

G R O U P

ESG Investor Presentation





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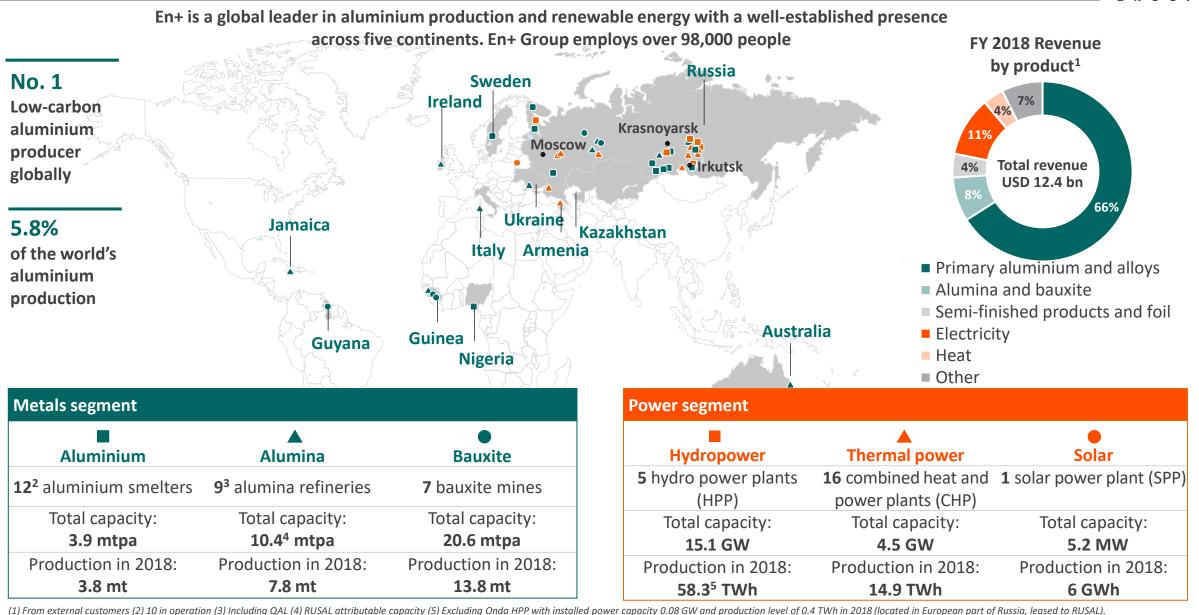
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4	8	12	24		
En+ at a Glance	9M 2019 Results	ESG	Outlook		
• En+ at a Glance	• Key Highlights	Environmental	Outlook		
 Business Model Strong Investment Fundamentals 	 Operational Performance Financial Performance 	 Social Governance 			





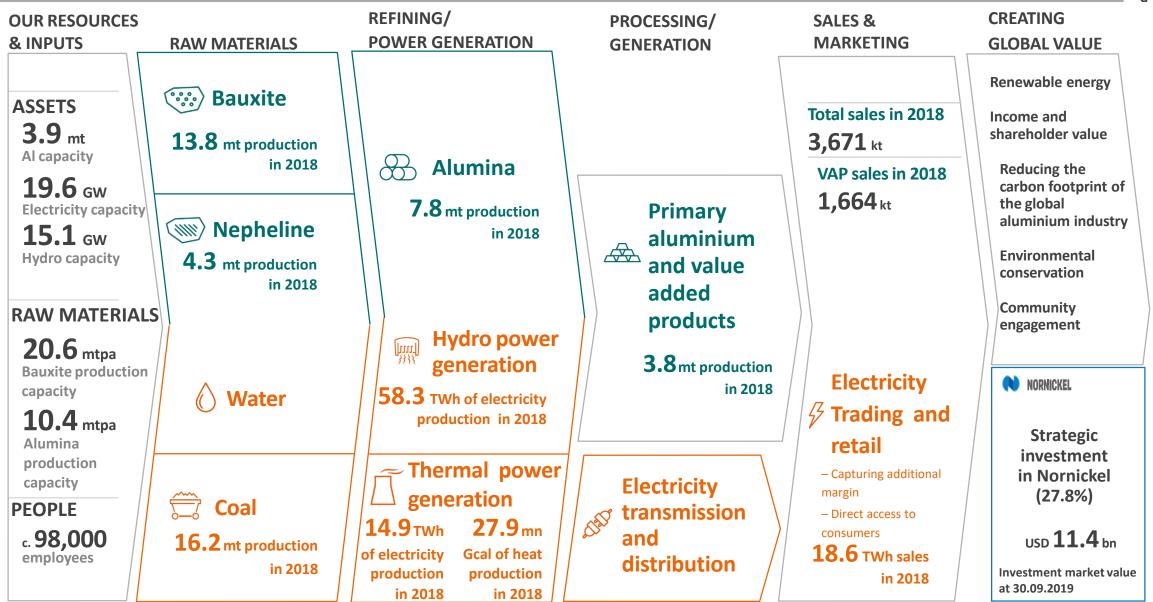
En+ at a Glance



En+ at a Glance

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Business Model



Outlook

Global Leader in Hydro Power Generation and Aluminium Production

- #1 Independent hydro power producer globally⁽¹⁾
- #1 Aluminium producer in the world (ex-China)⁽²⁾

Vertically Integrated Low Carbon Business Model

- 64 TWh En+ Siberian HPPs long-term average power production vs. c. 60 TWh RUSAL power consumption in Siberia
- c.100% self-sufficiency in alumina and c.70% self-sufficiency in bauxites and nephelines with c.100% targeted in the medium-term³
- ALLOW low-carbon aluminium brand emits no more than $4 \text{ tCO}_2 e^4$, which is among the best levels in the world's aluminium industry

Unique Asset Base and Operational Excellence Contributing to Cost Leadership

• Industrial synergy between cost-efficient HPPs and aluminium smelters resulting in top decile cost curve position globally

Strong and Resilient Cash Flow Generation Underpinning Sustainable Shareholder Returns over long term

- Industry leading EBITDA margins (9M 2019: 18.6%)
- 75% of Free Cash Flow⁽⁵⁾ of Power segment to be paid out in dividends supplemented by 100% of dividends received from UC RUSAL

Experienced Management and Robust Corporate Governance

- A new, majority independent board committed to best in class corporate governance
- New Board members bring a wealth of experience in environmental, financial and governance fields

Upside Potential from Multiple Catalysts

- Return to 'business as usual' post sanctions, driving incremental aluminium volumes
- Spare capacity of existing HPPs to be utilised to meet increased demand upon ramp up of RUSAL's new smelters
- Working capital reduction targeted compared to 2018

(1) According to SEEPX. (2) According to CRU estimates. (3) As of 12M2017 (4) Direct and indirect energy-related greenhouse gas at smelters. (5) Calculated, for any period, as cash flows generated from operating activities before capital expenditures and interest less interest paid and less capital expenditures adjusted for restructuring fees, payments from settlement of derivative instruments, one-off acquisitions plus dividends from associates and joint ventures.





	 In 9M 2019, the LME aluminium price continued its decline and in 3Q 2019 it reached an average of USD 1,761 per tonne (down 14.3% y-o-y), a record low since the end of 2016
Market overview	 In 9M 2019, the average electricity spot price on the day-ahead market in the second price zone accounted for 866 RUB/MWh (up 5.9% y-o-y). In 3Q 2019, the average electricity spot price accounted for 685 RUB/MWh (down 17.6% y-o-y)
	 VAP sales increased to 40% of sales in 3Q 2019 vs. 38% in 2Q 2019 and 29% in 1Q 2019 on the back of stable aluminium production
Operational Performance	 Aluminium sales volumes increased 9.8% in 9M 2019 vs 9M 2018
	• Electricity production increased 4.9% y-o-y to 55.8 TWh, driven by growth in output from HPPs
	 In 9M 2019, revenue decreased 8.1% to USD 8.7 bn y-o-y and Adjusted EBITDA decreased 38.2% to USD 1.6 bn y-o-y, mostly reflecting lower aluminium prices
Financial Performance	 In 3Q 2019, revenue decreased 13.0% y-o-y to USD 2.9 bn and Adjusted EBITDA dropped 53.4% y-o-y to USD 432 mn, largely driven by lower aluminium prices on the LME (down 14.3% y-o-y) and lower electricity sales prices in Siberia (down 17.6% y-o-y)
	• Further working capital improvement: USD 530 mn released in 9M 2019, including USD 316 mn in 3Q 2019
	 In 9M 2019, FCF generated of USD 967 mn vs 571 mn in 9M 2018¹
	First Sustainability Report since listing on the London Stock Exchange was published in September 2019
ESG Developments	 In September 2019, the Group participated in Climate Week in New York, during which En+ Group and Citi co- hosted a panel discussion addressing crucial questions about the role of investors in moving the private sector towards a net-zero-carbon economy
(1) In July 2019, Norilsk Nickel payed dividends to Rusal in	n the amount of USD 532 mn.

FY 2018 & 9M 2019 Operational Performance

		9M 2019	9M 2018	Change	FY 2018	FY 2017	Change
	Total aluminium production, kt	2,809	2,810	-	3,753	3,707	1.2%
	Total aluminium sales, kt	3,069	2,794	9.8% 🔺	3,671	3,955	(7.2%)
Sales and	Total electricity production ¹ , TWh	55.8	53.2	4.9% 🔺	73.2	68.4	7.0%
production	• HPPs, TWh	46.4	42.9	8.2%	58.3	54.9	6.2%
	• CHPs, TWh	9.4	10.3	(8.7%) 💌	14.9	13.6	9.6% 🔺
	Heat production, mn Gcal	17.9	18.4	(2.7%) 🔷	27.9	26.7	4.5% 🔺
	Average LME aluminium price, USD/t	1,804	2,158	(16.4%)	2,110	1,968	7.2% 🔺
	Average electricity spot prices ² in 2nd price zone, Rb/MWh	917	866	5.9% 🔺	888	865	2.7%
Macro	• Irkutsk region, Rb/MWh	829	820	1.1% 🔺	842	833	1.2% 🔺
	Krasnoyarsk region, Rb/MWh	823	808	1.9% 🔺	824	804	2.6%
	Average Exchange Rate, RUB/USD	65.08	61.44	5.9% 🔺	62.71	58.35	7.5%

Note: Due to rounding, numbers may not add up precisely to the totals provided, percentages may not precisely reflect the absolute figures, and percent change calculations may differ. Source: Company data, Bloomberg (1) Excluding Onda HPP leased to Rusal

(2) Day ahead market prices, data from ATS and Association "NP Market Council"

En+ at a Glance

9M 2019 Results

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USD mn	9M 2019	9M 2018	Change	FY 2018	FY 2017	Change
Revenue	8,673	9,434	(8.1%)	12,378	12,094	2.3%
Adj. EBITDA ¹	1,617	2,618	(38.2%)	3,287	3,223	2.0%
Adj. EBITDA margin	18.6%	27.8%	(9.2 pp)	26.6%	26.6%	-
Net profit	1,073	1,623	(33.9%)	1,862	1,403	32.7%
Net profit margin	12.4%	17.2%	(4.8 pp)	15%	12%	3 рр
Capex (before intersegm. elimination)	739	674	9.6%	1,015	990	2.5%
Free Cash Flow ²	967	571	69.4%	877	1,258	(30.3%)
9M 2019 Revenue by region ³ Other Asia		9M 2019 Revenue Other Heat 7%	e by product ⁴	(Adj. EBITDA by s JSD mn) 2,618 ⁴	egment
13% America 7% USD 8,673 mn		foil 8,673 n	Primary alumin and alloys 67%		1,800	1,617 ⁴ 765
Europe 41%	6%				863	829

(1) Adjusted EBITDA for any period represents the results from operating activities adjusted for amortisation and depreciation, impairment charges and loss on disposal of property, plant and equipment for the relevant period.

(2) Calculated as operating cash flow less net interest paid and less capital expenditure adjusted for payments from settlement of derivative instruments plus dividends from associates and joint ventures.

(3) From external customers.

(4) After consolidation adjustments.

En+ at a Glance

Power Metals

9M 2018

9M 2019

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En+ at a Glance	9M 2019 Results	ESG	Outlook



ESG Key Aspects



- Air Quality
- Climate change
- Energy
- Waste
- Water
- Biodiversity

- Employees
- Health and Safety
- Local Communities
- Supply Chain

- Board Composition
- Board Compensation
- Diversity
- Business Ethics
- Management / Oversight
- Shareholder Rights
- Audit Risk



Governance

Key driver: Board composition and shareholders rights



Environmental

Key driver: **Environmental footprint**

Key driver: Relationship with employees and society

Social

CLIMATE

OF RUSSIA

PARTNERSHIP

SUSTAINABLE DEVELOPMENT GOALS

- En+ Group supports the United Nations Sustainable Development Goals
- Focus of business operations on the SDGs highlighted below



15 UFE LAND



- In July 2019, as a part of its strategy to lead a global shift towards low carbon aluminium, En+ Group joined the Energy Transitions Commission ("ETC")
- By joining the ETC, En+ Group aims to draw on the international expertise of its members to identify new ways it can work towards its greenhouse gas reduction targets
- In August 2019, En+ Group joined the United Nations Global Compact, demonstrating its commitment to the 10 principles on human rights, labour, environment and anti-corruption

UNITED NATIONS

GLOBAL

 En+ Group pledged to publish annual reports updating on the implementation of these 10 Principles and to collaborate with industry peers and stakeholders to drive progress



- The Metals segment of the Group, represented by RUSAL, joined the Aluminium Stewardship Initiative (ASI) in 2015 to work with producers, customers and other stakeholders in the aluminium value chain to maximise the sector's contribution to building a sustainable society
- WØRLD MISSION ECONOMIC POSSIBLE FORUM PLATFORM
- In strategic partnership with the World Economic Forum, En+ Group is leading the "Aluminium for Climate" initiative
 The initiative's main objective is to accelerate the

transition to a low-

aluminium sector by

addressing the key

barriers that are

holding back

progress

carbon, Paris-

compatible,



- En+ Group was a founding partner of the Climate Partnership of Russia
- The partnership encourages Russian companies to move towards more environmentallysensitive production and introduce measures to support costeffective investment in green technologies

ESG

Environmental Focus: ALLOW Brand Aluminium

Actively promoting our low CO₂ aluminium

- 90% of the Metals segment's aluminium output uses clean renewable power
- In 2017, we launched ALLOW a bespoke brand for low carbon aluminium with a certified carbon footprint
- Allow brand was first verified in 2018 by KPMG. In 2017, 77% of the Company's output was attributed to this brand
- One of the lowest carbon footprints in the industry
- 25% of all aluminium produced is consumed by brands with a strong sustainability profile. Low CO₂ aluminium is a key element of the value proposition to customers to achieve our VAP growth strategy





Alow



Traceable to a single smelter



Available worldwide



Guaranteed low CO_2 footprint: less than 4t CO_2/t of aluminium (smelter scope 1&2)



Certificate with thirdparty verification

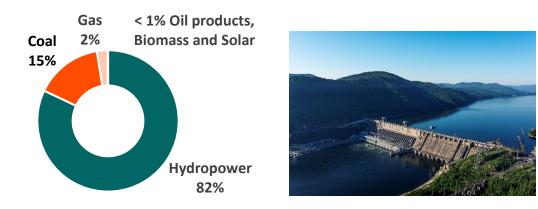


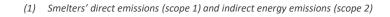
Renewable power

- In 2018, 77% of the Group's installed electricity generation capacity was represented by renewables
- In 2019, En+ Group decided to build a small-scale HPP in Karelia (Russia) with installed capacity 8.1 MW
- En+ Group also participates in different solar energy initiatives
- En+ Group is Highest Ranked Russian Renewable Energy Company in 2019 Green Utilities Global Report by Energy Intelligence

Energy Intelligence

Electric power output by energy source, 2018, %





En+ at a Glance

9M 2019 Results

New Energy modernisation program

- An ongoing program, focused on modernising the power plants at Angara and Yenisei cascades, to improve efficiency, reliability and safety as well as reduce potential GHG emissions by augmented HPP generation
- Programme to be completed by 2046. Expected capital outlay:
 - 2007-2026: USD 326 mn (RUB 21 bn)
 - 2027-2046: USD 528 mn (RUB 34 bn)
- Modernised HPP turbines offer increased efficiency and better cavitation
- From 2022 the Group's HPPs are expected to increase their clean electricity generation by 2 TWh, from the same volume of water



ESG

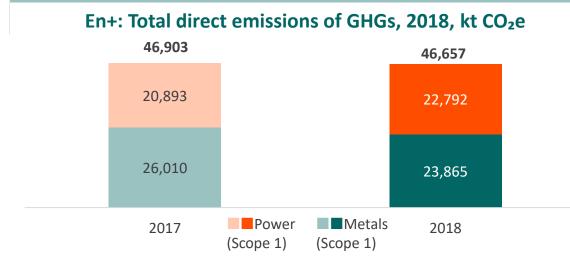




Direct GHG emissions reduction of electrolysis operations in the Metals segment, tCO₂e/tAl



The production of aluminium accounts 1% of global emissions¹.



(1) Source: Carbon Trust.

Auction of aluminium accounts 1% of global omissions¹

Forestry Project

• At the moment En+ Group is working on a strategy to minimise the impact

• Customers aiming to reduce carbon footprint from aluminium supplies

• In the next five years, c. USD 700mn investment programme in our metals

• R&D investment in inert anode technology, that potentially allowing the

• En+ supports tighter emissions' disclosure rules on the LME

• USD 315mn - on aluminum smelter projects

segment on environmental projects

USD 400mn - on alumina

production of zero carbon aluminum

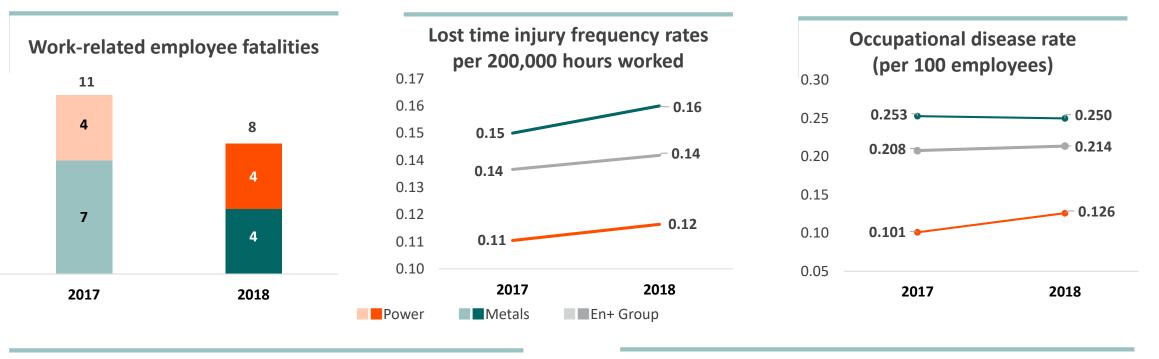
- The Metals segment's forestry program contributes to the UN's target to restore forests around the world in response to the damaging effects of climate change
- We committed to plant over one million trees in Russia as part of its climate strategy aimed at reducing the Company's carbon footprint





En+ at a Glance

of its coal assets



Performance

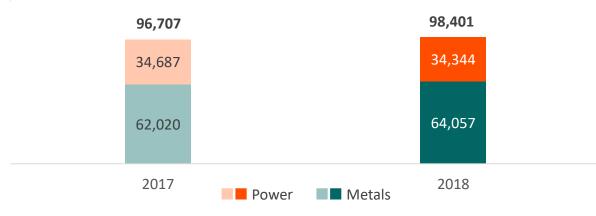
- Number of work-related employee fatalities decreased in 2018
- En+ Group reduced LTIFR to 0.14 in 2018 from 0.16 in 2015
- Increased detection following a series of high-quality medical check-ups at facilities of the Metals segment, as well as the hospitalisation of miners to the occupational disease clinic for in-depth examinations and treatment

Key goals

- Achieving zero fatalities
- Reducing LTIFR: in 2019, to achieve LTIFR not exceeding 0.11 for the Power segment, 0.19 for the Metals segment, 0.16 for the Group
- Reducing year-on-year employee occupational illness rate
- Providing health and safety trainings for employees on a regular basis

Employees

Average number of employees

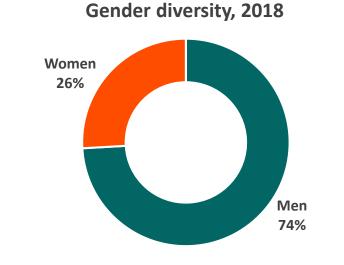


Performance

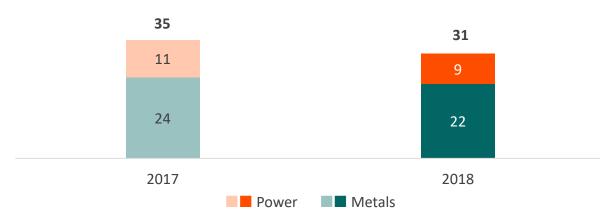
- Our success depends on building an inclusive and diverse environment where our employees can thrive: 74% of employees are men
- Gender diversity at present reflects historical industry trends
- 93% of employees have permanent contracts
- The Company sees the complete elimination of all forms of discrimination, persecution or bullying on the basis of race, skin colour, religion, sex, age, ethnicity or nationality, sexual orientation or disability as essential to its success

Key goals

- Analysing employee satisfaction levels
- Expanding existing programs and those launched in 2018
- Fully implementing the New Generation program
- Increasing the Metals segment's social programs budget for 2019 by 4% to fund various kinds of social support that are affected by inflation, such as the cost of medical services, compensation for travel and vacations and the maintenance of social housing facilities



Community investment, USD mn



The Metals segment

The RUSAL Territory program	636 social and infrastructure projects since 2011, contributed to building and renovating 230 social facilities
The 'Helping is Easy' program	A competition in 16 cities and regions of operation and the New Year Marathon, which involved more than 1,100 volunteers
School of Urban Changes	119 events costing a total of USD 61,872 and involving 3,128 people, 79 experts, 66 partners

Performance 2018

The Company's community development programs are based on local communities' needs and focus on the following key areas:

- social infrastructure and the urban environment
- education
- sports and healthy and recreation
- social entrepreneurship
- volunteering, including corporate volunteering
- assistance to socially vulnerable groups of the population
- healthcare



	The Power segment
Irkutsk branch of the National Council for Corporate Volunteering	Founded by En+ Group, an association that brings together 21 national and regional companies to promote corporate volunteering
Project 360	16,500 volunteers, including participants from 30 national and regional companies
The Environmental Entrepreneurship	Since 2012, more than 650 young entrepreneurs have participated in the project and pitched over 250 new business ideas

School Project



En+ corporate governance standards are best-in-class relative to Russian peers and comparable to London listed peers

Restructuring of En+ Group ownership and governance under the Barker plan led to sanctions lifting in January 2019

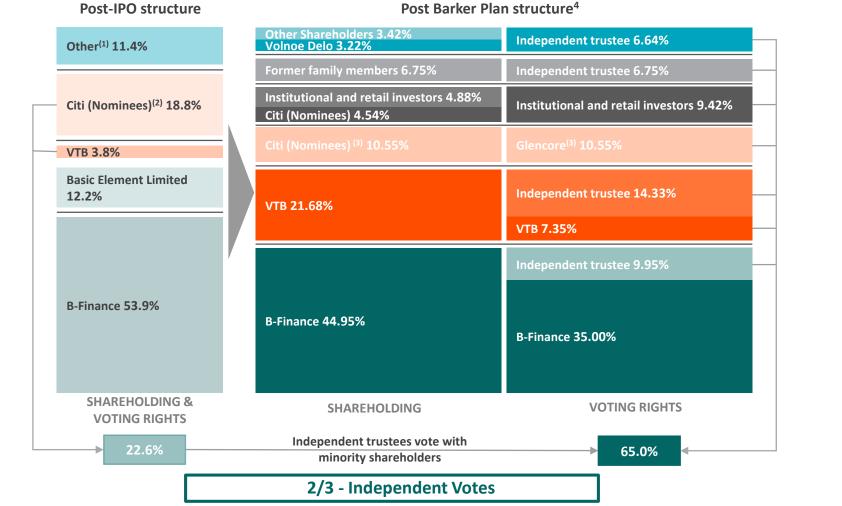
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En+ Group and UC RUSAL boardconsist of a majority of independent directors

Mr. Deripaska can nominate no more than 4 directors out of 12 to En+ Board

Ongoing commitment to transparency and regulatory auditing

Glencore exchanged interest in RUSAL for 10.55% ownership in En+



Voting and Shareholder Structure

(1) "Other" includes former family members; (2) "Citi Nominees" includes 6.2% stake held by ANAN GROUP (SINGAPORE) PTE, retail institutional investors' and financial investors' holdings; (3) GDRs issued as part of the Glencore swap transaction, increasing total shares in issue (4) Post Barker Plan structure presented as of 01.04.2019

En+ at a Glance

9M 2019 Results

ESG

Outlook

Corporate Governance

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Rt. Hon. Lord Barker of Battle PC Executive Chairman

A life Peer, since October 2015, a member of the House of Lords of the UK Parliament. From 2010 to 2014 - the UK Minister of State for Energy & Climate Change



Carl Hughes

Chair of Audit and Risk Committee Former Vice Chairman and senior audit partner at Deloitte, with 30 years+ experience in mining and utilities sectors



Igor Lojevsky

Former Vice Chairman of Eastern Europe for Deutsche Bank. Extensive experience of boardlevel governance in large, complex organisations



Ekaterina Tomilina Director of Corporate Finance at Basic Element Company LLC









Elena Nesvetaeva Head of the Investment Department at Basic Element Company LLC

Christopher Burnham

of transparency and accountability

Chair of Remuneration Committee

30 years'+ in senior positions in leading global

Sachs Russia and CEO of Russia & CIS at UBS

financial institutions. Former Co-CEO of Goldman

Chair of Corporate Governance and Nominations

President of the Moscow School of Management

SKOLKOVO. Former Chairman of the BoD and Head of IB at Troika Dialog Investment Company

and Compliance Committee

Nicholas Jordan

Andrey Sharonov

Committee

Senior Independent Director, Chair of Regulation

Chairman and CEO of Cambridge Global Capital.

Globally recognised expert in the implementation



Joan MacNaughton

Chair of Health, Safety, and Environment Committee Influential figure in international energy and climate policy. Worked in the UK government in a wide number of leadership roles



Alexander Chmel

Senior Advisor to Board Practice of Spencer Stuart in Russia & CIS. Extensive board-level experience in Russian public companies



Vadim Geraskin Deputy CEO for Government Relations at Basic Element Company LLC



Anastasia Gorbatova Head of M&A and International Projects at Basic Element Company LLC

Independent directors

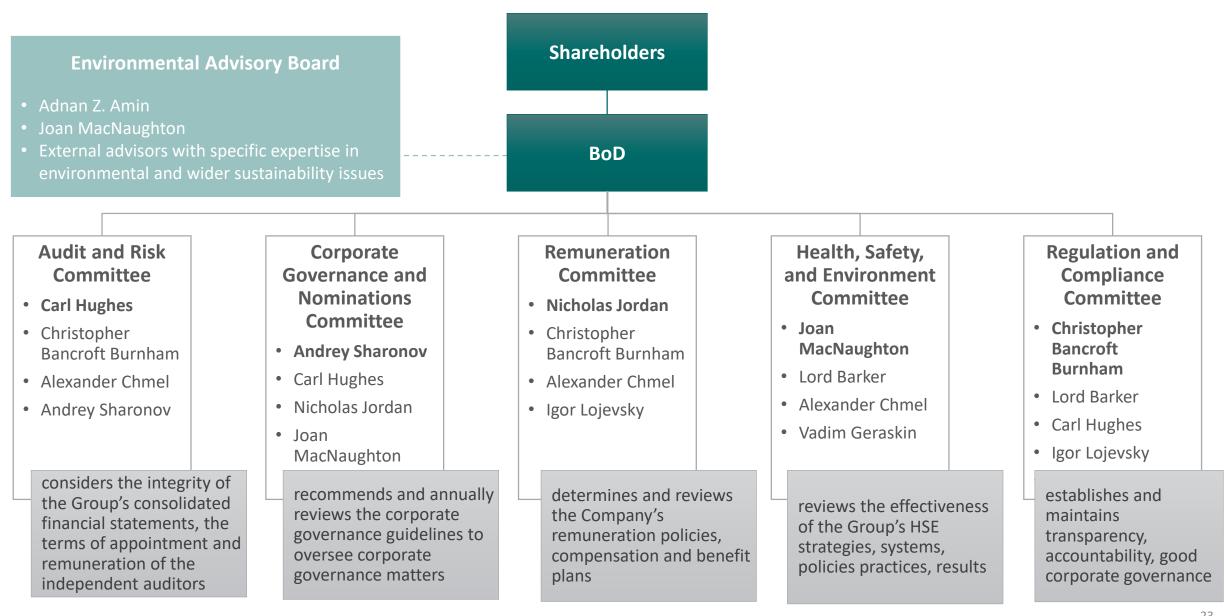
Non-executive directors

22

- The BoD consists of 12 members
- 7 independent directors represent the majority of the BoD
- All Board committees chaired by independent directors

Committees

J



En+ at a Glance

9M 2019 Results

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En+ at a Glance	9M 2019 Results	ESG	Outlook



Key ESG Goals

Environmental



- Increase output from hydro power plants, minimise electricity transmission loss and use more energy generated on-site
- Investing further in the New Energy modernisation program
- Reaching 100% recycled and reused water supply for the main production processes across the entire Company by 2022
- Reducing harmful effects waste disposal sites and mines have on the environment, including land rehabilitation
- Removing and recycling of all PCB-containing equipment
- Continue leading long-term regional biodiversity projects
- Achieving zero fatalities
- Reducing LTIFR: in 2019, to achieve LTIFR not exceeding 0.11 for the Power segment, 0.19 for the Metals segment, 0.16 for the Group
- Continuously improving the OHS management system, guided by international best practices
- Analysing employee satisfaction levels by running a comprehensive online survey about their overall contentment and involvement in upcoming training programs
- Increasing the Metals segment's social programs budget for 2019 by 4%
- Focusing on large-scale projects that have long-term impact and benefit for society



Social

• Commitment to upholding the highest international standards of corporate governance, through an enhanced financial and sustainability reporting and commitment to transparency

Contacts

For further information, please visit: <u>https://www.enplusgroup.com/en/investors/</u>

For Sustainability Section, please visit: <u>https://www.enplusgroup.com/en/enplus-and-society/</u>

For Sustainability Report 2018, please visit: <u>https://www.enplusgroup.com/en/investors/results-and-disclosure/</u>

or contact:

For investors:

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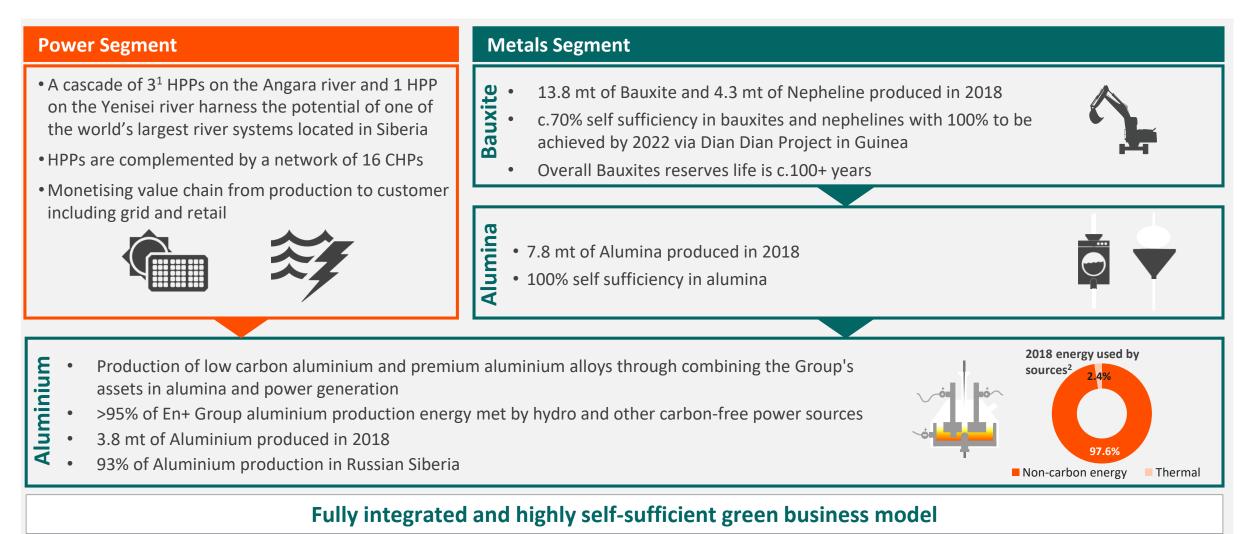
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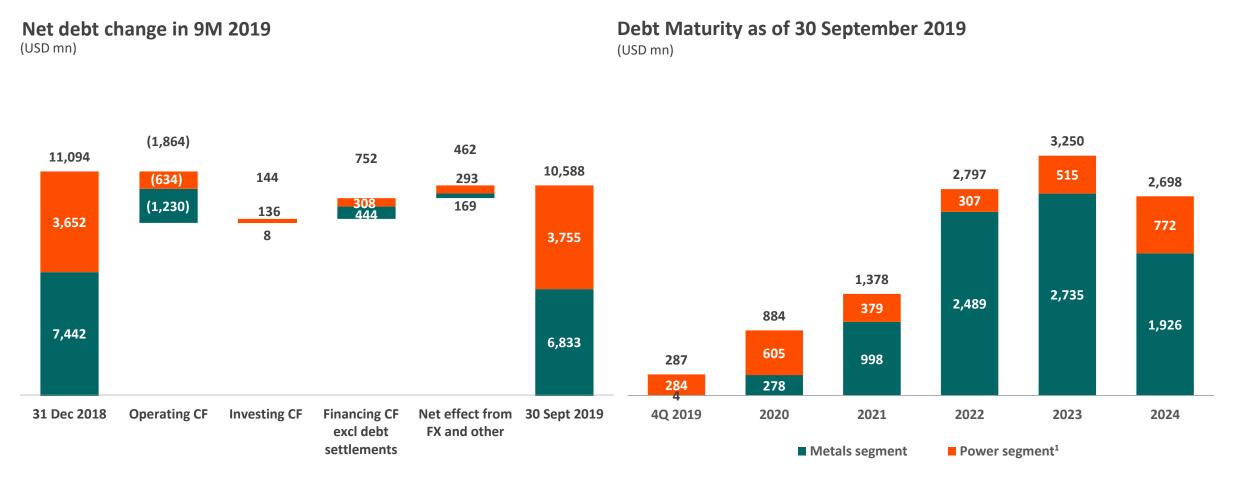


Source: Company data, CRU.

(1) Boguchansk HPP operated by RusHydro (a part of BEMO project a 50%/50% JV of UC RUSAL and RusHydro, which also includes Boguchansk aluminium smelter) is not included to Power Segment.

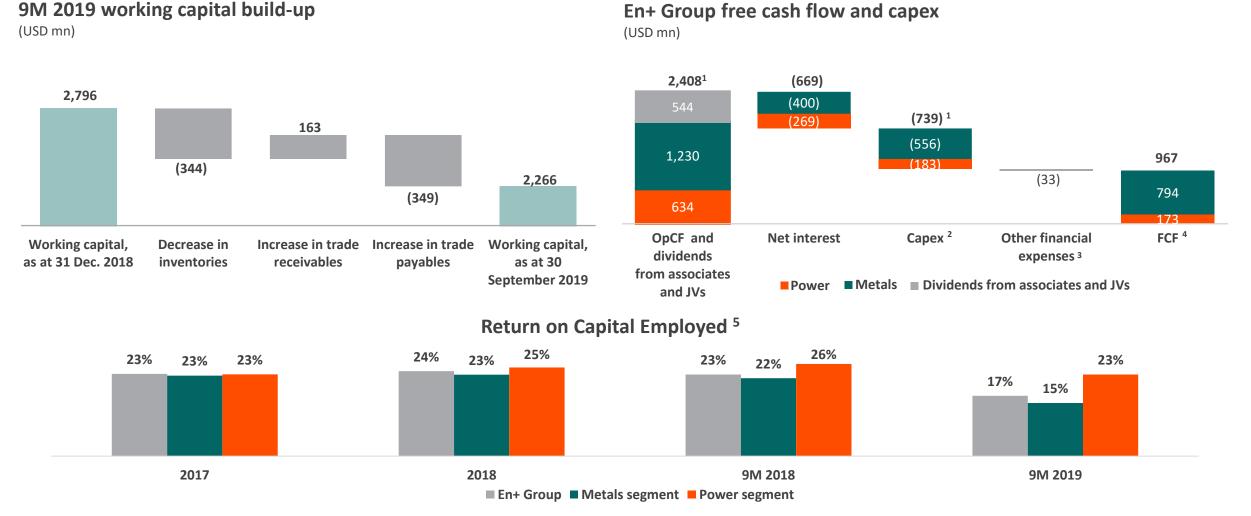
(2) May vary from year to year depending on the water level on HPPs.





Free Cash Flow and Return on Capital Employed





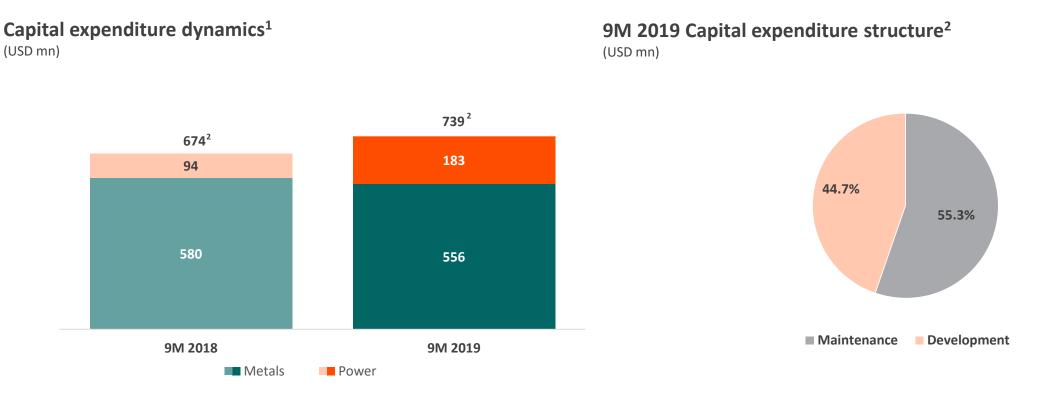
Note: Due to rounding, numbers may not add up precisely to the totals provided, percentages may not precisely reflect the absolute figures, and percent change calculations may differ.

(1) Before consolidation adjustments.

(2) Capital expenditure represents cash flow related to investing activities – acquisition of property, plant and equipment and intangible assets, adjusted for one-off acquisition of assets.

- (3) Restructuring fee, expenses related to issuance of shares and payments from settlement of derivative instruments.
- (4) Calculated as operating cash flow less net interest paid and less capital expenditure adjusted for payments from settlement of derivative instruments plus dividends from associates and joint ventures.

(5) Calculation of Return on Capital Employed: (a) Return is a sum of Adj. EBITDA, Dividends from the jointly controlled entities and other associates and Interest received; (b) Capital Employed is a sum of Loans and borrowings and Equity; (c) For Power segment: return excludes dividends from Metals segment while equity excludes investment in Metals segment.



- The Group continues to invest in its business, with focus on increasing the efficiency of our HPPs and building up the production of low-carbon aluminium
- In 9M 2019 the Company continued its investment in key development projects as per its strategic priorities of preserving its competitive advantages of vertical integration into raw materials and product mix enhancements, including Taishet aluminium smelter
- In 9M 2019, as a part of 'New Energy' modernization program upgraded equipment allowed for increased energy production from the HPPs of 934 GWh
- In 9M 2019, the Group participated in the state programs for CHP modernisation providing with a guaranteed return on investment. Through this program the Group will improve reliability and safety of 1,115 MW or 25.4% of its CHP capacity with the total expected CAPEX of USD 189 mn (RUB 12.2bn)

(1) Capital expenditure represents cash flow related to investing activities – acquisition of property, plant and equipment and acquisition of intangible assets..

(2) Before intersegmental elimination.

Associations and Initiatives (1/2)

Association / Initiative	Engagement activity
En+ Group	
World Economic Forum (WEF)	En+ Group became a partner of the World Economic Forum to accelerate net-zero transition in the aluminium sector.
Business 20 (B20)	En+ Group and RUSAL are among companies preparing policy recommendations on climate change, carbon pricing, sustainable development and green energy transition for the leaders of the Group of 20 (G20), an international forum for 19 states and the European Union.
Business and Advisory Committee to the Organisation for Economic Cooperation and Development (BIAC at OECD)	En+ Group and RUSAL are members of the Business and Industry Advisory Committee to the OECD (BIAC).
Carbon Pricing Leadership Coalition (CPLC)	En+ Group and RUSAL are the only two Russian members of CPLC, a voluntary partnership under the auspices of the World Bank initiated to advance carbon pricing on the global scale.
BRICS Business Council	En+ Group chairs the Russian part of the Energy and Green Economy Working Group at the BRICS Business Council.
Canada Eurasia Russia Business Association (CERBA)	En+ Group is a member of the Canada Eurasia Russia Business Association (CERBA). En+ Group regularly submits information to the CERBA Newsletter to share its achievements in sustainable development and climate change with the international business community.
Conferences of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC)	En+ Group and RUSAL regularly attend UN Climate Change Conferences.
UN Global Compact	In August 2019, En+ Group joined UNGC to promote its commitment to 10 principles on human rights, labour, environment and anti-corruption.
Energy Transitions Commission (ETC)	In July 2019, En+ Group joined ETC to identify new ways towards achieving its greenhouse gas reduction targets.
Business Ambition for 1.5°C	In September 2019, En+ Group joined the UN alongside leading international businesses in committing to climate targets across operations and value chains aligned with limiting global temperature rise to 1.5C above pre-industrial levels.

Associations and Initiatives (2/2)

Association/Initiative	Engagement activity
The Metals Segment	
International Aluminium Institute	RUSAL has been exchanging best practices and developing methodologies to be applied in the aluminium sector as a member of the International Aluminium Institute since 2002.
UN Global Compact	RUSAL became a member of the United Nations Global Compact, Caring for Climate: The Business Leadership Platform initiative in 2008.
The China Nonferrous Metals Industry Association (CNIA)	In 2012, RUSAL became a member of the China Non-Ferrous Metal Industry Association to work in the field of a long-term strategy for the aluminium industry, environmental protection and other issues.
Carbon Disclosure Project (CDP)	RUSAL has been involved in the Carbon Disclosure Project since 2015 and informs stakeholders about implementation of its climate agenda (carbon footprint, climate risks assessments, climate targets).
Aluminium Stewardship Initiative (ASI)	RUSAL joined the Aluminium Stewardship Initiative (ASI) to work with producers, customers and other stakeholders in the aluminium value chain to maximise the sector's contribution to building a sustainable society by taking part in the development and launch of the ASI standards, which is now applied across the aluminium manufacturing and supply chain all over the world.
Intergovernmental Panel on Climate Change (IPCC)	The Group's expert representatives participate in the IPCC on various issues, e.g. on update of the IPCC guidelines for GHGs evaluation for the period of 2017-2019.
Task Force on Climate-related Financial Disclosures (TCFD)	Up until 2019, RUSAL was the only company in Russia that supported TCFD Recommendations. Since 2017, RUSAL has been voluntarily working on building up an effective system to disclose decision useful information to stakeholders.
International Chamber of Commerce (ICC Russia)	As a member of the Commission on Economics of Climate Change and Sustainable Development of ICC-Russia, RUSAL provides recommendations on sustainable development, low carbon growth and green financing to the chamber members and policy makers.
The Power Segment	
The International Hydropower Association (IHA)	As an IHA member, JSC EuroSibEnergo helps to shape the sustainable development strategy for the global hydro power industry.
The Global Sustainable Electricity Partnership (GSEP)	JSC EuroSibEnergo has been a member of the Global Sustainable Electricity Partnership (GSEP) since June 2015.



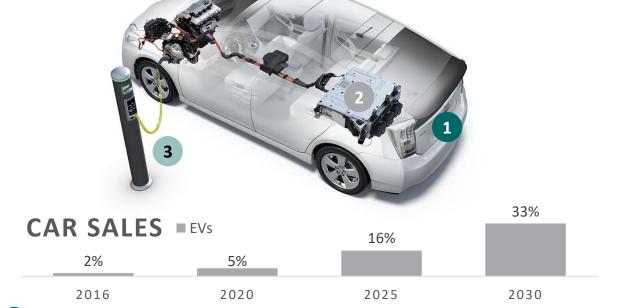
Why aluminium makes sense

- Alunimium is a lightweight metal making it an increasingly important component of production and construction
- Due to this quality it is the metal of choice for vehicle production. With the need to reach lower emission targets this is set to incentivize more intensive use of aluminium
- Beyond this it is also used in the construction of eco-houses, and is widely used in renewable energy and consumer goods

Landscape for aluminium

- Global production of aluminium is expanding, however inventories are running out
- There is a 800kt deficit in 2020
- En+ Group is positioned to capitalise on this

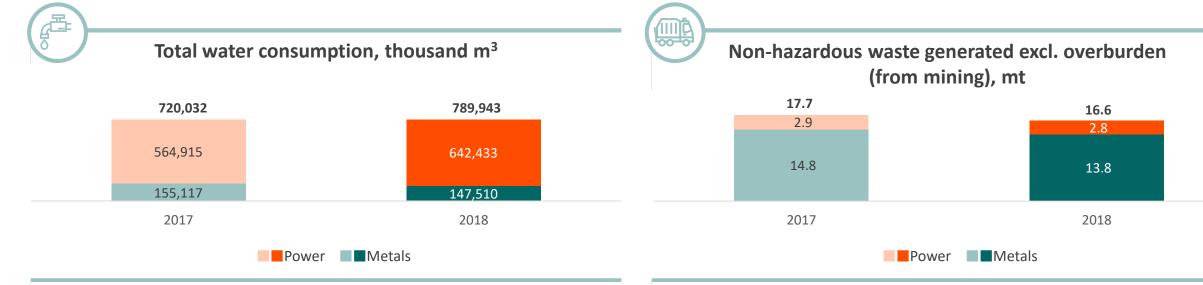
Favourable automotive prospects for Aluminium and Nickel



- 1 Trend for lighter and more energy efficient car bodies is expected to accelerate, thus increasing Al content in vehicles
- 2 NCA batteries (Nickel Cobalt Aluminium) are becoming the product of choice for the rapidly growing EV industry
- 3 As EV's market share grows the entire power generation and distribution infrastructure will need to adapt

Water & Waste Management

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Performance

- Water consumption growth in the Power segment reflects increased power and heat generation in 2018
- Bauxite and nepheline residue represent around 87% of waste created from alumina and aluminium production. Even though considered non-toxic, RUSAL is developing and implementing innovative methods of cutting waste in the smelting and refining processes
- The Group develops detailed individual rehabilitation plans for each site that identify the risks, scope and resource requirements

• Implement Best Available Techniques (BATs) reduce the burden on fresh water sources and increase waste utilisation/recycling

Key goals

- Strategic goal of a 100% recycled and reused water supply for the main production processes by 2022
- Reducing the environmental impact of waste disposal sites and mines including land rehabilitation
- Removal and recycling of all PCB-containing equipment

The Group's key HPPs are located on the Angara River – the only river flowing from Lake Baikal

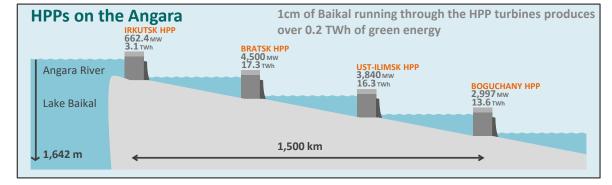
• Lake Baikal is a rift lake in the south of Eastern Siberia

Lake Baikal

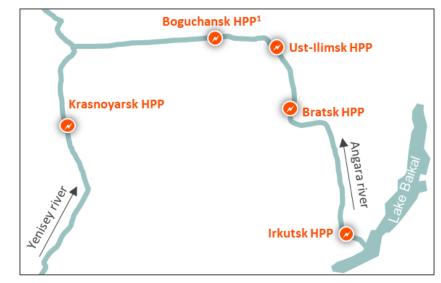
- Declared a UNESCO World Heritage Site in 1996, Baikal is the largest and deepest freshwater lake in the world
- En+ Group is committed to harnessing the natural power of the Angara River in a sustainable and responsible way
- All operations meet or exceed regulatory requirements
- Developing technology to predict inflows to Baikal more accurately

Environmental initiatives

- Scientific research and monitoring of the water level, wildlife and water condition with Moscow State University
- Voluntary major annual clean-up of the lake's shores
- Development of eco-educational platforms to promote responsible behaviour
- Cooperation with NGOs to proactively tackle the main issues affecting the lake
- Research on GHG emissions from reservoirs measurement



 Baikal is not the only water source feeding the HPPs, as 30–50% of the water feeding the Bratsk and Ust-Ilimsk reservoirs comes from other rivers



⁽¹⁾ BEMO – A 50%/50% JV of UC RUSAL and RusHydro, comprising Boguchansk aluminium smelter and Boguchansk HPP. Boguchansk HPP is operated by RusHydro.

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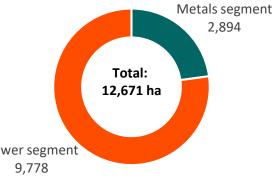
aquatic biological resources

Reservoirs with Life event

Land Rehabilitation & Biodiversity

The Stolby Nature Reserve near Krasnoyarsk	 Monitoring the pollution content of snow, water bodies and needles at the reserve Surveying the quality and condition of local soils, plants, water, bed sediments and snow cover Analysing the chemical composition of various substances and identifying potential extrinsic pollutants 	Total land distur
Environmental Monitoring project	 Partnership with: The Strana Zapovednaya National Foundation The Shushensky Bor National Park The Khakassky and Sayano-Shushensky natural reserves Monitoring of specially protected areas located near the Group's industrial facilities Field studies conducted in 18 pine forests located within the emission impact area 	Pov
Monitoring fish populations in the Vym River	 Monitoring fish populations in the Vym River around the Timan bauxite deposit Water quality / the natural environment have not been exposed to significant industrial pollution 	
Conservation of aquatic biological	 Artificially reproducing and releasing more than 1.2 mn young peledfish into the Belaya River - a tributary of the Angara River and Bratsk Reservoir Peled were released from the Belsky Fishery Plant in 2018 as part of the Baikal Interregional Environmental Prosecutor's Office's Filling 	

bed and not yet rehabilitated, 31.12.2018, ha





Risk management system

Approach to risk management was changed.

Compliance

- The Board approved the Company's first Risk Management Policy in 2018
- The Risk Management Regulation was updated, new targets and risk assessment methods were established
- The updated version of the Risk Management Regulation provides a detailed classification of risks and risk assessment tools

The Company uses the following risk management metrics to assess risk:

- Risk probability
- Financial risk estimation
- Probable damage
- Risk severity (five groups)

Internal control

- A total of 127 internal audit procedures were conducted in 2018, resulting in disciplinary actions against 224¹ employees and 1,011 recommendations, the majority of which have already been put into practice
- The Chief Compliance Officer was appointed. Together with the Directorate for Control and the Directorate for the Protection of Resources they play a leading role in preventing corruption

(1) 0.2% of the average number of employees in 2018

En+ Group has identified four key risk groups:



En+ Group's Aluminium Production Assets (1 of 2)

Asset	Location		Total capacit ktpa	ty ^{1,}	Utilisation rate	Bratsk Aluminium Smelter
Bratsk Aluminium Smelter	Russia		1,009		100%	
Krasnoyarsk Aluminium Smelter	Russia		1,019		100%	
Sayanogorsk Aluminium Smelter	Russia		542		99%	
Novokuznetsk Aluminium Smelter	Russia		215		100%	Krasnoyarsk Aluminium Si
Novokuznetsk Aluminium Smelter Khakas Aluminium Smelter Irkutsk Aluminium Smelter Kandalaksha Aluminium Smelter Urals Aluminium Smelter	Russia		297		98%	
Irkutsk Aluminium Smelter	Russia	3.9 mtpa	419	96%	100%	
Kandalaksha Aluminium Smelter	Russia	•	76		95%	
Urals Aluminium Smelter	Russia		75		0%	
Volgograd Aluminium Smelter	Russia		68		94%	Lange C.
Kubal	Sweden		128		98%	Khakas Aluminium Smelte
Alscon	Nigeria		24		0%	
Achinsk Alumina Refinery	Russia		1,069		80%	
Bogoslovsk Alumina Refinery	Russia		1,030		97%	
Urals Alumina Refinery	Russia		900		100%	Ashingh Aluming Definence
Friguia Alumina Refinery	Guinea	13.6 mtpa	650	79%	28%	Achinsk Alumina Refinery
Friguia Alumina Refinery QAL ²	Australia	(10.4 mtpa) ²	3,950	(75%) ²	93%	
Attributable to Metals segment Eurallumina	11 - 1		790		00/	
Eurallumina	Italy		1,085		0%	
Aughinish Alumina Refinery	Ireland		1,990		94%	Aughinish Alumina Refine
Windalco	Jamaica		1,210		41%	
Nikolaev Alumina Refinery	Ukraine		1,700		101%	

(1) As of 2018 year end.

(2) The Metals segment holds a 20% equity stake in QAL, Metals segment attributable capacity is 790 ktpa.

En+ Group's Aluminium Production Assets (2 of 2)

	Asset	Location	on Total capacity ^{1,} ktpa			Utilisation rate	
	Timan Bauxite	Russia		3,300		101%	
S	North Urals Bauxite Mine	Russia		3,000		78%	
Bauxite mines	Compagnie Des Bauxites De Kindia	Guinea		3,500		99%	
	Friguia Bauxite and Alumina Complex	Guinea	20.6 mtpa	2,100	67%	34%	
	Bauxite Company of Guyana, INC	Guyana		1,700		82%	
	Windalco	Jamaica		4,000		45%	
	Dian-Dian Project	Guinea		3,000		28%	В



Boguchansk Aluminium Smelter



Energy assets

Boguchansk HPP (BEMO Project) is a 50:50 JV between UC RUSAL and RusHydro and it is operated by RusHydro. Boguchansk is the fourth step of the Angara hydroelectric power chain. The total capacity is 2,997 MW.

Mining assets

Besides the bauxite mines described above the Metals segment's mining assets also comprise two quartzite mines, one fluorite mine, two coal mines, one nepheline syenite mine and two limestone mines.



En+ Group's Power and Utilities Assets

	8	5	n	4	}
-	G	R	0	U	P

	Accet	Location in Russia			Installed capacity	,1		G R O I
	Asset		Ele	Electricity (MW) Heating (Gcal/h)		eating (Gcal/h)	Krasnoyarsk HPP	
<u> </u>	Krasnoyarsk HPP	Krasnoyarsk		6,000		-		
S S	Bratsk HPP	Bratsk		4,500		-		
ro pov plants	Ust-Ilimsk HPP	Ust-Ilimsk	15.1GW	3,840		-		and the second s
Hydro power plants	Irkutsk HPP	Irkutsk		662		-		
Ŧ	Onda HPP ²	Nadvoitsy		80		-	Bratsk HPP	and the second s
er L	CHP-10	Angarsk		1,110		563		A A A A A A A A A A A A A A A A A A A
ŇO	Novo-Irkutsk CHP	Irkutsk		726		2,076	and the second s	
d pr	CHP-9	Angarsk		619		3,232	MALLEY MANTE	
s a	CHP-11	Usolie-Sibirsk		320		1,057		A MARCAN
Combined heating and power plants	Novo-Ziminskaya CHP	Sayansk	4.5GW	260	15,487 Gcal/h	819	Ust-Ilimsk HPP	
l he	CHP-6	Bratsk		282		1,743		HT.
inec	Ust-Ilimsk CHP	Ust-Ilimsk		515		1,015	Lat Mitchen and	
mbi	Avtozavodskaya CHP	Nizhniy Novgorod		580		2,280	LE	Annual L
C	Other heat and power plants ²	-		142		2,702		A SAMALAN AND
	Abakan solar power plant	Abakan		5		-	Abakan SPP	
		Abunun		5				
 Transmission and distribution infrastructure completely covers Irkutsk region Transmission and distribution network – 41,000km Annual electricity transmission – 47TWh 							Irkutsk HPP	CHP-10