held in 2018, including:

- An adaptive riding programme in Krasnoyarsk for adults with neurological disorders and injuries.
- Setting up in Kamensk-Uralsky the Cycling Club for Children with Disabilities.
- Supporting the Blago mini-hotel in Kamensk-Uralsky.
- The Romashka children’s centre in Novokuznetsk was equipped with a special area, a School of Cooking for Special Needs Children, for cooking classes.
- A logopaedic massage room was created at the Children’s Beach centre in Nazarov in the Krasnoyarsk Territory; speech therapists from the Achinsk and Achinsk regions were trained in the centre’s methods.

## Go Skiing! project

Since 2016, RUSAL, together with En+ Group and the Cross-Country Ski Federation of Russia, has organised and supported the Go Skiing! social project, which is aimed at promoting the activity of mass skiing. The initiative provides training seminars for cross-country skiing coaches so that they can improve their professional qualifications,

cross-country skiing and sports equipment, and mass ski holidays are held, aimed at promoting healthy lifestyles and cross-country skiing. The programme also supports annually the Russian national ski team.

### Go Skiing! project implementation results 2018–2019 season

Number of regions participating in the programme	6
Number of coaches that improved their qualification level	402
Number of ski equipment items for athletes	1,131
Spending to equip regional teams	\$253,000
Best Ski Coach Of The Year competition winners	5
Number of participants taking part in skiing and sports events	over 10,000
<b>Upgrades to skiing facilities (stadiums, bases, and tracks in Bratsk and Kamensk-Uralsky) were checked, in six cities ski centres were provided with snowcat equipment designed and manufactured as part of the project</b>	
Competitions were held for national youth teams in regions, and ski equipment and gear were purchased	
Project audience in social media	over 9,000

## RUSAL Festival project

This programme seeks to encourage interest in culture and the arts, by conducting a wide range of cultural and educational events in local communities. Related events included festivals of modern Russian cinema in small towns and villages, theatre tours, interactive science shows, and special bike tours around historic and

cultural sites. From 2016 to 2019, the programme made a positive contribution in 18 Russian and Armenian cities, with assistance from 1,500 volunteers: 150 events and activities were held, attended by over 300 thousand people.

## 7.3 INVESTING IN LOCAL COMMUNITIES OUTSIDE RUSSIA

GRI 413-1, GRI 203-2, HKEX KPI B8.1

Throughout the history of RUSAL's operations in foreign countries the Company has invested in community development and helped to boost the quality of health care and educational systems as well as social services. Through social investment, the Company returns to society some of the revenues it generates from production. A selection of projects implemented in 2019 in Guinea, Jamaica, and Ireland are described below. In 2019, social investment abroad amounted to USD1.8 million. *HKEX KPI B8.2*

### Guinea

GRI 203-1

RUSAL has a number of operations in Guinea and is one of the largest foreign investors in the country in the social sphere, where the Company assists local authorities in fighting poverty in rural settlements.

The Company's priorities in Guinea include the sustainable development of local communities, with projects in place to provide drinking water, electricity, medical and educational assistance to remote villages, and other communities in need.

As part of activities to support social and economic development in territories of operation, financial assistance is provided to four Union of Producers of Mambia organisations and four female production groups in Friguiaqbe, as part of efforts to combat poverty.

### Scholarship programme

RUSAL has for many years contributed to the education of Guineans by awarding scholarships to young students.

101 students successfully completed their first year of a six-year Scholarship-2018 programme. The educational programme is designed for Guineans aged between 18 and 25, who attend Russian Universities to train as mining specialists, rail workers, economists, builders, and medical and administrative workers.

### Cultural projects

The Company respects the culture and customs of the country and assists in the building of religious facilities (mosques and churches) in Conakry and Kindia, by supplying construction materials and providing financial support to mosques before religious holidays in Fria, Kindia, Conakry, and Boke.

### Infrastructure projects

RUSAL invests regularly in basic infrastructure in Guinea to supply drinking water and provide electricity, medicine, and education to remote communities, in particular:

- The construction and equipping of an elementary school in Nianaya was completed
- School equipment was procured and catering was provided for the Nelson Mandela School in the village of Debele
- Wells were constructed to supply villages with drinking water in the Kindia, Boke, and Fria areas.

### Equal rights and poverty

Financial assistance was provided to 12 organisations in the Kindia Region that combat poverty and seek to bring about gender equality.

Funds were provided to 14 villages to finance the construction of infrastructure projects.

### Medical service

All RUSAL productions in Guinea have their own medical departments.

In the City of Fria, the medical service of the Phrygia bauxite-alumina complex consists of two dispensaries and a hospital with surgical, therapeutic, and maternity wards. The hospital has a capacity of 120 beds and receives around 8,000 patients annually. Since 2016, over 7,000 babies have been delivered in the maternity ward.

The Kindia Bauxite Company has two dispensaries and three 24-hour posts. Over 12,000 children annually undergo consultations and treatment, 2,000 children are vaccinated, and 500 babies are born in the maternity ward.

Three 24-hour medical posts are operating at the Quarry Bussere, Rail Depot, and Taressa Port production facilities, as part of the KOBAD medical service.

Aye-Coye medical centres provide medical and advisory assistance and perform pest control activities.

### Jamaica

GRI 203-1

RUSAL is the single largest employer in its operating areas in Ewarton and Old Harbour in St. Catherine in Jamaica. The Company contributes significantly to the nation's development, and continues to invest in projects as part of its corporate social responsibility mandate. These projects and activities are aimed at enhancing education and fostering social and economic growth, and, most importantly, nurturing a harmonious relationship between the Company and its host communities.

The Company invested in a number of projects in 2019.

### Educational scholarships

The Company awarded full scholarships to nine primary school students for matriculation to a secondary school.

Local scholarships and bursaries were awarded to 50 students in tertiary education, as financial assistance during their period of study.

Five scholarships were awarded to final-year engineering students in the local University of Technology, to assist them financially during their final year of study.

25 Jamaican students studying at the Federal University in Krasnoyarsk in Russia continued to be sponsored by the Company.

### Internship programme

As part of WINDALCO's Summer Employment Programme, the Company employed several university students to take part in an internship at the Company during the summer months of July and August.



## Good health and well-being



**Project:** Ebola Vaccine

**Stakeholders:** Guinean Government and public, the global community

RUSAL built a Russian-Guinean Scientific Clinical and Diagnostic Centre for Epidemiology and Microbiology for the purpose of developing an EBOLA vaccine in Guinea.

In 2019, the centre completed a two-year research programme for the GamEvak-Combi vaccine. Over 2,000 local residents were vaccinated, with the WHO verifying the results. A Russian medication will be used to combat Ebola globally.



### Back-to-school activities

Hundreds of students received assistance ahead of their new school term.

### Sporting activities

A number of football, table tennis, cricket, and athletic programmes were sponsored, both nationally and locally, as well as sports events at own sport facilities at Ewarton, Port Esquivel, and Kirkvine works.

### Infrastructure activities

Infrastructure work and assistance were provided to the Crescent Primary School, to construct a perimeter wall to separate the school premises from WINDALCO's rail lines.

Financial assistance was provided to restore a fire-damaged Jamaica National Children's Home. In addition, charity races were organised by company volunteers and sponsored by the Company, with the proceeds going to hospitals and childcare facilities and to families in need.

Company volunteers repaired school buildings, community centres, and facilities as part of annual Labour Day community projects.

## Ireland

RUSAL's Aughinish Alumina plant is situated in the Shannon Estuary on a 525-hectare site, in the heart of an Irish rural farming community. The plant is surrounded by several small towns and villages, and local residents have a close link to the activities of the refinery. The Company actively engages with the local community to maintain its good standing, organising social events as well as other forms of social investment.

### Education

The plant hosted a number of educational trips to its facilities for local educational establishments. Insights were provided into the process of alumina production, as well as the everyday life of the plant.

RUSAL participated in the Limerick for Engineering Showcase, promoting the STEM world among schoolchildren.

The Company sponsored charity and fundraising events at local primary schools.

Financial support was provided to the Local Flying Boat Museum.

### Charity

During the Christmas holidays employees donate money to local charities, as part of a yearly tradition.

The annual RUSAL Aughinish charity organised fundraising events, including a 10-kilometre run and six-kilometre walk at the Aughinish Nature Trail.

The Company invested in the further development of nature trails in its vicinity. The trails are considered a local amenity and are used by all members of the local community.

RUSAL Aughinish employees annually nominate a charity: in 2019 a charity that promotes positive mental health was selected.

### Sports and leisure

The Company provides extensive sponsorship support to local Gaelic Athletic Association Clubs, and is the main sponsor of the local football club located in the island of Aughinish.

Company employees and their families are active participants in sports clubs, from players to volunteer coaches.

RUSAL Aughinish has sports facilities on site, which are available to both employees and local residents. Activities and facilities include tennis, indoor basketball/football, and a small gymnasium.

### Culture and the arts

RUSAL Aughinish assists and supports the local town of Askeaton during its annual St. Patrick's Day festival.

### Community

The Company supports local community councils in their efforts to improve the local area. In addition, RUSAL supports local clubs and associations.

The annual Barrigone Robertstown Family Fun Day is a traditional Irish Family festival held annually in local communities, with support from RUSAL Aughinish.

RUSAL Aughinish holds annual community events that are organised to discuss potential ways to develop and improve surrounding areas.

## Plans for 2020 and the medium term

From a strategic perspective the Company's plans for 2020 include:

- Further improving all social programmes, including the RUSAL territory programme in a new format
- Finalising the internal decision-making process for social investments
- Creating a sustainable development strategy, including a social investments component
- Elaborating a methodology to gauge the efficiency and effectiveness of social investments in terms of their impact.

# APPENDICES

## Appendix 1. About this Report

### Approach to reporting

GRI 102-46, GRI 102-50, GRI 102-51, GRI 102-52, GRI 102-54, HKEX Para 9, HKEX Para 11

This Sustainability Report of RUSAL (“the Report”) reflects the main results of the Company’s sustainable development management activities from 1 January 2019 to 31 December 2019.

The Report also includes a description of management approaches, achieved results, as well as the Company’s plans for 2020 and the medium term. The previous report was published in 2019 and disclosed the Company’s results for the 2018 calendar year. The Company has published sustainability reports annually since 2010. Electronic versions of reports are available on the corporate website of RUSAL: <https://rusal.ru/en/sustainability/report/>.

The Sustainability report is prepared in accordance with the core-level reporting of Global Reporting Initiative (GRI) Standards. The Company has continued to use where applicable the requirements of the GRI Mining and Metals Sector Supplement. In addition, the Sustainability report is prepared in line with the Environmental, Social, and Governance Reporting Guide of HKEX and ASI Standards, and includes information about the Company’s contributions to achieving UN Sustainable Development Goals.

The Sustainability report is published in the English, Chinese and Russian languages.

### The principles forming the contents of the Report

#### 1. Stakeholder engagement

In compiling the contents of the Report, the opinions of stakeholders were taken into account; interaction with stakeholders occurs at all stages of the Company’s operations.

Before beginning to create the Report, a survey of stakeholders was conducted to identify material topics. You can read more about the process to select material topics in the section Material Topics, and on interactions with stakeholders — in the section Stakeholder engagement.

#### 2. Sustainable development context

This Report covers topics relating to the Company’s activities in the economic, social, and environmental spheres. In addition to the performance of activities in these areas in 2019, goals for the future are also presented. Chapter Innovation, presents the Company’s projects and developments, which will have a positive impact on the environment, the economies of the countries where the Company operates, and society as a whole.

#### 3. Materiality

In determining the contents of the Report, an analysis of material topics affecting the Company and its stakeholders was conducted. The Report covers in detail the results of activities on selected material topics. You can read more about the process to select material topics in the section Material Topics.

#### 4. Completeness

In preparing the Report, data were collected on all key indicators relevant to the Company and its stakeholders. The data include information on all production facilities of the Company, and are presented in the section Reporting boundaries.

#### 5. Quantitative

The calculation, collection, and consolidation of economic, environmental, and social indicators presented in the Report were carried out in accordance with GRI Standard reporting principles and requirements, and are presented in the section Methodology of data preparation.

#### 6. Consistency

Descriptions of changes in data collection methods and methods for calculating indicators are presented in the section Methodology of data preparation and additional statements in the text of the Report.

### Reporting boundaries

HKEX Para 10, GRI 102-45

The information on sustainable development presented in this Report relates to the activities of RUSAL production facilities. In 2019, the Boguchansky Aluminium Smelter was included in the scope of assets.

The assets included in the Sustainability report are presented below by product type.

#### Assets included in the boundaries of the Report

Product type	Assets
Aluminium smelters	<ul style="list-style-type: none"> <li>KUBAL (Sweden)</li> <li>Alscon (Nigeria)</li> <li>Novokuznetsk Aluminium Smelter</li> <li>Bratsk Aluminium Smelter</li> <li>Irkutsk Aluminium Smelter</li> <li>Krasnoyarsk Aluminium Smelter</li> <li>Sayanogorsk Aluminium Smelter</li> <li>Kandalaksha Aluminium Smelter</li> <li>Volgograd Aluminium Smelter</li> <li>Nadvoitsy Aluminium Smelter</li> <li>Boguchansky Aluminium Smelter</li> </ul>
Bauxite	<ul style="list-style-type: none"> <li>Friguia (Guinea)</li> <li>Bauxite Company of Kindia (Guinea)</li> <li>Bauxite Company of Guyana Inc. (Guyana)</li> <li>Boksit Timana</li> <li>North Urals Bauxite Mine</li> <li>Windalco (Jamaica)</li> </ul>

Product type	Assets
Alumina refineries	<ul style="list-style-type: none"> <li>Aughinish Alumina (Ireland)</li> <li>Bogoslovsk Aluminium Smelter</li> <li>Urals Aluminium Smelter</li> <li>Friguia Alumina Refinery (Guinea)</li> <li>Achinsk Alumina Refinery</li> <li>Winalco (Jamaica)</li> <li>Boksitogorsk Alumina Refinery</li> <li>Nikolaev Alumina Refinery (Ukraine)</li> <li>Dian-Dian (Guinea)</li> </ul>
Powders	<ul style="list-style-type: none"> <li>Powder Metallurgy –Krasnoturyinsk</li> <li>Powder Metallurgy – Shelekhov</li> </ul>
Foils	<ul style="list-style-type: none"> <li>SAYANAL</li> <li>Ural Foil</li> <li>ARMENAL (Armenia)</li> <li>Sayana Foil</li> </ul>
Silicon	<ul style="list-style-type: none"> <li>Kremniy</li> <li>RUSAL Silicon Ural</li> </ul>
Production of cryolites and cathodes	<ul style="list-style-type: none"> <li>South Ural Cryolite Plant</li> </ul>

### Material topics

HKEX Para 9, HKEX Para 10, GRI 103-1, GRI 102-46, GRI 102-47

To determine topics of the greatest importance for the Company and to establish the contents of the Report, the Management divisions responsible for managing sustainability conducted a procedure to identify and evaluate material topics.

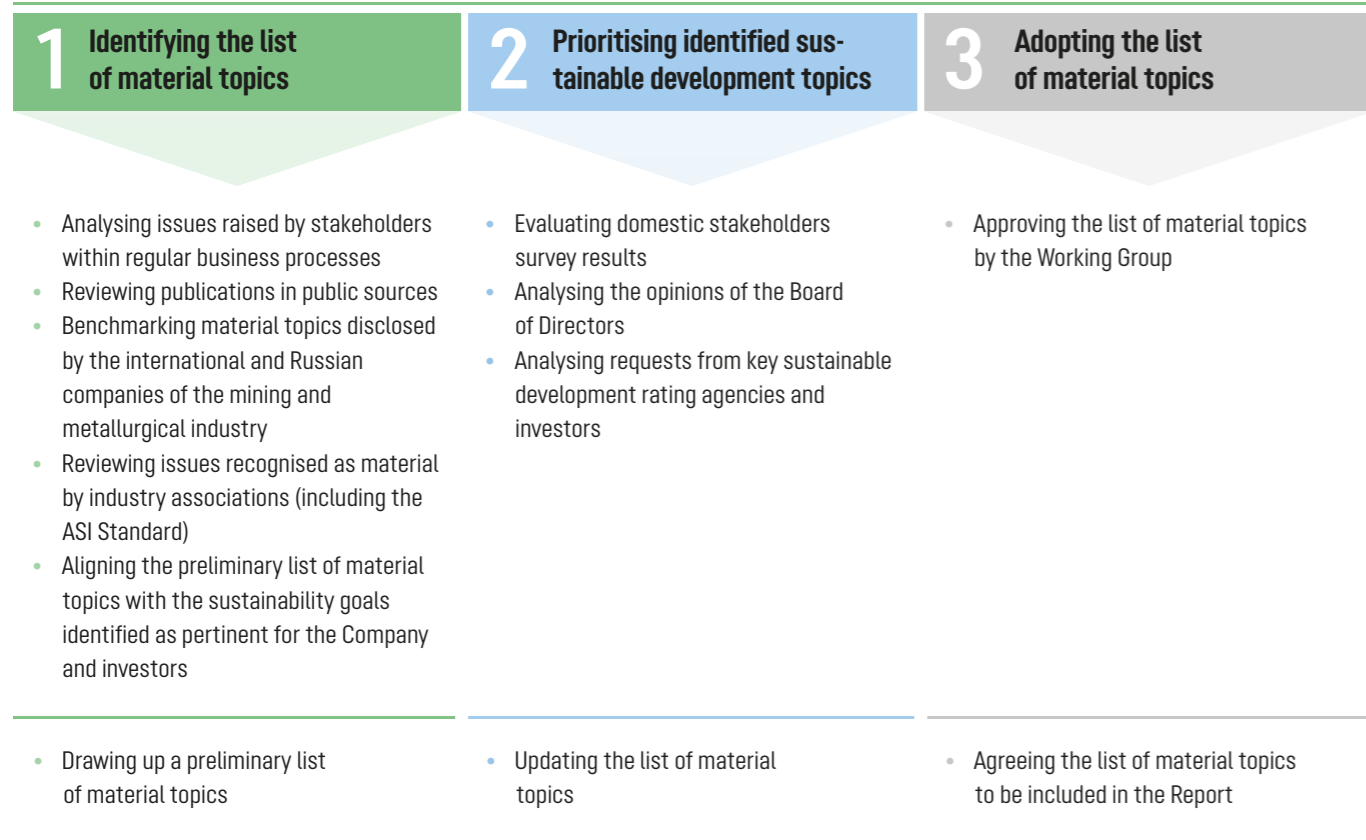
The materiality assessment process is divided into three main stages – see the diagram below.

The assessment of materiality was carried out in accordance with GRI Standards. Eighteen material topics were identified and a materiality matrix was created.

Our key stakeholders contributed to the identification of material topics by completing an online form. The Company determines, lists, and ranks material topics in line with its strategy, risk assessments, and management foresights, using a scale of from 1 to 10, where 1 stands for 'not important' and 10 'the most important'.

In total, 169 people participated in the survey, including shareholders, investors, and analysts; employees and trade unions; non-profit organisations; local communities; customers and suppliers; federal and regional authorities; and local environmental communities.

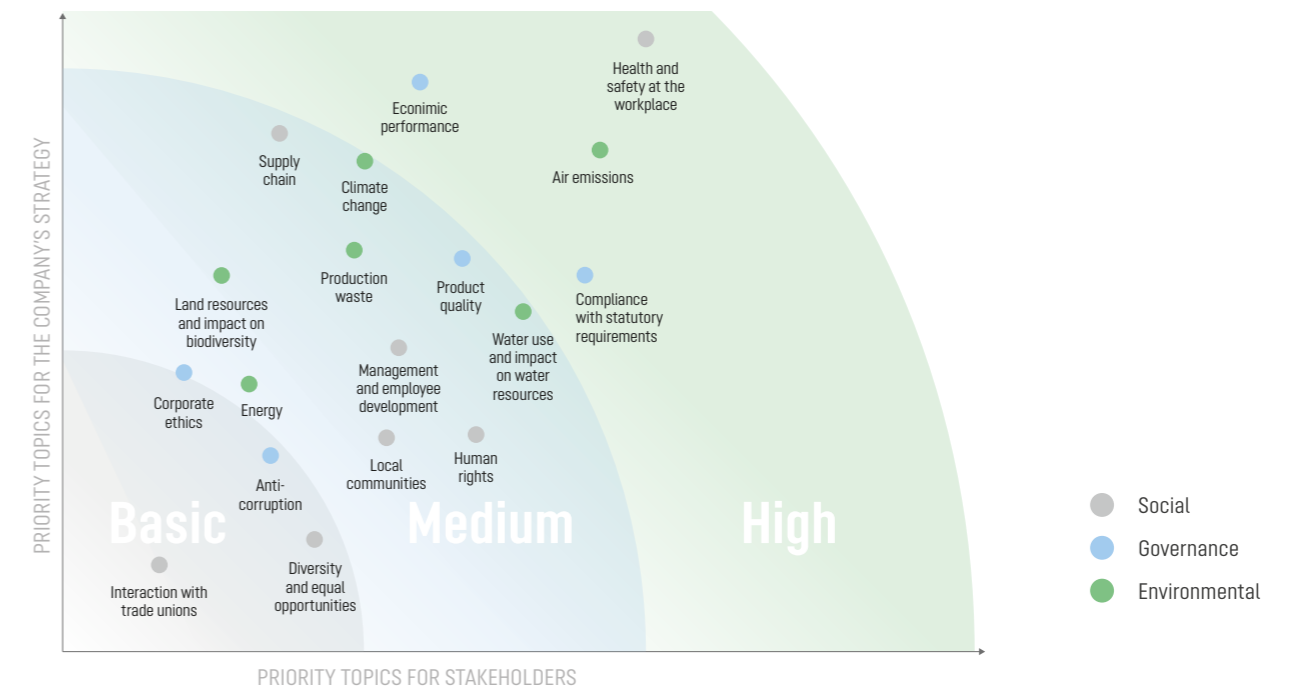
#### Approach to identifying material topics



### Material topics

Category	Nº	Topic	Page number
Environmental	1	Energy	104
	2	Water use and impact on water resources	85
	3	Land resources and impact on biodiversity	93
	4	Air emissions	91
	5	Production waste	87
	6	Climate change	96
Social	7	Employment and employee development	52
	8	Health and safety in the workplace	64
	9	Interaction with trade unions and collective bargaining	63
	10	Diversity and equal opportunity	48
	11	Local communities	106
	12	Human rights	46
Governance	13	Economic performance	23
	14	Compliance with statutory and regulatory requirements	84
	15	Product quality	32
	16	Anti-corruption	49
	17	Supply chain	34
	18	Corporate ethics	42

### Materiality matrix





## Methodology of data preparation

HKEX Para 9, HKEX Para 10, GRI 102-48, GRI 102-49

The sustainability performance information contained in the Report was collected in accordance with GRI Standard reporting principles and requirements through the Company's corporate data reporting system. Data sources are from official reporting forms provided annually to the state statistics authorities, and data from management records. Financial performance is based on IFRS consolidated financial statements and is presented in US dollars.

The reported figures were converted into US dollars according to the weighted average annual exchange rate for 2019.

In order to ensure the comparability of data, the most significant indicators related to the Company's activities are presented in three-year dynamics.

There were no significant changes in the methods for calculating indicators in 2019.

### Changes in list of material topics, 2019 vs. 2018

Material topics for 2018	Material topics for 2019	Reasons for changes
Employment	Employment and employee development	The topic was combined with the topic Training and education of employees. Both topics concerned similar issues and were reformulated for better coverage of the topic in question.
Training and education of employees	–	The topic was combined with the topic Employment and removed from the list of material topics.
Climate and energy efficiency	Climate change Energy	The topic was divided into two different topics: Climate change and Energy, to cover more aspects of the Company's activities in each topic separately.

## Contact information

GRI 102-53

Please see the website and Annual Report, available at <https://rusal.ru/en/investors/financial-stat/annual-reports/> for more information about the Company's activities, corporate governance, and operational performance.

For further information about the Report, sustainability performance, or to provide feedback on this report, please contact us:

## Restatements of information

GRI 102-48

In the second half of 2019, based on the results of instrumental measurements, the value of the reduction in direct specific greenhouse gas emissions from existing alumina production achieved in 2018 was compared with 2014, and amounted to 1%.

## Changes in the list of material topics

In order to provide a more in-depth disclosure of information, which is important for stakeholders, the material topic Diversity and Equal Opportunities has been added.

Other changes in the list of material topics and the reasons behind such changes are set out in table "RUSAL's direct economic value generated and distributed" on page 23.

## Appendix 2. Additional quantitative data

### Employees

Personnel structure	Units of measurement	2017	2018	2019
<b>NEW EMPLOYEE HIRES</b> <i>GRI 401-1</i>				
Russia				
Women	persons	771	677	1,558
Men	persons	3,627	3,682	4,728
Other countries				
Women	persons	114	119	126
Men	persons	981	750	1,724

### Environmental protection

Environmental compliance	Units of measurement	2017	2018	2019
Total monetary value of non-significant fines	USD thousand	36.1	17.6	5.0

Water	Units of measurement	2017	2018	2019
<b>GENERAL WATER INPUT (ONLY FRESH WATER)</b> <i>GRI 303-3, ASI PS 7.1</i>				
broken down by source				
Surface water	%	66.14	69.17	71.53
Groundwater	%	15.75	10.12	8.78
Urban networks	%	11.78	11.59	11.43
Other	%	6.34	9.12	8.26

### FRESH WATER

*GRI 303-1, HKEX KPI A2.2, ASI PS 7*

Input	million cubic metres	155.1	147.5	162.1
Used for production needs	million cubic metres	95.5	86.3	85.8
<b>TOTAL VOLUME OF FRESH WATER CONSUMPTION</b> <i>GRI 303-5, HKEX KPI A2.2</i>				
broken down by divisions				
Aluminium Division	thousand cubic metres	25,572.39	26,937.80	26,018.40
Alumina Division	thousand cubic metres	123,366.99	115,127.16	131,254.58

Water	Units of measurement	2017	2018	2019
New Projects Directorate	thousand cubic metres	2,814.38	1,691.40	1,598.85
Downstream Division	thousand cubic metres	3,363.38	3,754.05	3,268.67
Share of circulating and recycling of the water supply	%	93.0	93.3	92.6
<b>TOTAL VOLUME OF WASTEWATER DISCHARGES</b> <i>GRI 306-1, HKEK KPI A1.1, ASI PS 6.2</i>	thousand cubic metres	3,011.91	33,558.53	34,710.50
broken down by divisions				
Aluminium Division	thousand cubic metres	224.59	228.28	234.39
Alumina Division	thousand cubic metres	2,785.04	33,327.97	34,206.28
New Projects Directorate	thousand cubic metres	2.28	2.28	2.28
Downstream Division	thousand cubic metres	0	0	267.55
<b>INDUSTRIAL WASTEWATER DISCHARGES INTO SURFACE WATER</b> <i>GRI 306-1, HKEK KPI A1.1, ASI PS 6.2</i>	million cubic metres	34.9	33.5	34.7
broken down by type				
Polluted	million cubic metres	21.8	15.4	22.0
Treated	million cubic metres	13.1	18.1	12.4
Nominally clean	million cubic metres	0	0	0.3

Waste	Units of measurement	2017	2018	2019
Accumulation of non-hazardous waste on 31 December	million tonnes	894	939	1,030
<b>WASTE MANAGEMENT, EXCLUDING OVERBURDEN ROCKS</b> <i>GRI 306-2, HKEK KPI A1.1, A1.3, A1.4, A1.6, ASI PS 6.5</i>				
Generated	million tonnes	15.2	14	14
Disposed	million tonnes	13.1	11.7	12.1
Recycled	million tonnes	2.6	2.0	2.0
Hazardous waste				
Generated	million tonnes	0.4	0.3	0.3
Disposed	million tonnes	0.0	0.0	0.1
Recycled	million tonnes	0.6	0.2	0.2
Non-hazardous waste				
Generated	million tonnes	14.8	13.8	13.7

Waste	Units of measurement	2017	2018	2019
Disposed	million tonnes	13.1	11.6	12.1
Recycled	million tonnes	2.0	1.9	1.8
<b>SPECIFIC WASTE</b>				
Bauxite residue and nepheline mud from alumina production <i>GRI MM3</i>				
Generated	million tonnes	13.2	12.6	12.8
Disposed	million tonnes	11.9	11.3	11.6
Recycled	million tonnes	1.2	1.3	1.2
Spent pot lining <i>ASI PS 6.7</i>				
Generated	thousand tonnes	45.0	48.1	41.6
Disposed	thousand tonnes	22.3	13.3	10.2
Recycled	thousand tonnes	27.2	29.2	32.6

Land	Units of measurement	2017	2018	2019
Disturbed	hectares	114.2	204.6	685.6
Rehabilitated	hectares	63.9	53.5	18.6

## Climate change

GHG emissions	Units of measurement	2017	2018	2019
<b>DIRECT (SCOPE 1) GHG EMISSIONS</b> <i>HKEK KPI A1.2</i>				
broken down by divisions				
Aluminium Division	tonnes CO <sub>2</sub> -e	9,064,796	8,727,655	8,819,639
Other production	tonnes CO <sub>2</sub> -e	16,945,225	15,137,274	17,255,741
<b>INDIRECT (SCOPE 2) GHG EMISSIONS</b> <i>HKEK KPI A1.2</i>				
broken down by divisions				
Aluminium Division	tonnes CO <sub>2</sub> -e	1,633,524	877,668	748,960
Other production	tonnes CO <sub>2</sub> -e	1,403,963	1,117,081	1,289,901
<b>SPECIFIC GHG EMISSIONS</b> <i>HKEK KPI A1.2</i>				
Direct (Scope 1) specific GHG emissions in electrolysis operations	tonnes CO <sub>2</sub> -e per tonne of aluminium produced	2.2	2.11	2.03

## Energy efficiency

Energy	Units of measurement	2017	2018	2019
<b>FUEL CONSUMPTION</b> <i>HKEX KPI A2.1, ASI 5.1, GRI 302-1</i>				
broken down by type of fuel				
Natural gas	billion cubic m	2.81	2.90	2.92
Heavy fuel	million tonnes	0.43	0.42	0.57
Coal	million tonnes	3.63	3.59	3.47
Diesel	million tonnes	0.08	0.09	0.10
Other <sup>27</sup>	million tonnes	0.00	0.10	0.08
<b>ENERGY CONSUMPTION (PURCHASED / RECEIVED ELECTRICITY AND HEAT)</b> <i>GRI 302-1</i>				
broken down by type				
Electricity	million MWh	63	65	67
Heat	million Gcal	0.9	0.8	0.7

27. For 2017 the figure includes gasoline, kerosene, and LNG.  
For 2018 and 2019 the figures also include coke, charcoalt, and biofuel.

## Appendix 3. GRI Content Index

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
<b>GRI 102 GENERAL DISCLOSURES</b>						
<b>1. ORGANISATIONAL PROFILE</b>						
GRI 102-1	Name of the organisation	About RUSAL	p. 4			
GRI 102-2	Activities, brands, products, and services	Our products	p. 4			
GRI 102-3	Location of headquarters	About RUSAL	p. 4			
GRI 102-4	Location of operations	Where we operate	p. 8			
GRI 102-5	Ownership and legal form		p. 5			
GRI 102-6	Markets served	Where we operate Our products	p. 8 p. 4			
GRI 102-7	Scale of the organisation	About RUSAL Where we operate 2019 Sustainability Profile	p. 4 p. 8 p. 10			
GRI 102-8	Information on employees and other workers	3.2 Personnel structure	p. 55		KPI B1.1	
GRI 102-9	Supply chain	1.4 Supply chain	p. 34		Aspect B5, KPI B5.1, Para 12	
GRI 102-10	Significant changes to the organisation and its supply chain	1.4 Supply chain	p. 34		Aspect B5	
GRI 102-11	Precautionary Principle or approach	Approach to managing sustainability risks 1.5 Innovation	p. 18 p. 40			
GRI 102-12	External initiatives	Contribution to UN Sustainable Development Goals Participation in industry organisations and international initiatives	p. 20 p. 24			
GRI 102-13	Membership of associations	Participation in industry organisations and international initiatives	p. 24			
<b>2. STRATEGY</b>						
GRI 102-14	Statement from senior decision-maker	Message from the CEO	p. 12		Para 9, 10	
GRI 102-15	Key impacts, risks, and opportunities	Key sustainability risks Approach to sustainability management	p. 18 p. 14		Para 9, 10	

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
<b>3. ETHICS AND INTEGRITY</b>						
GRI 102-16	Values, principles, standards, and norms of behaviour	2.2 Promoting ethical business conduct	p. 45			Criteria 1.3, 2.5, 9.1
		2.3 Human rights	p. 46			
		2.4 Anti-corruption and compliance	p. 49			
GRI 102-17	Mechanisms for advice and concerns about ethics	2.5 The Signal hotline	p. 51		KPI B7.2	Criteria 3.4
<b>4. GOVERNANCE</b>						
GRI 102-18	Governance structure	Sustainability governance	p. 16	Additional information can be found in the RUSAL Annual Report 2019, Corporate governance report, p. 130		
GRI 102-19	Delegating authority	Sustainability governance	p. 16	Additional information can be found in the RUSAL Annual Report 2019, Corporate governance report, p. 130		
GRI 102-20	Executive-level responsibility for economic, environmental, and social aspects	Sustainability governance	p. 16			Criteria 2.2
GRI 102-21	Consulting stakeholders on economic, environmental and social topics	Stakeholder engagement	p. 22			
GRI 102-22	Composition of the highest governance body and its committees			RUSAL Annual Report 2019, Corporate governance report, p. 131		
GRI 102-23	Chair of the highest governance body			RUSAL Annual Report 2019, Corporate governance report, p. 133		
GRI 102-24	Nominating and selecting the highest governance body			RUSAL Annual Report 2019, Corporate governance report, p. 134		
GRI 102-25	Conflicts of interest			RUSAL Annual Report 2019, Corporate governance report, p. 120		
GRI 102-26	Role of the highest governance body in setting purpose, values, and strategy	Sustainability governance	p. 16		Para 8	
GRI 102-27	Collective knowledge of the highest governance body	Sustainability governance	p. 16	RUSAL Annual Report 2019, Corporate governance report		
		Key sustainability risks	p. 18			
GRI 102-28	Evaluating the highest governance body's performance			RUSAL Annual Report 2019, Corporate governance report, p. 136		
GRI 102-29	Identifying and managing economic, environmental, and social impacts	Sustainability governance	p. 16		Para 9,10	Criteria 3.1
		Key sustainability risks	p. 18			

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
GRI 102-30	Effectiveness of risk management processes	The Sustainability risk management system	p. 18	RUSAL Annual Report 2019, Corporate governance report, p. 140	Para 9,10	
GRI 102-31	Reviewing economic, environmental, and social topics	Approach to sustainability management	p. 14		Para 9,10	Criteria 3.1
GRI 102-32	Highest governance body's role in sustainability reporting	Sustainability governance	p. 16	Sustainability report is approved by the Board of Directors	Para 8	
GRI 102-33	Communicating critical concerns	Key sustainability risks	p. 18	RUSAL Annual Report 2019, Corporate governance report, p. 141		
GRI 102-34	Nature and total number of critical concerns	Sustainability governance	p. 16	Significant Sustainable development issues are reported to the Board of Directors quarterly		
GRI 102-35	Remuneration policies			RUSAL Annual Report 2019, Emolument policy, p.125		
GRI 102-36	Process for determining remuneration			RUSAL Annual Report 2019, Emolument policy, p.125		
GRI 102-37	Stakeholders' involvement in remuneration			RUSAL Annual Report 2019, Emolument Policy, p.125		
GRI 102-38	Annual total compensation ratio			RUSAL Annual Report 2019, Directors' remuneration, p. 183		
GRI 102-39	Percentage increase in annual total compensation ratio			RUSAL Annual Report 2019, Directors' remuneration, p. 183		
<b>5. STAKEHOLDER ENGAGEMENT</b>						
GRI 102-40	List of stakeholder groups	Stakeholder engagement	p. 22		Para 6	Criteria 3.4
GRI 102-41	Collective bargaining agreements	3.6 Social partnership	p. 63			Criteria 10.1
GRI 102-42	Identifying and selecting stakeholders	Stakeholder engagement	p. 22		Para 6	
GRI 102-43	Approach to stakeholder engagement	Stakeholder engagement	p. 22		Para 6	
GRI 102-44	Key topics and concerns raised	Stakeholder engagement	p. 22		Para 6	
<b>6. REPORTING PRACTICE</b>						
GRI 102-45	Entities included in the consolidated financial statements	Reporting boundaries	p. 125		Para. 9, 10	
GRI 102-46	Establishing the report content and topic boundaries	Approach to reporting, Material topics	p. 124, p. 126		Para 11	

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
GRI 102-47	List of material topics	Material topics	p. 126		Para 10	Criteria 3.1
GRI 102-48	Restatements of information	Methodology of data preparation	p. 128			
GRI 102-49	Changes in reporting	Methodology of data preparation	p. 128		Para. 9, 10	
GRI 102-50	Reporting period	Approach to reporting	p. 124			
GRI 102-51	Date of most recent report	Approach to reporting	p. 124			
GRI 102-52	Reporting cycle	Approach to reporting	p. 124			
GRI 102-53	Contact point for questions regarding the report	Contact information	p. 128			
GRI 102-54	Reporting complaints in accordance with the GRI Standards	Approach to reporting	p. 124			
GRI 102-55	GRI content index	Appendix 3. GRI Content Index	p. 133			
GRI 102-56	External assurance			External assurance will be performed as part of the En+ sustainability Report review	Para. 7	
<b>GRI 103 MANAGEMENT APPROACH</b>						
GRI 103-1	Explanation of the material topic and its boundaries	Material topics	p. 126		Para. 9, 10	Criteria 3.1
GRI 103-2	The management approach and its components			The management approach is presented in the Report before the disclosure of data on each material topic	Para. 9, 10	Criteria 3.1
GRI 103-3	Evaluation of the management approach			Management approaches are evaluated within certification and supervisory audits of respective management systems, as well as corporate audits Messages about these events are contained in the text of the Report		
<b>MATERIAL TOPICS</b>						
<b>GRI 200 ECONOMIC</b>						
<b>GRI 201 ECONOMIC PERFORMANCE</b>						
GRI 103	Management approach	Approach to sustainability management	p. 14		Para 9, 10	
GRI 201-1	Direct economic value generated and distributed	Value creation for stakeholders	p. 23		KPI B8.2	Criteria 3.3
GRI 201-2	Financial implications and other risks and opportunities due to climate change	Key sustainability risks 5.1 Management approach 6.2 Climate strategy	p. 18 p. 82 p. 100			

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
GRI 201-3	Established benefit plan obligations and other retirement plans			RUSAL workers participate in the pension plans of countries where the Company's operates. The Company allocates funds for the future pensions of its employees pro rata to payroll amounts. Targeted funds have been established for this purpose in different countries.		
GRI 201-4	Financial assistance received from government			No financial assistance was received from the government during the reporting period.		
<b>GRI 202 MARKET PRESENCE</b>						
GRI 103	Management approach	3.1 Management approach	p. 54		Para 9,10, Aspect B1	
GRI 202-1	Ratios of standard entry level wage by gender compared to local minimum wage	3.4 Motivation and remuneration	p. 59			Criteria 10.7
GRI 202-2	Share of senior management hired from the local community	3.2 Personnel structure	p. 55			
<b>GRI 203 INDIRECT ECONOMIC IMPACTS</b>						
GRI 103	Management approach	7.1 Management approach	p. 108		Aspect B8 Para 9,10	
GRI 203-1	Infrastructure investments and services supported	7.2 Investing in local communities in Russia 7.3 Investing in local communities outside Russia	p. 112 p. 120			KPI B8.1, B8.2
GRI 203-2	Significant indirect economic impacts	7.2 Investing in local communities in Russia 7.3 Investing in local communities outside Russia	p. 112 p. 120			KPI B8.1, B8.2
<b>GRI 204 PROCUREMENT PRACTICES</b>						
GRI 103	Management approach	1.4 Supply chain. Interactions with suppliers	p. 34		Aspect B5	
GRI 204-1	Share of spending on local suppliers	1.4 Supply chain	p. 34			KPI B5.1
<b>GRI 205 ANTI-CORRUPTION</b>						
GRI 103	Management approach	2.4 Anti-corruption and compliance 2.5 The Signal hotline	p. 49 p. 51		Aspect B7; Para. 9, 10; KPI B7.2	Criteria 1.2
GRI 205-1	Operations assessed for corruption-related risks	2.4 Anti-corruption and compliance	p. 49			

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
GRI 205-2	Communication and training about anti-corruption policies and procedures	2.4 Anti-corruption and compliance	p. 49			
GRI 205-3	Confirmed incidents of corruption and actions taken	2.4 Anti-corruption and compliance	p. 49		Aspect B7, KPI B7.1	
<b>GRI 300 ENVIRONMENTAL</b>						
<b>GRI 302 ENERGY</b>						
GRI 103	Management approach	6.1 Management approach 6.3 Energy efficiency	p. 98 p. 104		Aspect A2, KPI A2.3, A3.1, Para 9, 10	Criteria 2.1; 2.3
GRI 302-1	Energy consumption within the organisation	6.3 Energy efficiency Appendix 2. Additional quantitative data	p. 105 p. 129		KPI A2.1	Criteria 5.1
GRI 302-3	Energy intensity	6.3 Energy efficiency	p. 105		KPI A2.1	
GRI 302-4	Reduction of energy consumption	6.3 Energy efficiency	p. 104		KPI A2.3	
<b>GRI 303 WATER AND EFFLUENTS</b>						
GRI 103	Management approach	5.1 Management approach 5.2 Water resources	p. 82 p. 85		Aspect A2 Para 9, 10	Criteria 2.1; 2.3
GRI 303-1	Interactions with water as a shared resource	5.2 Water resources Appendix 2. Additional quantitative data	p. 85 p. 129		KPI A2.2	Criteria 7.1
GRI 303-2	Management of water discharge-related impacts	5.2 Water resources	p. 85		KPI A3.1	Criteria 6.2
GRI 303-3	Water withdrawal	5.2 Water resources Appendix 2. Additional quantitative data	p. 85 p. 129		KPI A2.4	Criteria 7.1
GRI 303-4	Water discharges	5.2 Water resources	p. 85			Criteria 6.2
GRI 303-5	Water consumption	5.2 Water resources Appendix 2. Additional quantitative data	p. 85 p. 129		KPI A2.2	
<b>GRI 304 BIODIVERSITY</b>						
GRI 103	Management approach	5.1 Management approach 5.6 Land and biodiversity	p. 82 p. 93		Aspect A3; KPI A3.1; Para. 10	Criteria 2.1; 2.3
GRI 304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	5.6 Land and biodiversity	p. 93			Criteria 8.4
GRI 304-2	Significant impacts of activities, products, and services on biodiversity	5.6 Land and biodiversity	p. 93		KPI A3.1	Criteria 8.1
GRI 304-3	Habitats protected or restored	5.6 Land and biodiversity	p. 93			Criteria 8.2, 8.4

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
<b>GRI 305 EMISSIONS</b>						
GRI 103	Management approach	6.1 Management approach 6.2 Climate strategy	p. 98 p. 99		Aspect A1, A3, KPI A1.5, KPI A3.1, Para 9,10	Criteria 2.1, 2.3, 5.3
GRI 305-1	Direct (Scope 1) GHG emissions	6.2 Climate strategy Appendix 2. Additional quantitative data	p. 99 p. 129		KPI A1,1, A1.2	Criteria 5.1
GRI 305-2	Energy indirect (Scope 2) GHG emissions	6.2 Climate strategy Appendix 2. Additional quantitative data	p. 99 p. 129		KPI A1,1, KPI A1.2	Criteria 5.1
GRI 305-3	Other indirect (Scope 3) GHG emissions	6.2 Climate strategy	p. 99		KPI A1,1, KPI A1.2	Criteria 5.1
GRI 305-4	GHG emissions intensity	6.2 Climate strategy Appendix 2. Additional quantitative data	p. 99 p. 129		KPI A1.2	Criteria 5.3
GRI 305-5	Reduction of GHG emissions	6.2 Climate strategy	p. 99		KPI A1.5	Criteria 5.2
GRI 305-7	Nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ), and other significant air emissions	5.5 Air emissions	p. 91		KPI A1.1 KPI A1.5	Criteria 6.1
<b>GRI 306 EFFLUENTS AND WASTE</b>						
GRI 103	Management approach	5.1 Management approach 5.3 Waste management	p. 82 p. 87		Aspect A1, A3; KPI A1.6; KPI A3.1; Para 9,10	Criteria 2.1, 2.3, 6.5
GRI 306-1	Water discharge by quality and destination	5.2 Water resources Appendix 2. Additional quantitative data	p. 85 p. 129		KPI A1.1	Criteria 6.2
GRI 306-2	Waste by type and disposal method	5.3 Waste management Appendix 2. Additional quantitative data	p. 87 p. 129		KPI A1.3 KPI A1.4 KPI A1.6 KPI A2.5	Criteria 6.5 Criteria 6.7
GRI 306-3	Significant spills	5.3 Waste management	p. 87		KPI A3.1	Criteria 6.4
GRI 306-4	Transport of hazardous waste	5.3 Waste management	p. 87		KPI A1.3; KPI A1.6	
<b>GRI 307 ENVIRONMENTAL COMPLIANCE</b>						
GRI 103	Management approach	5.1 Management approach	p. 82		Para. 9, 10	Criteria 1.1
GRI 307-1	Non-compliance with environmental laws and regulations	5.1 Management approach Appendix 2. Additional quantitative data	p. 82 p. 129		Aspect A1	Criteria 3.2
<b>GRI 308 SUPPLIER ENVIRONMENTAL ASSESSMENT</b>						
GRI 103	Management approach	1.4 Supply chain	p. 34		Para. 9, 10; Aspect B5; KPI B5.2	
GRI 308-1	New suppliers that were screened using environmental criteria	Supplier certification	p. 36	Partial disclosure	KPI B5.2	

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
<b>GRI 400 SOCIAL</b>						
<b>GRI 401 EMPLOYMENT</b>						
GRI 103	Management approach	3.1 Management approach	p. 54		Aspect B1; Para 9, 10	Criteria 2.1, 2.3
GRI 401-1	New employee hires and employee turnover	3.2 Personnel structure Appendix 2. Additional quantitative data	p. 55 p. 129		KPI B1.2	
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	3.4 Motivation and remuneration	p. 59	RUSAL provides the same social package to full-time, temporary, and part-time employees	Aspect B1	
<b>GRI 403 OCCUPATIONAL HEALTH AND SAFETY</b>						
GRI 103	Management approach	4.1 Management approach	p. 66		Aspect B2 KPI B2.3 Para 9, 10	Criteria 2.1; 2.3; 11.1
GRI 403-1	Occupational health and safety management system	4.1 Management approach, Management system	p. 68		Aspect B2 KPI B2.3	Criteria 11.1, 11.2
GRI 403-2	Hazard identification, risk assessment, and incident investigation	4.1 Management approach, Management system	p. 68			
		4.2 Risk identification and management	p. 69			
		4.4 Performance results	p. 72			
GRI 403-3	Occupational health services	4.9 Health protection, RUSAL medical services	p. 77-78		KPI B2.3	
GRI 403-4	Worker participation, consultations, and communication on occupational health and safety	4.1 Management approach, Management system	p. 68		KPI B2.3	
		4.3 Safety audits	p. 71			
GRI 403-5	Worker training on occupational health and safety	4.5 Training	p. 73		KPI B2.3	
		4.6 Special safety programmes and projects	p. 74			
GRI 403-6	Promotion of worker health	4.9 Health protection, Treatment of occupational and non-occupational diseases	p. 77		KPI B2.3	
		4.9 Health protection, RUSAL medical services	p. 78			
GRI 403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	4.1 Management approach, Management system	p. 68		KPI B2.3	
		4.2 Risk identification and management	p. 69			
		4.7 Emergency preparedness	p. 75			
		4.9 Health protection	p. 77			
		5.4 Use of hydraulic structures	p. 90			

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
GRI 403-8	Workers covered by an occupational health and safety management system	4.1 Management approach, Management system	p. 68	100% of employees are covered by the Health and Safety management system		
GRI 403-9	Work-related injuries	4.4 Performance results	p. 72		KPI B2.2 KPI B2.1	Criteria 11.4
GRI 403-10	Work-related ill health	4.9 Health protection, Performance Results	p. 77			Criteria 11.4
<b>GRI 404 TRAINING AND EDUCATION</b>						
GRI 103	Management approach	3.5 Training and development	p. 61		Aspect B3; Para 9, 10	Criteria 2.1
GRI 404-2	Programmes for upgrading employee skills and transition assistance	3.5 Training and development	p. 61		Aspect B3	
GRI 404-3	Percentage of employees receiving regular performance and career development reviews	3.5 Training and development	p. 61	Partial disclosure		
<b>GRI 405 DIVERSITY AND EQUAL OPPORTUNITY</b>						
GRI 103	Management approach	2.3 Human rights	p. 46		Aspect B1; Para. 9, 10	Criteria 9.2, 10.4
		3.1 Management approach	p. 54			
GRI 405-1	Diversity of governance bodies and employees	3.2 Personnel structure	p. 55		KPI B1.1	
GRI 405-2	Ratio of basic salary and remuneration of women to men	3.4 Motivation and remuneration	p. 59			
<b>GRI 408 CHILD LABOUR</b>						
GRI 103	Management approach	2.3 Human rights, Position on child and forced labour	p. 46, p. 48		Aspect B4; KPI B4.1; KPI B4.2 Para. 9, 10	Criteria 10.2
GRI 408-1	Operations and suppliers at significant risk of incidents involving child labour	2.3 Human rights, Position on child and forced labour	p. 46, p. 48		KPI B4.1; KPI B4.2	
<b>GRI 409 FORCED OR COMPULSARY LABOUR</b>						
GRI 103	Management approach	2.1 Management approach	p. 44		Aspect B4; KPI B4.1; KPI B4.2 Para. 9, 10	Criteria 10.3
GRI 409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	2.3 Human rights, Position on child and forced labour	p. 46, p. 48			
<b>GRI 412 HUMAN RIGHTS ASSESSMENT</b>						
GRI 103	Management approach	2.3 Human rights	p. 46		Para 9, 10	Criteria 9.1
GRI 412-1	Operations that have been subject to human rights reviews or impact assessments	2.3 Human rights	p. 46	Partial disclosure		Criteria 9.1

GRI Indicator	Disclosure	Cross-reference	Page number	Comments, or additional information	HKEX	ASI
GRI 412-2	Employee training on human rights policies or procedures	2.3 Human rights	p. 46	Partial disclosure		
<b>GRI 413 LOCAL COMMUNITIES</b>						
GRI 103	Management approach	7.1 Management approach	p. 108		Aspect B8; Para. 9, 10	Criteria 9.7
GRI 413-1	Operations with local community engagement, impact assessments, and development programmes	7.1 Management approach,	p. 108		KPI B8.1, B8.2	
		7.2 Investing in local communities in Russia	p. 112			
		7.3 Investing in local communities outside Russia	p. 120			
<b>GRI 414 SUPPLIER SOCIAL ASSESSMENT</b>						
GRI 103	Management approach	1.4 Supply chain	p. 34		Aspect B5; KPI B5.2; Para. 9, 10	
GRI 414-1	New suppliers screened using social criteria	1.4 Supply chain	p. 34	Partial disclosure	KPI B5.2	
<b>GRI 417 MARKETING AND LABELING</b>						
GRI 103	Management approach	1.4 Supply chain, Interaction with suppliers	p. 34			
GRI 417-1	Requirements for product and service information and labelling	1.4 Supply chain	p. 38	Partial disclosure	Para 12 KPI B6.5	
GRI 417-2	Incidents of non-compliance concerning product and service information and labelling	1.4 Supply chain	p. 38	Partial disclosure	Aspect B6	
<b>GRI 419 SOCIOECONOMIC COMPLIANCE</b>						
GRI 103	Management approach	2.4 Anti-corruption and compliance	p. 49		Para. 9, 10	Criteria 1.2
GRI 419-1	Non-compliance with laws and regulations in the social and economic area			In the reporting period there were no significant fines or sanctions for non-compliance in the social and economic areas		
<b>GRI SECTOR SPECIFIC ASPECT</b>						
GRI MM1	Amount of land (owned or leased) used for production activities, disturbed, or reclaimed	5.6 Land and biodiversity	p. 93			
GRI MM3	Total amounts of overburden, rock, tailings, and sludge and associated risks	5.3 Waste management	p. 87			
		5.6 Land and biodiversity	p. 93			
GRI MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process	7.1 Management Approach, Relocation programme	p. 108			Criteria 9.6

## Appendix 4. Glossary

<b>AAL</b>	Aughinish Alumina	<b>ISO 26000</b>	Guidance on social responsibility
<b>AIDS</b>	Acquired immune deficiency syndrome	<b>ISO 45001</b>	Management systems of occupational health and safety
<b>APQP</b>	Advanced product quality planning	<b>ISO 9001</b>	Quality management systems - Requirements
<b>ASI</b>	Aluminium Stewardship Initiative	<b>ISSA</b>	International Social Security Association
<b>BAT</b>	Best available technologies	<b>ITA</b>	Industry tariff agreement
<b>BAZ</b>	Bogoslovsk Alumina Refinery means Bogoslovsky aluminium smelter, a branch of RUSAL Ural JSC	<b>ITC</b>	Engineering and Technology Centre
<b>BEMO</b>	The companies comprising the Boguchanskoye Energy and Metals Complex	<b>IUCN</b>	International Union for Conservation of Nature
<b>BoAZ</b>	Boguchansky aluminium smelter	<b>KPI</b>	Key Performance Indicator
<b>BrAZ or RUSAL Bratsk</b>	Bratsk aluminium smelter	<b>KrAZ</b>	Krasnoyarsk Aluminium smelter
<b>BS</b>	Business System	<b>LCA</b>	Low carbon aluminium
<b>CAPEX</b>	Capital expenditures	<b>LTIFR</b>	Lost Time Injury Frequency Rate
<b>CBK</b>	Compagnie des Bauxites de Kindia	<b>MMTUR</b>	Mining and Metallurgical Trade Union of Russia
<b>CDP</b>	Carbon Disclosure Project	<b>MSA</b>	Measurement System Analysis
<b>CISS</b>	Centre for Innovation in the Social Sphere	<b>MZGV</b>	Alumina Loading Machines
<b>CEO</b>	Chief executive officer	<b>MPU</b>	Dust collecting machine
<b>CFO</b>	Chief financial officer	<b>NEBOSH</b>	National Examination Board in Occupational Safety and Health
<b>Company, Group or RUSAL</b>	United Company RUSAL Plc. and its subsidiaries from time to time, including a number of production, trading and other entities controlled by the Company directly or through its wholly owned subsidiaries	<b>NCCV</b>	National Council for Corporate Volunteering
<b>CSP</b>	Centre for Social Programmes	<b>NGO</b>	Non-Governmental Organisation
<b>CSR</b>	Corporate social responsibility	<b>OEE</b>	Overall Equipment Effectiveness
<b>EIT</b>	European Institute of Innovation & Technology	<b>OHS</b>	Occupational health and safety
<b>EITI</b>	Extractive Industries Transparency Initiative	<b>OHSAS 18001</b>	Occupational Health and Safety Specification 18001
<b>ESG</b>	Environmental, social and governance	<b>PCB</b>	Polychlorinated biphenyl
<b>FCPA</b>	Foreign Corrupt Practices Act	<b>PFC</b>	Perfluorocarbons
<b>FFI</b>	Fauna and Flora International	<b>PPE</b>	Personal protective equipment
<b>FMEA</b>	Failure Mode and Effects Analysis	<b>RC</b>	Remote control
<b>FPIC</b>	Free, prior, and informed consent	<b>PR</b>	Public Relations
<b>FSSC 22000</b>	Food Safety Management Certification Scheme	<b>QMS</b>	Quality management system
<b>GHG</b>	Greenhouse Gases	<b>RMC</b>	RUSAL Medical Centre
<b>GR</b>	Government Relations	<b>R&amp;D</b>	Research and development
<b>GRI</b>	Global Reporting Initiative	<b>RSPP</b>	Russian Union of Entrepreneurs and Industrialists
<b>HKEX</b>	Hong Kong Stock Exchange	<b>SAWC</b>	Special assessment of working conditions
<b>HR</b>	Human Resources	<b>SAZ</b>	Sayanogorsk aluminium smelter
<b>H&amp;S</b>	Health and safety	<b>SA 8000</b>	Social Accountability 8000
<b>HSE</b>	Health, Safety, and Environment	<b>SBT</b>	Science-based Targets
<b>IATF</b>	International Automotive Task Force	<b>SDG</b>	Sustainable Development Goals
<b>ICC</b>	International Chamber of Commerce – The World Business Organization	<b>SPC</b>	Statistical process control
<b>ILM&amp;T</b>	Institute of Light Materials and Technologies of RUSAL	<b>SUBR</b>	JSC Sevuralboksitruda
<b>IrKAZ</b>	Irkutsk aluminium smelter, branch of RUSAL Bratsk in Shelekhov	<b>TCFD</b>	Task Force on Climate-related Financial Disclosures
<b>ISO</b>	International Organization for Standardization	<b>TPS</b>	TOYOTA Production System
<b>ISO 14001</b>	Environmental management systems – Requirements	<b>TQM</b>	Total Quality Management
		<b>UAZ</b>	Urals Aluminium Smelter
		<b>UN</b>	United Nations
		<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
		<b>VAP</b>	Value-added products
		<b>WHO</b>	World Health Organization
		<b>WWF</b>	World Wide Fund for Nature