



Mass testing in Parauapebas city, in a partnership between Vale and the local government

VALE'S PERFORMANCE IN 2Q20



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Except where otherwise indicated the operational and financial information in this release is based on the consolidated figures in accordance with IFRS. Our quarterly financial statements are reviewed by the company's independent auditors. The main subsidiaries that are consolidated are the following: Companhia Portuária da Baía de Sepetiba, Mineração Corumbaense Reunida S.A., Minerações Brasileiras Reunidas S.A. PT Vale Indonesia Tbk, Salobo Metais S.A, Vale Holdings B.V., Vale Canada Limited, Vale International S.A., Vale Manganés S.A., Vale Malaysia Minerals Sdn. Bhd., Vale Moçambique S.A., Vale Nouvelle-Calédonie SAS, Vale Oman Pelletizing Company LLC and Vale Oman Distribution Center LLC.

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Cautionary Note to U.S. Investors - The SEC permits mining companies, in their filings with the SEC, to disclose only those mineral deposits that a company can economically and legally extract or produce. We present certain information in this presentation, including 'measured resources,' 'indicated resources,' 'inferred resources,' 'geologic resources,' which would not be permitted in an SEC filing. These materials are not proven or probable reserves, as defined by the SEC, and we cannot assure you that these materials will be converted into proven or probable reserves, as defined by the SEC. U.S. Investors should consider closely the disclosure in our Annual Report on Form 20-K, which may be obtained from us, from our website or at <http://us.sec.gov/edgar.shtml>.

The information contained in this press release includes financial measures that are not prepared in accordance with IFRS. These non-IFRS measures differ from the most directly comparable measures determined under IFRS, but we have not presented a reconciliation to the most directly comparable IFRS measures, because the non-IFRS measures are forward-looking and a reconciliation cannot be prepared without unreasonable effort.

Vale's 2Q20 in review

Rio de Janeiro, July 29th, 2020 – "*We are moving in our path to de-risk the company even in a very complex second quarter of 2020, facing the challenging times brought by the COVID-19 pandemic with responsibility, discipline and sense of urgency. We continue to make progress on the reparation of Brumadinho, on the assurance of the safety of our dams and on the stabilization of our iron ore production. As another important step in the capital allocation front, we are also announcing the resumption of our dividend policy.*", commented Eduardo Bartolomeo, Chief Executive Officer.

Since March 2020, Vale had to adjust the way to operate amid the pandemic scenario, combining the initiatives on the reparation of Brumadinho and the ramp-up of iron ore production to the strong measures to protect our employees and support communities.

Reparation of Brumadinho

The reparation of Brumadinho is a priority for Vale. The works on that front have been continuously adjusted amid the COVID-19 pandemic to ensure their continuity. Actions to prevent and contain the COVID-19 spread were guided by care for communities and included financial resources and equipment for hospitals and local health units, the donation of more than 920 thousand PPE¹ and 55 thousand rapid test kits, and investments for the production of fabric face masks by local, small businesses and social projects.

In an active listening process, Vale has been working on an Integral Reparation Plan, which will lead its actions in the coming years to deliver structuring projects able to promote lasting positive impacts for the affected communities. Some of these projects are already being implemented, such as the Ground Zero, a pilot for environmental recovery in Brumadinho, while others are at an early stage, such as the Córrego do Feijão Memorial, a permanent facility to honour the victims and support territory re-signification.

The indemnification process continues, with the signing of civil agreements related to more than 600 people since the publishing date of the 1Q20 results. To date, such agreements refer to more than 7,600 people, while labour indemnifications relate to more than 1,600 people.

Since January 2019, approximately R\$ 3.9 billion² have been paid in indemnities, including the monthly emergency assistance. In total, Vale has disbursed approximately R\$ 11.5 billion³ in initiatives related to the reparation of Brumadinho and the decharacterization of its dams.

¹ Personal Protective Equipment.

² As of July 29th, 2020, equivalent to approximately US\$ 720 million with exchange rate on the date of disbursement.

³ Equivalent to approximately US\$ 2.6 billion as of June 30th, 2020, including US\$ 1.4 billion in agreements and donations, US\$ 1.0 billion in incurred expenses and US\$ 269 million in dams decharacterization.

Safety of our dams

We continue to develop our *as is* project and our decharacterization plan, advancing with the decharacterization works at Fernandinho dam and the construction of the backup dams.

We are also evolving with the decharacterization of other structures in Brazil:

- Doutor and Campo Grande dams and three drained stacks are in engineering phase
- Póndes de Rejeitos, a Base Metals dam, will be concluded in December 2020
- Other upstream structures, such as dikes and water dams, are also being decharacterized. We had two structures concluded in the first half of 2020 and a third one will be concluded in December 2020

Stabilization of iron ore production

The major milestones towards the resumption of operations in 2Q20 were:

- Improved safety measures to fight the pandemic, reducing the contingent of workers at operation sites as much as necessary to allow for safe distancing, applied the test-trace-treat protocol, mass testing and quarantining workers that tested positive and those that have been in contact with positive cases.
- In the Southeastern System, Timbopeba dry-processing operation resumed in June and is shifting to wet-processing production after the temporary authorization by ANM to dispose tailings at Timbopeba pit. Additionally, Conceição plants are using tailings filtration and tailings disposal at the Onça and Periquito pits, after the ramp-up in 1Q20, as a short-term alternative for the Itabiruçu dam stoppage.
- In the Southern System, Vargem Grande Complex implemented alternative solutions to partially debottleneck logistic capacity at the site and partially resumed wet processing with tailings filtration, using the Maravilhas I dam and Cianita waste dump as a preliminary solution for tailings disposal. At Fábrica site, TAS⁴ railway terminal resumed operation, after vibration tests, enabling inventory movement.
- In the Northern System, Vale obtained in June the preliminary license for the expansion of the Serra Leste mine, which represents the first stage within the licensing process. After the installation license is issued, Vale will resume its operation with 6 Mtpy capacity.

For more details, please refer to our 2Q20 Sales and Production Report.

⁴ Terminal Água Santa

Resumption of dividend payments

Following the reduction of uncertainties related to the pandemic, with risks of a second wave in China mitigated and the stabilization and decline in COVID-19 cases, especially in the northern states of Brazil (e.g. Pará), Vale assesses that the worst is likely behind us and decided to resume its Shareholder Remuneration Policy, which requires that the minimum dividends calculated based on 1H20 results to be paid in September. Additionally, the company is taking steps to repay part of its revolving credit facilities in the near future and, therefore, the Board has decided for the payment, on August 7th, 2020, of the interest on capital of R\$ 1.41 per share approved on December 19th, 2019.

Vale ESG approach

Climate Change:

Vale moved further on its climate change agenda and quantified its ambition announcing a target, aligned with the Paris Agreement, to reduce 33% of its scope 1 and scope 2 emissions by 2030, with 2017 as a baseline. Investments of US\$ 2 billion will be made in renewable energy over the next ten years to support and bring solutions to the low carbon economy. To prioritize the most cost-competitive initiatives, a marginal abatement cost was drawn up through a roadmap that analyzes more than 35 projects and considers renewables, energy efficiency, biofuels, electrification and breakthrough technology, using an internal carbon pricing⁵.

Governance:

With the current Shareholder Agreement expiring in November, Vale's Board of Directors has decided to establish the Nomination Committee, with the role of proposing improvements related to the structure, size and skills of the Board, as these are essential to define the nominees to the 2021 Annual Meeting of Shareholders. The Committee was announced in July, with a majority of independent members and reputable names and backgrounds.

Risk:

Overseeing the third line of defense, Vale announced the Chief Compliance Officer, who will be responsible for the compliance office, including Integrity, Internal Audit and the Whistleblower Channel, which are directly subordinated to the Board of Directors.

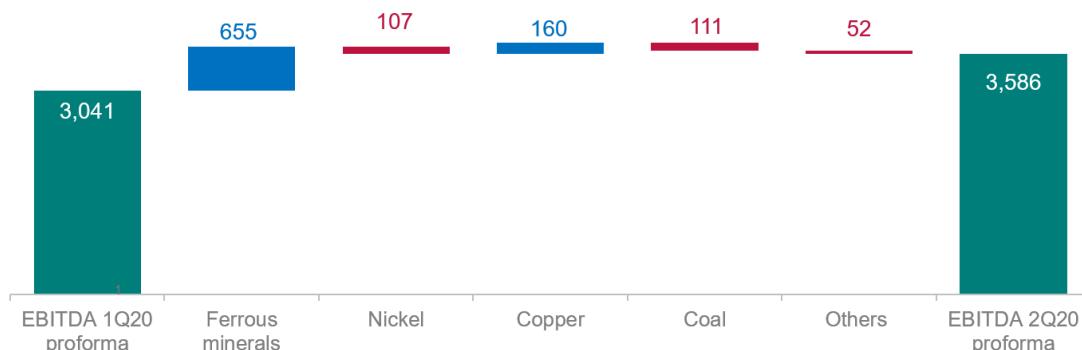
⁵ Internal carbon pricing of US\$ 50/t.

Vale's performance in 2Q20

In 2Q20, proforma adjusted EBITDA, excluding US\$ 130 million of expenses related to Brumadinho and US\$ 85 million of COVID-19-related donations supporting initiatives to fight the pandemic, totaled US\$ 3.586 billion, US\$ 545 million higher than in 1Q20. After those effects, the adjusted EBITDA was US\$ 3.371 billion in 2Q20.

Adjusted EBITDA proforma 2Q20 vs. 1Q20 per business

US\$ million



Ferrous Minerals EBITDA of US\$ 3.502 billion in 2Q20 was US\$ 655 million higher than the US\$ 2.847 billion recorded in 1Q20, mainly due to (i) higher realized prices, reflecting the healthy demand coming from China; (ii) higher iron ore fines sales volumes, following a quarter of stronger production volume; (iii) the positive effect of the Brazilian real devaluation; and (iv) lower freight costs, which were partially offset by higher iron ore fines C1 cash costs.

- Vale's realized price CFR/FOB totaled US\$ 88.9/t, an increase of US\$ 5.1/t compared with 1Q20, mainly due to higher 62% Fe reference price, higher forward price curve and higher premiums for Vale's low alumina products.
- The quarter-on-quarter devaluation of 21% of the average Brazilian real improved iron ore fines C1 cost by US\$ 1.7/t. Nevertheless, iron ore fines C1 cost increased to US\$ 17.1/t in 2Q20 from US\$ 16.2/t in 1Q20, mainly due to effects anticipated in 1Q20 report, such as the consumption of inventories with higher average production costs from 1Q20 (US\$ 1.1/t), higher volumes and prices of third-party purchase (US\$ 0.7/t) and COVID-19 additional employee benefits and operational safety measures (US\$ 0.3/t), and one-off effects, such as higher demurrage costs (US\$ 0.5/t). Considering the lower end of the production guidance as the most likely scenario and the current foreign exchange rate level, C1 cash cost is expected to be close to US\$ 14.5/t in 2H20. (please refer to the Ferrous Minerals section of the report for C1 cost build-up and details).

- Unit maritime freight cost per iron ore metric ton decreased US\$ 3.6/t, totaling US\$ 13.5/t in 2Q20, better than the expectation of at least US\$ 3.0/t decrease driven mainly by lower bunker oil fuel costs. For 3Q20, freight cost may increase due to the seasonally higher exposure to spot freight prices.

The Nickel business EBITDA of US\$ 243 million in 2Q20 was US\$ 107 million lower than the US\$ 350 million in 1Q20, mainly due to lower PGMs by-product credits, especially palladium and rhodium, and higher stoppage expenses related to the care and maintenance at the Voisey's Bay mine, which were partially offset by the positive effects of the nickel hedge positions Vale unwound in March 2020 and copper by-product realized prices.

The Copper business recorded an EBITDA of US\$ 320 million in 2Q20, US\$ 160 million higher than the US\$ 160 million in 1Q20, mainly due to (i) higher realized prices, as LME prices trended higher toward the end of the quarter and provisionally-price-based invoices were either settled or marked-to-market with higher prices, and (ii) the favorable effect of the Brazilian real devaluation on Salobo and Sossego costs. Salobo unit cash cost after by-products credit remained negative for the second quarter in a row.

In the first six months of 2020, the impact of COVID-19 pandemic in Vale's costs and expenses was US\$ 112 million, of which US\$ 85 million in expenses with initiatives to fight the pandemic, such as donations of rapid test kits and personal protection equipment to the Brazilian and state governments and support of hospitals and local health units, and US\$ 27 million in the increase of costs in operations.

Vale posted a net income of US\$ 995 million in 2Q20, US\$ 756 million higher than 1Q20, mainly due to:

- Higher EBITDA in 2Q20;
- The improvement of net financial results, as in 1Q20 this line was heavily impacted by derivatives expenses related to the Brazilian real devaluation;

Partially offset by:

- Impairment charges in Nickel assets of US\$ 314 million, following the announcement in May 2020 of the exclusivity to negotiate the sale of VNC with the Australian company New Century Resources Limited;
- Additional provisions of US\$ 566 million for expenditures with Renova Foundation, following the update of its business plan and funding requirements to fulfill its commitments.

In June 2020, Vale signed, together with Sumitomo Metal Mining Co., the definitive agreements for sale of a 20% stake of PT Vale Indonesia Tbk ("PT Vale"), which is one of the requirements to be fulfilled in order for PT Vale to be entitled with the extension of its license to operate beyond 2025. For its stake, Vale will receive approximately US\$ 290 million in cash upon closing of the transaction, which is expected to happen by the end of 2020, after the satisfaction of standard regulatory approvals.

Vale generated US\$ 277 million in Free Cash Flow from Operations in 2Q20, US\$ 103 million lower than in 1Q20, mainly due to the higher working capital needed to support stronger CFR sales in 2Q20 concentrated in June, which carry longer collection lead time than FOB sales. Vale expects its free cash flow to improve substantially in 2H20, following the increasing volumes and the gradual normalization of its working capital.

In July 2020, Vale issued US\$ 1.5 billion in notes due 2030 bearing a coupon of 3.75% per year, representing an extremely successful return to the international debt capital market, from which it was absent since February 2017, with a 9x oversubscription and lowest-ever yield for Vale's 10-year benchmark. With such additional liquidity, Vale intends to repay a portion of its revolving credit facility during the third quarter of 2020.

Selected financial indicators

US\$ million	2Q20	1Q20	2Q19
Net operating revenues	7,518	6,969	9,186
Total costs and other expenses	4,901	4,818	5,743
Expenses related to Brumadinho	130	159	1,532
Adjusted EBIT	2,564	2,067	2,132
Adjusted EBIT margin (%)	34%	30%	23%
Adjusted EBITDA	3,371	2,882	3,098
Adjusted EBITDA margin (%)	45%	41%	34%
Proforma adjusted EBITDA ¹	3,586	3,041	4,630
Iron ore - 62% Fe reference price	93	89	100
Net income (loss)	995	239	(133)
Net debt ²	4,697	4,808	9,726
Capital expenditures	967	1,124	730

¹ Excluding expenses related to Brumadinho and COVID-19.

² Does not include leases (IFRS 16).

US\$ million	1H20	1H19	%
Net operating revenues	14,487	17,389	-17%
Total costs and other expenses	9,719	10,923	-11%
Expenses related to Brumadinho	289	6,036	-95%
Adjusted EBIT	4,631	679	582%
Adjusted EBIT margin (%)	32%	4%	28%
Adjusted EBITDA	6,253	2,446	156%
Adjusted EBITDA margin (%)	43%	14%	29%
Proforma adjusted EBITDA ¹	6,627	8,482	-22%
Net income (loss)	1,234	(1,775)	-170%
Capital expenditures	2,091	1,341	56%

¹ Excluding expenses related to Brumadinho and COVID-19.

Market overview

IRON ORE

Iron ore 62% Fe reference price averaged US\$ 93.3/dmt in 2Q20, 5% higher than 1Q20, after a scenario of high productivity level in the steel side, combined with lowering of iron ore port inventories in China.

China's steel production totaled 499 Mt in 1H20, 1.4% higher than in 1H19. After the industrial activity resumption from the lockdown in 1Q20, Chinese iron ore consumption along 2Q20 achieved record levels buoyed by the government's infrastructure spending support, which in May measures included 3.75 trillion yuan (US\$ 535 billion) in special government bonds. Additionally, on the supply side, shipments from major producers did not increase in the same pace as demand, resulting in a continued iron ore destocking on ports along the quarter.

MB65% index averaged US\$ 108.5/dmt in 2Q20, 4% higher than 1Q20. The spread between the MB65% and the 62% iron ore reference price was at the same level as 1Q20, supported by a steady levels of steel rebar margins during most of 2Q20 and low levels of inventory of high-grade ore at ports and Chinese concentrate at mills.

In 2Q20, ex-China markets have been the most impacted as the measures to contain the spread of COVID-19 have led to mass closure of manufacturing, interruption of supply chains, knocked down the purchase of automobiles, held businesses from investing in capital assets and construction sites in many countries were ordered to stop. All of which brought steel demand close to a halt and led steel mills to adopt heavy cuts in production. Steel production in 1H20 decreased 19% in EU28, 18% in North America and 17% in Japan vs. 1H19. The effect was similar in Emerging Economies, with steel production decreasing 24% in India and 20% in South America.

Nevertheless, the global markets bottom seems to have been reached in the 2Q20 and demand is expected to slowly recover as from the 2H20 lows. In China, the credit easing has been key to leverage the property market, while investments in new infrastructure projects will continue to positively impact the real economy, providing demand growth for steel and thus a healthy steel production in 2H20.

Ex-China, global automakers expect a gradual recovery of production as plants reopen, supply chains are reestablished and consumers return. In Europe, ACEA⁶ reported a slight improvement of car sales in June and purchasing is expected to improve as consumers respond to the incentives adopted by European governments towards electric cars.

Despite the good signals, the perspective of improvements in 2H20 is not expected to offset 1H20 downturns. Developed Economies are expected to contract between 15%-20% and Emerging

⁶ European Automobile Manufacturers Association

Economies are expected contract 5%-10%, as South East Asia continues to add new capacity to fulfill their long-term domestic growth. All in all, steel production ex-China is expected to contract between 10% and 15% in 2020.

COAL

The seaborne coking coal price averaged US\$ 118/t in 2Q20, down from the previous quarter's US\$155/t. The price drop was primarily related to the impact of COVID-19, with steel production cuts and extended regional lockdowns being enforced in most demand regions outside of China. This sudden demand drop saw many contracted cargoes being re-sold into the spot market, and combined with a weaker supply-side response, the prices fell to \$109/t by the end of April.

Such scenario created a large arbitrage with Chinese domestic coal production (US\$ 30+/t), prompting healthy seaborne demand from China and keeping prices from falling further. However, limited import quota and strict port policies remained a pressing issue for Chinese end-users, affecting their procurement plans for seaborne coal, and keeping prices rangebound at around the US\$ 112/t level throughout May and June. With ex-China activity showing signs of recovery, the consensus is that 2Q20 was the bottom of the market and prices will gradually increase through the second half of the year.

In the thermal coal market, FOB Richards Bay 6000 NAR coal averaged US\$ 54.8/t for the quarter, down from the previous quarter's US\$ 78/t. 2Q20 was defined by a steep drop in prices from \$ 74/t to \$ 42/t during the first three weeks of April once it was confirmed that the Richards Bay Coal Terminal operations would be classified as an essential service during South Africa's lockdown, removing concerns of South African coal availability. Prices then remained rangebound in the low US\$ 50s throughout May and June, as India's demand started to increase on resumption of industrial sectors and sponge iron production, but high stock levels and ample domestic supply prevented prices lifting higher.

Despite the easing of India's lockdown, power demand remains weak in the country, dragging on thermal coal prices. With Indian demand expected to improve once the monsoon abates in September, as well as global energy demand generally improving as regional lockdowns ease, prices should hold steady or slightly increase into 4Q20.

NICKEL

LME nickel prices averaged US\$ 12,215/t in 2Q20, 4% lower compared to US\$ 12,723/t in 1Q20. However, while averaging less, nickel prices posted strong gains in the last month of the quarter, closing at US\$ 12,790/t on June 30th, 2020.

Total exchange inventories (LME and SHFE) had a net increase, closing at 262.9 kt by the end of 2Q20, an increase of 4.4 kt from the previous quarter as off-exchange inventories came back online. LME inventories at the end of 2Q20 stood at 233.9 kt, an increase of 4.1 kt since last quarter. SHFE inventories increased by 0.3 kt to 29.0 kt by the end of 2Q20.

Global stainless-steel production increased 1.5% in 2Q20 relative to 1Q20 as Chinese production rebound was able to offset global declines. As noted last quarter, visible Chinese stainless inventories are elevated, however, we saw a slight draw down each month of 2Q20. Sales of electric vehicles worldwide fell 6% in 2Q20 relative to 1Q20 amid a continued decline

in overall automotive sales, primarily driven this time by lockdowns in the United States and Europe. On the bright side, electric vehicle sales in China increased 123% over the same period. Demand for nickel in other applications was subdued, aerospace manufacturing plant closures resulted in reduced demand in super alloy applications and continuing poor results for the automotive market negatively impacting plating applications.

During the first five months, NPI (nickel pig iron) production in China remained strong, however, because of 2Q developments, we expect production levels to weaken before year end. With the Indonesian export ban in full effect, Chinese producers now have a greater reliance on ore imports from other countries, particularly from the Philippines. As such, the Philippine port closures in April, which resulted from a COVID-19 outbreak, has an amplified impact and caused ore imports to decline to a multi-year low. To maintain production, NPI producers looked to ore inventories to make up for the shortfall. As a result, ore inventories shrank substantially. We believe ore tightness in China could now be an issue to come in 4Q20.

The current COVID-19 pandemic has caused disruptions in nickel supply in 2020. Producing operations in South Africa, Madagascar, Canada, Colombia, Australia and the Philippines have been impacted. In addition to the impact on existing operations, delay in projects have also been observed given the restriction on the movement of people. While mine supply is forecasted to be 4% lower this year, the inventory of ore and concentrates has limited the impact on refined nickel.

Our near-term view for nickel remains the same, we believe the market will be in surplus in 2020. COVID-19 has impacted demand, particularly in the stainless steel, aerospace and automotive sectors. However, our long-term outlook for nickel continues to remain positive. We are cautiously optimistic that depressed markets, such as airlines, could return rather quickly with the successful development of a COVID-19 vaccine. Governments are on stand-by, ready for mass distribution, and private companies, such as Pfizer, Johnson & Johnson, and AstraZeneca etc. have shown promising early COVID-19 vaccine results.

Additionally, to bolster markets, governments globally have committed record amounts of funding for stimulus. Many packages appear to be specifically supporting and targeting the growth of the “green economy”. For instance, 25% of the European commission’s 8 year, €1.85 trillion, economic recovery proposal, “must be green”. We expect support/incentives to, at minimum, remain for electric vehicles, many of which will be using nickel rich batteries.

We continue to monitor the progress of HPAL (High Pressure Acid Leach) projects in Indonesia. These projects are expected to supply the EV market by producing a battery-suitable nickel material; however, operations so far have been delayed due to complexity, costs, and COVID-19 related issues, such as travel restrictions for technical experts. NPI production from Indonesia on the other hand, continues to grow and is expected to offset any Chinese NPI reductions.

COPPER

The LME copper price averaged US\$ 5,356/t in 2Q20, a decrease of 5% from 1Q20 (US\$ 5,637/t). Copper prices gained substantially in the last month of the quarter, closing above US\$ 6,000/t on June 30th, 2020.

LME copper inventories at the end of 2Q20 stood at 216.6 kt, a decrease of 5.6 kt from last quarter. SHFE inventories, including deliverable stocks, decreased by 264.1 kt, or 73%, to 100.0 kt by the end of 2Q20. The COMEX increased by 43.7 kt, ending 2Q20 at 72.9 kt. Overall, copper exchange inventory decreased by 226.0 kt, ending the quarter at 389.5 kt.

While the COVID-19 pandemic negatively affected global demand in 1Q20, we have seen an impressive rebound in 2Q20, with demand increasing 18.0% quarter-over-quarter. On the supply side, while we have seen disruptions globally, Latin American countries such as Peru, Chile, and Panama continue to see impacts as containing the spread of COVID-19 proves difficult in the region. Estimates indicate that 2020 copper mine production could decline by more than 400 kt of Cu, compared to 2019.

With supply disruptions mounting and strong demand in China, we have a positive near-term view on copper. Still, we expect the market to remain in a minor surplus with further downside risks as economic impacts continue to be evaluated. As smelter disruptions have been resolved, and Chinese imports remain strong, the copper concentrates remain in deficit. We see copper benefiting from fiscal stimulus packages from across the globe, particularly in China, where industries such as infrastructure and construction are typically favored to stimulate the economy.

Our long-term outlook for copper remains positive. Copper demand is expected to grow, partially driven by electric vehicles and renewable energy as well as infrastructure investments. Future supply growth is challenged given declining ore grades and the lack of major discoveries. While in the short term, there are enough quality assets being developed to meet demand, however, in the medium-term, additional assets will be required to replace existing operation ramp downs and closures.

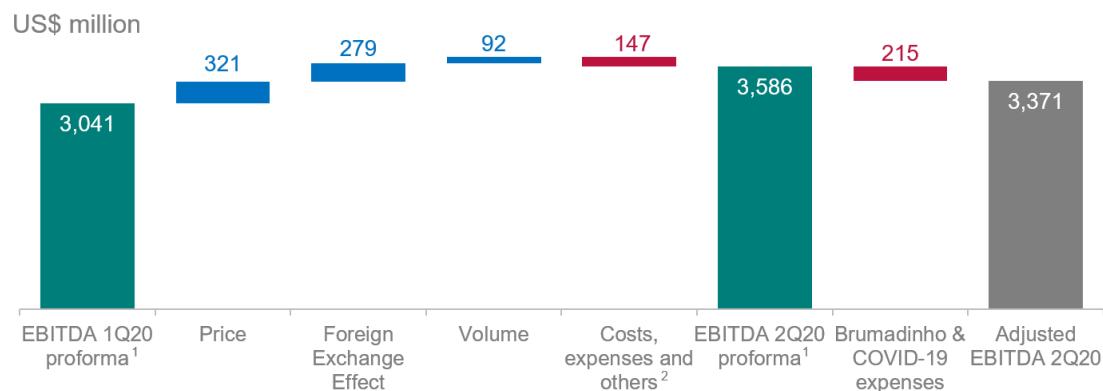
Adjusted EBITDA

Adjusted EBITDA

US\$ million	2Q20	1Q20	2Q19
Net operating revenues	7,518	6,969	9,186
COGS	(4,212)	(4,278)	(5,173)
SG&A	(124)	(115)	(110)
Research and development	(90)	(95)	(90)
Pre-operating and stoppage expenses	(238)	(268)	(335)
Expenses related to Brumadinho	(130)	(159)	(1,532)
Expenses related to COVID-19 donations	(85)	-	-
Other operational expenses	(152)	(62)	(35)
Dividends and interests on associates and JVs	77	75	221
Adjusted EBIT	2,564	2,067	2,132
Depreciation, amortization & depletion	807	815	966
Adjusted EBITDA	3,371	2,882	3,098
Proforma adjusted EBITDA¹	3,586	3,041	4,630

¹ Excluding expenses related to Brumadinho and COVID-19.

EBITDA proforma 2Q20 vs. 1Q20



¹ Net of Brumadinho and COVID-19 related expenses

² Including positive freight effect US\$ (169 million) and dividends received (US\$ 2 million)

Impact of provisions and reparation expenses related to the Brumadinho dam rupture

In this quarter, Vale recognized US\$ 21 million in additional provisions due to donations and ongoing negotiations in the legal front. The aggregate amount of the provisions is currently at US\$ 3.4 billion, mainly due to payments made during the year in the amount of US\$ 645 million, and the impact of the Brazilian real devaluation.

US\$ million	EBITDA impact in 2019	Payments in 2019	PV & FX adjust 2019	Provisions balance 31dec19	EBITDA impact in 1H20	Payments 1H20	PV & FX adjust 1H20	Provisions balance 30jun20
Decharacterization	2,624	(158)	23	2,489	-	(111)	(692)	1,686
Agreements & donations	3,926	(831)	(112)	2,983	21	(534) ¹	(747)	1,723
Total Provisions	6,550	(989)	(89)	5,472	21	(645)	(1,439)	3,409
Incurred expenses	730	(730)			268	(268)		
Others	122	-			-	-		
Total	7,402	(1,719)			289	(913)		

¹ Includes cash outflows of US\$ 260 million and the release of judicial deposits of US\$ 274 million

Adjusted EBITDA by business area

US\$ million	2Q20	1Q20	2Q19
Ferrous Minerals	3,502	2,847	4,223
Base Metals	563	510	465
Coal	(269)	(158)	(106)
Others	(210)	(158)	48
Brumadinho impact	(130)	(159)	(1,532)
Expenses related to COVID-19 donations	(85)	-	-
Total	3,371	2,882	3,098

Net operating revenue by business area

US\$ million	2Q20	%	1Q20	%	2Q19	%
Ferrous Minerals	5,895	78.4	5,296	76.0	7,315	79.6
Iron ore fines	4,852	64.5	4,311	61.9	5,849	63.7
ROM	3	0.0	6	0.1	6	0.1
Pellets	900	12.0	852	12.2	1,300	14.2
Manganese ore	58	0.8	23	0.3	27	0.3
Ferroalloys	10	0.1	23	0.3	42	0.5
Others	72	1.0	81	1.2	91	1.0
Base Metals	1,471	19.6	1,427	20.5	1,538	16.7
Nickel	591	7.9	637	9.1	740	8.1
Copper	491	6.5	350	5.0	495	5.4
PGMs	120	1.6	210	3.0	115	1.3
Gold as by-product	191	2.5	179	2.6	152	1.7
Silver as by-product	7	0.1	12	0.2	5	0.1
Cobalt	27	0.4	32	0.5	26	0.3
Others	44	0.6	7	0.1	5	0.1
Coal	94	1.3	148	2.1	256	2.8
Metallurgical coal	52	0.7	94	1.3	194	2.1
Thermal coal	42	0.6	54	0.8	62	0.7
Others	58	0.8	98	1.4	77	0.8
Total	7,518	100.0	6,969	100.0	9,186	100.0

COGS by business segment

<i>US\$ million</i>	2Q20	%	1Q20	%	2Q19	%
Ferrous Minerals	2,632	62.5	2,569	60.1	3,264	63.1
Base Metals	1,063	25.2	1,150	26.9	1,378	26.6
Coal	361	8.6	393	9.2	445	8.6
Others	156	3.7	166	3.9	86	1.7
Total COGS	4,212	100.0	4,278	100.0	5,173	100.0
Depreciation	734		729		871	
COGS¹, ex-depreciation	3,478		3,549		4,302	

¹ COGS currency exposure in 2Q20 was as follows: 54% USD, 41% BRL, 4% CAD and 1% EUR.

Expenses

<i>US\$ million</i>	2Q20	1Q20	2Q19
SG&A ex-depreciation	110	98	94
SG&A	124	115	110
Administrative	104	98	85
Personnel	40	47	41
Services	33	18	13
Depreciation	14	17	16
Others	17	16	15
Selling	20	17	25
R&D	90	95	90
Pre-operating and stoppage expenses	238	268	335
Depreciation	59	69	79
Expenses related to Brumadinho	130	159	1,532
Provisions	21	-	1,374
Incurred expenses	109	159	158
Expenses related to COVID-19 donations	85	-	-
Other operating expenses	152	62	35
Total expenses	819	699	2,102
Depreciation	73	86	95
Expenses ex-depreciation	746	613	2,007

Pre-operating and stoppage expenses decreased US\$ 30 million in 2Q20, mainly due to Brumadinho stoppage expenses, 36% lower in relation to 1Q20, mainly driven by Vargem Grande complex and Timbopeba operations' resumption and the positive effect of the Brazilian real devaluation. The decrease was partially offset by Voisey's Bay care and maintenance related expenses.

Pre-operating and stoppage expenses break-down

US\$ million	2Q20	1Q20	2Q19
Pre-operating and stoppage expenses	238	268	335
Depreciation	59	69	79
Pre-operating and stoppage expenses, ex-depreciation	179	199	256
Brumadinho - stoppage expenses	104	163	238
Itabira Complex (Cauê, Conceição and others)	-	6	-
Minas Centrais Complex (Brucutu and others)	19	26	19
Mariana Complex (Alegria, Timbópeba and others)	7	19	27
Paraopeba Complex (Mutuca, Fábrica ¹ and others)	44	55	65
Vargem Grande Complex (Vargem Grande ¹ , Pico and others)	34	57	120
Others Brumadinho	-	-	7
Tubarão pellet plants	17	15	-
Voisey's Bay	29	-	-
Others	29	21	18

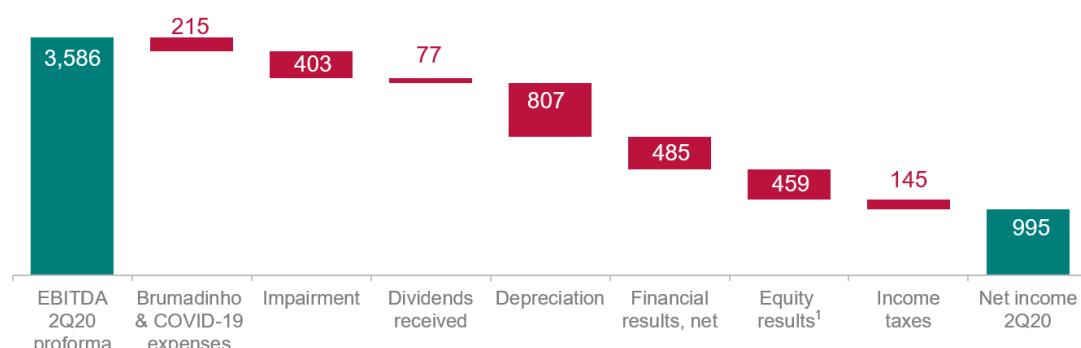
¹ Including pelletizing plants.

Net income (loss)

Vale posted a net income of US\$ 995 million in 2Q20, US\$ 756 million higher than 1Q20.

EBITDA proforma to Net income reconciliation

US\$ million



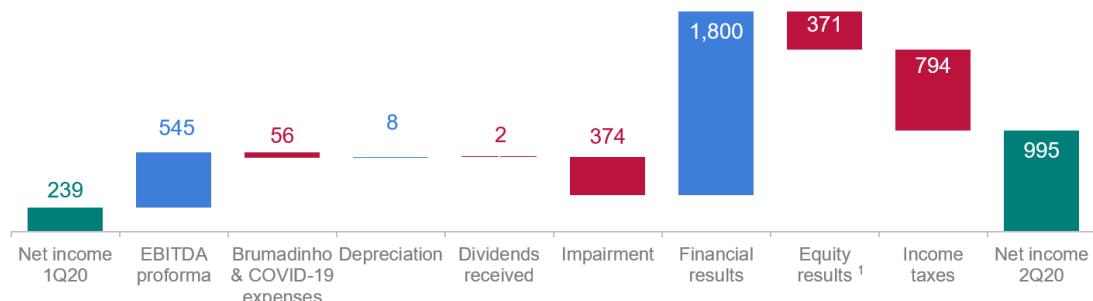
¹ Includes net income (loss) of -US\$ 76 million attributable to noncontrolling interests.

Besides higher EBITDA in 2Q20, stronger net income can be explained by the improvement of net financial results as in 1Q20 this line was heavily impacted by derivatives expenses related to the Brazilian real devaluation. This improvement was partially offset by (i) impairment charges in Nickel assets, reflecting the negotiations for the sale of VNC, and (ii) additional provisions for future expenditures with Samarco and Renova Foundation.

As new developments and assumptions are incorporated into Renova's reparation programs, it becomes necessary to update its business plan and funding requirements to fulfill its commitments. As a result of an increase in expected funding needs by Renova, Vale recognized an additional provision of US\$ 566 million, included in Equity results in the graph above.

Net income 2Q20 vs. 1Q20

US\$ million



¹ Includes net income (loss) of US\$ 2 million attributable to noncontrolling interests.

Financial results

US\$ million	2Q20	1Q20	2Q19
Financial expenses	(585)	(525)	(751)
Gross interest	(193)	(214)	(274)
Capitalization of interest	12	32	40
Shareholder debentures ¹	(231)	(49)	(251)
Others	(161)	(269)	(223)
Financial expenses (REFIS)	(12)	(25)	(43)
Financial income	135	107	122
Derivatives²	(86)	(1,384)	66
Currency and interest rate swaps	(230)	(1,091)	25
Others (bunker oil, commodities, etc)	144	(293)	41
Foreign Exchange	107	(464)	21
Monetary variation	(56)	(19)	(186)
Financial result, net	(485)	(2,285)	(728)

¹ In 2Q20, US\$ 88 million were paid as remuneration on shareholder debentures.

² The cash effect of the derivatives was a loss of US\$ 114 million in 2Q20.

CAPEX

Investments in 2Q20 totaled US\$ 967 million, consisting of US\$ 124 million in project execution and US\$ 843 million in maintenance of operations. Investments were 14.5% lower than in 1Q20, mainly due to (i) the continued depreciation of the Brazilian real relative to the U.S. dollar (US\$ 100 million), as 48.0% of the period's capital expenditure were denominated in the Brazilian currency, and (ii) overall anticipation of payments to suppliers in 1Q20, as a measure to mitigate impacts of the COVID-19 pandemic on Vale's value chain.

Project Execution and Sustaining by business area

US\$ million	2Q20	%	1Q20	%	2Q19	%
Ferrous Minerals	541	56.0	627	55.8	399	54.7
Base Metals	392	40.5	413	36.7	301	41.2
Coal	31	3.2	80	7.1	27	3.7
Energy and others	3	0.3	4	0.4	3	0.4
Total	967	100.0	1,124	100.0	730	100.0

Based on recent exchange rate fluctuations and the gradual resumption of projects expected to 2H20, with additional cost for remobilization, estimates for capital expenditure at US\$ 4.6 billion in 2020 remains unchanged. Nonetheless, COVID-19-related risks to the scope and execution of investments cannot be discarded during the second half of the year.

Project execution

Investments in project execution totaled US\$ 124 million in 2Q20, 47.7% lower than 1Q20, mainly due to the combined effect of (i) currency depreciation, (ii) amplified by the anticipation of payments in 1Q20 and (iii) the postponement of works at the two main multi-year projects, the Northern System 240 Mtpy project and the Salobo III project, as a preventive measure amid the COVID-19 pandemic.

Project execution by business area

US\$ million	2Q20	%	1Q20	%	2Q19	%
Ferrous Minerals	59	47.7	91	62.8	87	66.9
Base Metals	63	50.7	52	35.9	42	32.3
Energy and others	2	1.6	2	1.4	1	0.8
Total	124	100.0	145	100.0	130	100.0

The Northern System 240 Mtpy project had construction works at the project's site suspended temporarily, starting in early April 2020 and resuming in early June 2020, relocation of construction sites to open path for earthmoving works. As for the Salobo III project, non-critical works were suspended in late March 2020, with their gradual resumption starting in May 2020, for example, the substation expansion. At this point, the estimated start-up date for both projects remain unchanged, but increased costs for re-mobilization of teams in the coming months are likely.

Capital projects progress indicator⁷

Projects	Capacity (tons per year)	Estimated start-up ⁸	Executed capex (US\$ million)		Estimated capex (US\$ million)		Physical progress (%)
			2Q20	Total	2020	Total	
Ferrous Minerals Project							
Northern System 240 Mtpy	10 Mt	2H22	20	121	224	772	25%
Base Metals Project							
Salobo III	(30-40) kt	1H22	54	236	323	1,128	54%

Sustaining CAPEX

Investments in the maintenance of operations in 2Q20 decreased 13.9% compared to 1Q20, mainly due to, in addition to the above described effects, the postponement of the plant revamp in Coal operations and maintenance in Copper, given impacts related to COVID-19 pandemic, with respective expenditure decreases of 61.0% and 36.0% compared to previous quarter.

Sustaining capex by business area

US\$ million	2Q20	%	1Q20	%	2Q19	%
Ferrous Minerals	482	57.2	536	54.7	312	52.0
Base Metals	329	39.0	361	36.9	259	43.2
Nickel	289	34.3	299	30.6	228	38.0
Copper	40	4.7	62	6.3	31	5.2
Coal	31	3.7	80	8.2	27	4.5
Energy and others	1	0.1	2	0.2	2	0.3
Total	843	100.0	979	100.0	600	100.0

Investments in dam management and health & safety are considered essential to Vale, therefore projects have been implemented amid the COVID-19 pandemic, with due adjustments and in line with the most rigorous international practices, such as test-trace-treat protocol and mass testing employees, among other measures.

⁷ Pre-operating expenses were not included in the estimated capex for the year, although included in the total estimated capex column, in line with Vale's Board of Directors approvals. Estimated capex for the year is only reviewed once a year

⁸ Updates may be required in the future, depending on the developments of the COVID-19 pandemic

Sustaining capex by type - 2Q20

US\$ million	Ferrous Minerals	Base Metals	Coal	Energy and others	TOTAL
Enhancement of operations	299	180	24	-	503
Replacement projects	29	90	-	-	119
Dam management	3	3	-	-	6
Other investments in dams and waste dumps	24	15	3	-	42
Health and Safety	49	14	3	-	66
Social investments and environmental protection	24	14	1	-	39
Administrative & Others	54	13	-	1	68
Total	482	329	31	1	843

The two main replacement projects, Voisey's Bay underground mine extension ("VBME"), in Canada, and Gelado, in Brazil, had work fronts suspended in March 2020 as a preventive measure amid the COVID-19 pandemic. The VBME project had critical path work resumed in late May 2020, with the first blast at level 270 in Reid Brook and the restart of boring the raise pilot, ending 2Q20 with expenditure 21.1% higher compared to 1Q20, mainly due to the remobilization of teams.

The Gelado project moved forward with earthmoving works, the assembling of two local structures and the resumption of civil works for sifting. The project ended 2Q20 with expenditure 31.2% lower compared to 1Q20, given the suspension of work fronts. The completion estimates for VBME remain unchanged, but in case of Gelado, the start-up was postponed to 1H22.

Replacement projects progress indicator

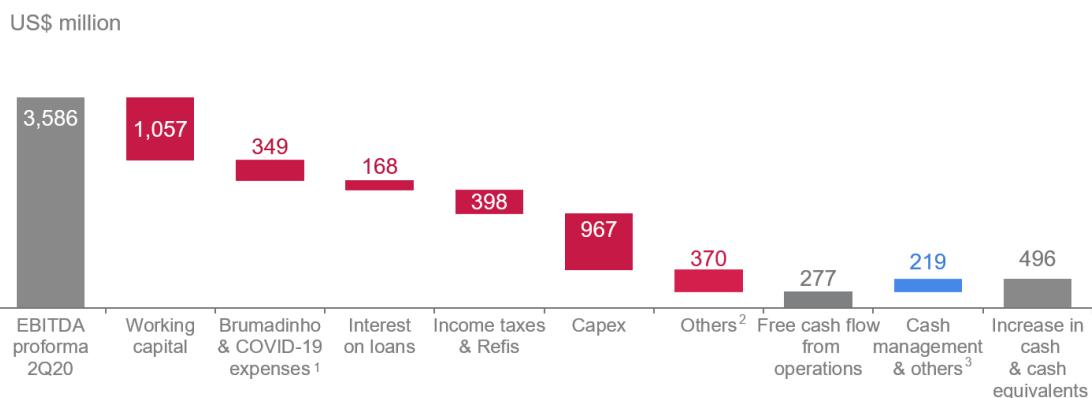
Projects	Capacity (ktpy)	Estimated start-up	Executed capex (US\$ million)		Estimated capex (US\$ million)		Physical progress (%)
			2Q20	Total	2020	Total	
Voisey's Bay Mine Extension	45	1H21	89	634	499	1,694	48%
Gelado	9.6	1H22	22	129	121	428	60%

Free cash flow

In 2Q20, Free Cash Flow from Operations was US\$ 277 million and cash & cash equivalents increased US\$ 496 million.

The quarter was marked by the negative impact of working capital variation, which was mainly due to low clients' receipts in the quarter (US\$ 922 million), caused by stronger CFR sales in 2Q20 concentrated in June, which carry longer collection lead time than FOB sales, leading to 12.5 Mt of accrual sales volumes in 2Q20 versus 5.7 Mt in 1Q20.

Free Cash Flow 2Q20



¹ Includes US\$ 109 million of Brumadinho incurred expenses, US\$ 155 million disbursement of Brumadinho provisioned expenses and US\$ 85 million of COVID-19 related expenses.

² Includes derivatives, Samarco, dividends and interest on capital paid to noncontrolling interest and others.

³ Includes US\$ 353 million of short term Brazilian treasury bonds disbursement and US\$ 116 million of net debt repayments.

Debt indicators

Debt indicators

US\$ million	2Q20	1Q20	2Q19
Gross debt ¹	16,903	17,075	15,790
Net debt ¹	4,697	4,808	9,726
Leases (IFRS 16)	1,652	1,694	1,840
Total debt / adjusted LTM EBITDA (x)	1.2	1.2	1.4
Net debt / adjusted LTM EBITDA (x)	0.3	0.3	0.9
Adjusted LTM EBITDA / LTM gross interest (x)	16.5	14.8	10.4

¹ Does not include leases (IFRS 16).

Gross debt totaled US\$ 16.903 billion as of June 30th, 2020, decreasing by US\$ 172 million vs. March 31st, 2020, mainly as a result of usual debt amortization.

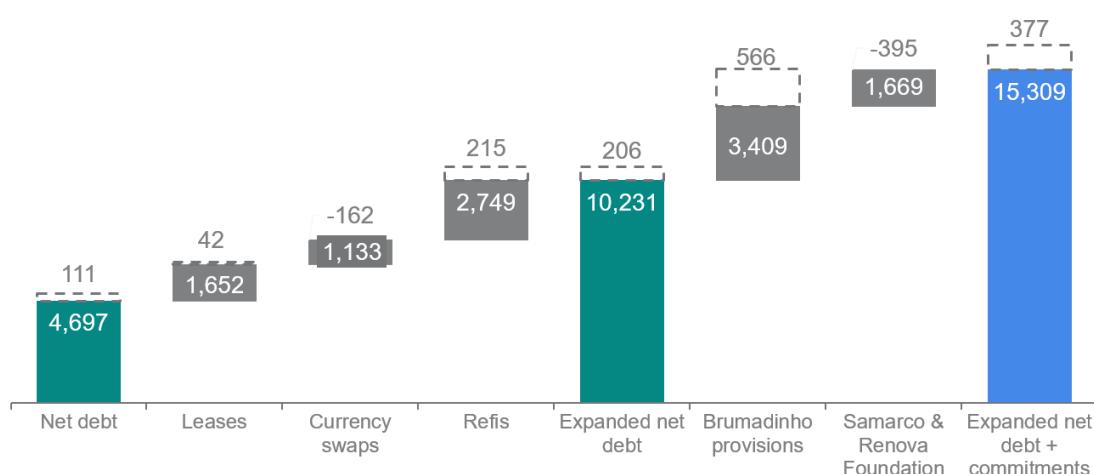
Net debt remained relatively stable at US\$ 4.697 billion as of June 30th, 2020, at its lowest level since 4Q08, decreasing by US\$ 111 million vs. US\$ 4.808 billion as of March 31st, 2020. The slight decline in net debt is mainly due to the cash generation in the period, offset by foreign exchange variations.

Expanded net debt (including relevant commitments) remained roughly at the same level at US\$ 15.309 billion as of June 30th, 2020. The decrease of US\$ 377 million from 1Q20 is mainly due to lower Brumadinho and Refis commitments, reflecting payments made during the quarter, which were offset by an increase in the Renova Foundation provisions in addition to the effect of currency swaps in the period.

Expanded net debt¹

US\$ million

[---] Change from 1Q20 recorded value

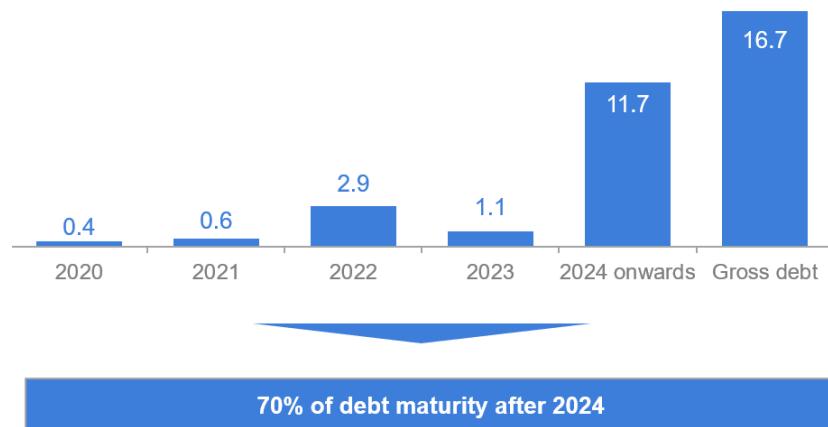


¹ As of June 30th, 2020.

Average debt maturity decreased to 7.1 years on June 30th, 2020, when compared to 7.3 years on March 31st, 2020. Likewise, average cost of debt, after currency and interest rate swaps, decreased to 3.61% per annum on June 30th, 2020 when compared to 3.71% per annum on March 31st, 2020, mainly due to lower international interest rates in the quarter.

Debt amortization schedule¹

US\$ billion



¹ As of June 30th, 2020. Does not include accrued charges.

Performance of the business segments

Segment information — 2Q20, as per footnote of financial statements

US\$ million	Expenses					Dividends and interest received from associates and JVs	Adjusted EBITDA
	Net Revenues	Cost ¹	SG&A and others ¹	R&D ¹	Pre operating & stoppage ¹		
Ferrous Minerals	5,895	(2,214)	(56)	(27)	(149)	53	3,502
Iron ore fines	4,852	(1,739)	(59)	(25)	(122)	-	2,907
ROM	3	-	-	-	-	-	3
Pellets	900	(377)	2	(1)	(17)	53	560
Others ferrous	72	(56)	1	-	-	-	17
Mn & Alloys	68	(42)	-	(1)	(10)	-	15
Base Metals	1,471	(834)	(19)	(26)	(29)	-	563
Nickel ²	948	(649)	(16)	(11)	(29)	-	243
Copper ³	523	(185)	(3)	(15)	-	-	320
Coal	94	(361)	3	(5)	-	-	(269)
Others	58	(69)	(190)	(32)	(1)	24	(210)
Brumadinho impact	-	-	(130)	-	-	-	(130)
COVID-19 donations	-	-	(85)	-	-	-	(85)
Total	7,518	(3,478)	(477)	(90)	(179)	77	3,371

¹ Excluding depreciation, depletion and amortization.

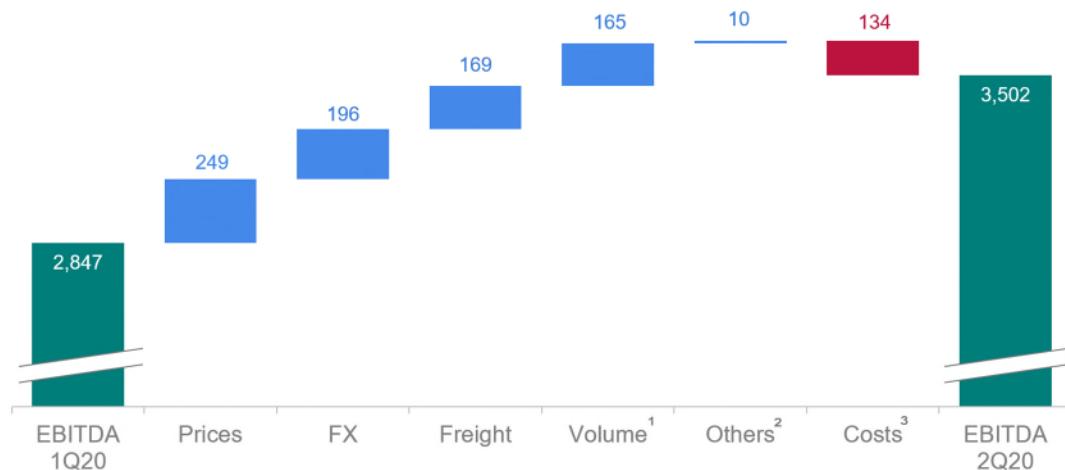
² Including copper and by-products from our nickel operations.

³ Including by-products from our copper operations.

Ferrous Minerals

In 2Q20, adjusted EBITDA of the Ferrous Minerals business segment was US\$ 3.502 billion, 23% higher than in 1Q20, and the adjusted EBITDA per ton for Ferrous Minerals, excluding Manganese and Ferroalloys, totaled US\$ 56.6/t, an increase of US\$ 8.3/t when compared to 1Q20.

Ferrous Minerals EBITDA variation (2Q20 x 1Q20) – US\$ million



¹ Including resumption of halted operations related to Brumadinho event.

² Including dividends received (US\$ 53 million) and higher expenses (US\$ 43 million).

³ Excluding volume effect, FX and freight costs.

The share of premium products⁹ in total sales was 83% in 2Q20, slightly lower than 1Q20 mainly due to higher share of Southern System products in total sales. Iron ore fines and pellets quality premiums reached US\$ 7.5/t¹⁰ in 2Q20 vs. US\$ 5.2/t in 1Q20, mainly due to seasonal dividends received and higher premiums for low alumina products, such as BRBF and IOCJ.

Iron ore fines and pellets quality premium

US\$/t	2Q20	1Q20	2Q19
Iron ore fines quality premium	5.3	4.6	5.7
Pellets weighted average contribution	2.2	0.6	5.7
Iron ore fines and pellets total quality premium	7.5	5.2	11.4
Share of premium products¹ (%)	83%	87%	86%

¹ Composed of pellets, Carajás (IOCJ), Brazilian Blend Fines (BRBF) and pellet feed.

Volume sold

'000 metric tons	2Q20	1Q20	2Q19
Iron ore fines	54,569	51,445	61,873
ROM	46	211	72
Pellets	6,950	7,311	8,842
Manganese ore	270	219	92
Ferroalloys	10	27	39

⁹ Pellets, Carajás, BRBF (Brazilian Blend Fines) and pellet feed

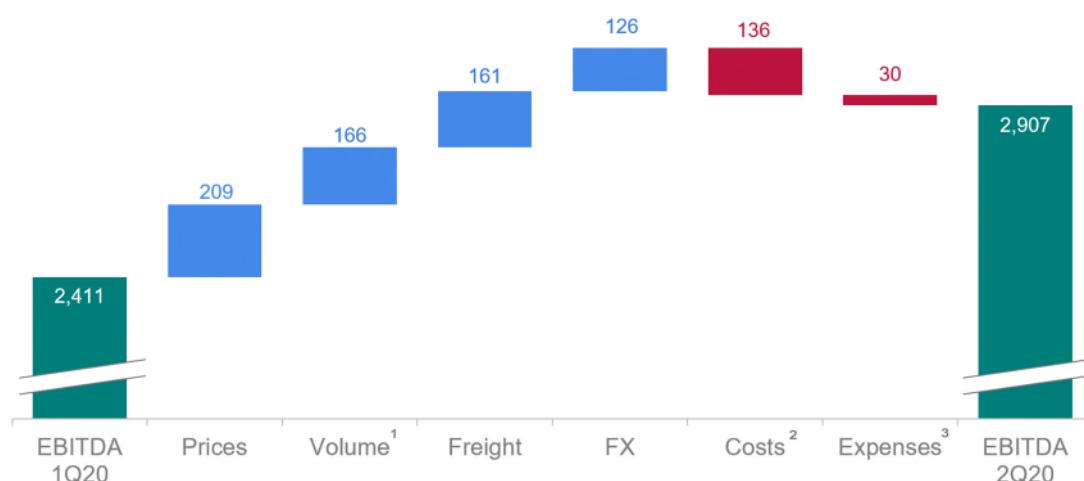
¹⁰ Iron ore premium of US\$ 5.3/t and weighted average contribution of pellets of US\$ 2.2/t

Net operating revenue by product

US\$ million	2Q20	1Q20	2Q19
Iron ore fines	4,852	4,311	5,849
ROM	3	6	6
Pellets	900	852	1,300
Manganese & Ferroalloys	68	46	69
Others	72	81	91
Total	5,895	5,296	7,315

Iron ore fines (excluding Pellets and ROM)

Iron ore fines EBITDA variation (2Q20 x 1Q20) – US\$ million



¹ Including resumption of halted operations related to Brumadinho event.

² Excluding volume effect, FX and freight costs.

³ Excluding volume effect and FX.

REVENUES AND SALES VOLUMES

Net sales revenues of iron ore fines, excluding pellets and run of mine (ROM), increased to US\$ 4.852 billion in 2Q20 vs. US\$ 4.311 billion in 1Q20, as a result of higher sales volumes (US\$ 332 million) and higher sales prices (US\$ 209 million).

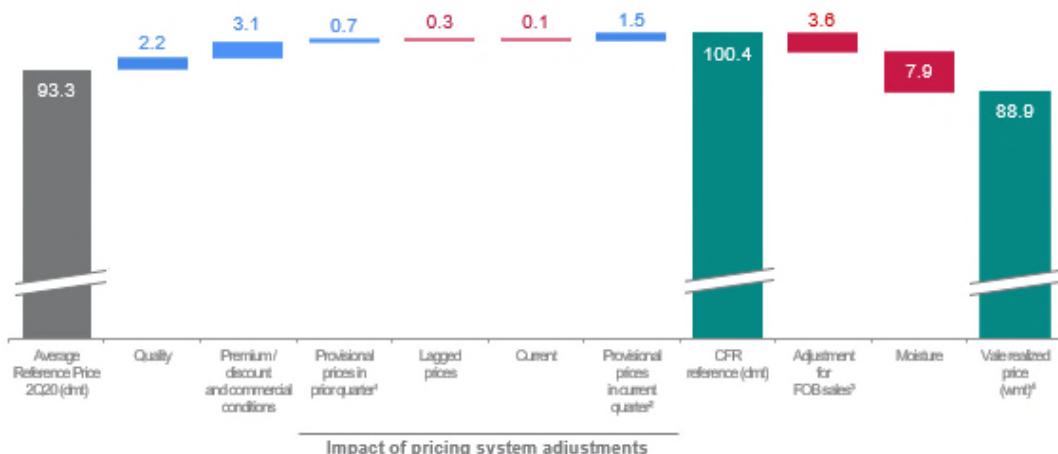
Sales volumes of iron ore fines totaled 54.6 Mt in 2Q20, 6% higher than in 1Q20. CFR sales of iron ore fines totaled 44.2 Mt in 2Q20, which represented 81%, a significant increase compared with previous quarters mainly due to the higher percentage of sales to China (70% in 2Q20 vs. 58% in 1Q20 of fines and pellet sales). Sales to China are predominantly CFR-based, due to Vale's blending strategy and customers' usual choice. The higher percentage of sales to China is an effect of COVID-19 impacts in different markets.

Pricing system breakdown - %



Vale's realized price CFR/FOB totaled US\$ 88.9/t, an increase of US\$ 5.1/t compared with 1Q20, mainly due to higher 62% Fe reference price (US\$ 4.3/t), positive pricing system mechanisms impacted by a higher forward price curve (US\$ 1.9/t) and higher premiums (US\$ 0.8/t), which were partially offset by a higher adjustment for FOB sales, due to freight pricing mechanisms (US\$ 1.3/t).

Price realization iron ore fines – US\$/t, 2Q20



^¹ Adjustment as a result of provisional prices booked in 1Q20 at US\$ 82.6/t.

^² Difference between the weighted average of the prices provisionally set at the end of 2Q20 at US\$ 94.3/t based on forward curves and US\$ 93.3/t from the 2Q20 62% Fe reference price.

^³ Includes freight pricing mechanisms of CFR sales freight recognition.

^⁴ Vale price is net of taxes.

Average prices

US\$/ metric ton	2Q20	1Q20	2Q19
Iron ore - Metal Bulletin 65% index	108.5	104.3	114.4
Iron ore - Metal Bulletin 62% low alumina index	95.9	91.0	103.6
Iron ore - 62% Fe reference price	93.3	89.0	100.1
Provisional price at the end of the quarter	94.3	82.6	108.4
Iron ore fines CFR reference (dmt)	100.4	93.5	106.8
Iron ore fines CFR/FOB realized price	88.9	83.8	94.6
Pellets CFR/FOB (wmt)	129.4	116.6	147.1
Manganese ore	214.3	107.4	294.6
Ferroalloys	1,005.9	870.7	1,073.8

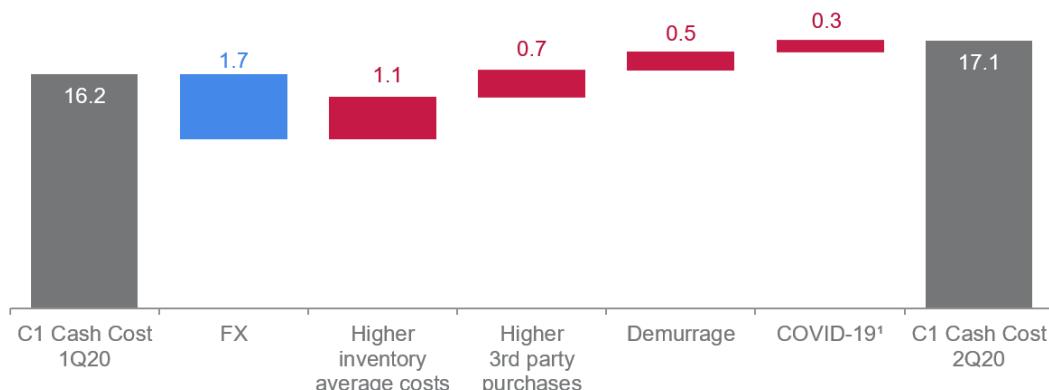
COSTS

IRON ORE COGS - 1Q20 x 2Q20

US\$ million	1Q20	Variance drivers				2Q20
		Volume	Exchange rate	Others	Total variation	
C1 cash costs	832	42	(85)	144	101	933
Freight	646	112	-	(161)	(49)	597
Others	205	12	-	(8)	4	209
Total costs before depreciation and amortization	1,683	166	(85)	(25)	56	1,739
Depreciation	231	11	(49)	121	83	314
Total	1,914	177	(134)	96	139	2,053

C1 cash cost FOB port per metric ton for iron ore fines ex-royalties increased to US\$ 17.1/t in 2Q20 from US\$ 16.2/t in 1Q20. Despite the positive effect of Brazilian real devaluation, C1 cost increased mainly due to (i) consumption of inventories with higher average costs; (ii) higher volumes and prices of third-party purchases; and (iii) higher demurrage costs, mainly as a result of the extended queue of vessels at Ponta da Madeira port, caused by the effects of the rainy season and operational issues in iron ore production.

C1 cash cost variation (2Q20 x 1Q20) – US\$/t



¹ Include other effects which total net impact is zero.

Considering the lower end of the production guidance as the most likely scenario and the current FX level, C1 cash cost is expected to be close to US\$ 14.5/t in 2H20. The main levers to C1 cash cost decrease are: (i) higher dilution of fixed costs; and (ii) normalization of demurrage costs in July.

Unit maritime freight cost per iron ore metric ton decreased US\$ 3.6/t, totaling US\$ 13.5/t in 2Q20. Freight cost decreased was led by: (i) lower bunker fuel costs¹¹ (US\$ 2.7/t); and (ii) lower spot freight prices (US\$ 0.3/t). For 3Q20, unit maritime freight cost may increase due to the seasonal higher exposure to spot freight prices.

Iron ore fines cash cost and freight

	2Q20	1Q20	2Q19
Costs (US\$ million)			
COGS, less depreciation and amortization	1,739	1,683	2,093
(-) Distribution costs	48	55	63
(-) Maritime freight costs (A)	597	646	781
FOB at port costs (ex-ROM)	1,094	982	1,249
(-) Royalties and others ¹	161	150	163
FOB at port costs (ex-ROM and ex-royalties) (B)	933	832	1,086
Sales volumes (Mt)			
Total iron ore volume sold	54.6	51.6	61.9
(-) Total ROM volume sold	0.0	0.2	-
Volume sold (ex-ROM) (C)	54.6	51.4	61.9
Vale's iron ore cash cost (ex-ROM, ex-royalties), FOB (US\$/t) (B/C)	17.1	16.2	17.6
Freight			
Maritime freight costs (A)	597	646	781
% of CFR sales (D)	81%	73%	76%
Volume CFR (Mt) (E = C x D)	44.2	37.7	47.3
Vale's iron ore unit freight cost (US\$/t) (A/E)	13.5	17.1	16.5

¹ Includes idle capacity.

Iron Ore Fines Costs and Expenses in BRL

R\$/t	2Q20	1Q20	2Q19
C1 cash costs ¹	91.8	72.8	68.9
Stoppage expenses related to Brumadinho ¹	9.5	13.2	22.1
Other expenses ¹	11.6	5.1	3.6
Total	113.0	91.1	94.5

¹ Net of depreciation

¹¹ In 2Q20, 70% of the contracted fleet were with scrubbers installed.

EXPENSES

Iron ore fines expenses, net of depreciation, decreased US\$ 11 million, mainly due to lower pre-operating and Brumadinho stoppage expenses (US\$ 47 million), which was partially offset by expenses related to scrubber installation delays due to COVID-19 (US\$ 12 million) and higher R&D expenditures after a lower seasonal first quarter (US\$ 7 million).

Pre-operating and Brumadinho stoppage expenses declined largely due to positive effect of the Brazilian real devaluation (US\$ 35 million) and lower stoppage expenses, mainly in Vargem Grande and Timbopeba operations (US\$ 12 million).

Expenses - iron ore fines

US\$ millions	2Q20	1Q20	2Q19
Selling	13	11	15
R&D	25	23	24
Pre-operating and stoppage expenses	122	169	236
Brumadinho stoppage expenses	97	153	225
Others	25	16	11
Other expenses	46	9	133
Total expenses	206	217	408

Iron ore pellets

Adjusted EBITDA for pellets increased 32% quarterly, largely explained by seasonal dividends received (US\$ 53 million) and positive impact of the Brazilian real devaluation (US\$ 53 million).

CFR pellets sales of 5.0 Mt in 2Q20 represented 71% of total pellets sales. FOB pellets sales amounted to 2.0 Mt in 2Q20. The increase in CFR sales was led by the increase of sales share to China as an effect of COVID-19 impacts in different markets.

Realized prices in 2Q20 were an average CFR/FOB of US\$ 129.4/t, increasing US\$ 12.8/t vs. 1Q20, mainly due to higher 65% Fe price index, higher CFR sales and a positive forward price curve.

Costs totaled US\$ 377 million (or US\$ 459 million with depreciation charges) in 2Q20. Excluding the impact of the positive effect of the Brazilian real devaluation (US\$ 49 million) and the negative effect of volumes and CFR sales impact (US\$ 15 million), costs remained in line with 1Q20.

Pellets expenses, net of depreciation, totaled US\$ 16 million in 2Q20, in line with 1Q20, mainly as a result of a positive effect of the Brazilian real devaluation, which was partially offset by lower reversal of provisions when compared to the previous quarter.

Pellets - EBITDA

	2Q20		1Q20	
	US\$ million	US\$/wmt	US\$ million	US\$/wmt
Net revenues / Realized price	900	129.5	852	116.5
Dividends received (Leased pelletizing plants)	53	7.6	-	-
Cash costs (Iron ore, leasing, freight, overhead, energy and other)	(377)	(54.2)	(412)	(56.4)
Pre-operational & stoppage expenses	(17)	(2.4)	(25)	(3.4)
Expenses (Selling, R&D and other)	1	0.1	9	1.2
EBITDA	560	80.6	424	58.0

Iron ore fines and pellets cash break-even¹²

Iron ore and pellets cash break-even landed in China¹

US\$/t	2Q20	1Q20	2Q19
Vale's iron ore cash cost (ex-ROM, ex-royalties), FOB (US\$ /t)	17.1	16.2	17.6
Iron ore fines freight cost (ex-bunker oil hedge)	13.5	17.1	16.5
Iron ore fines distribution cost	0.9	1.1	1.0
Iron ore fines stoppage expenses related to Brumadinho	1.8	3.0	5.7
Iron ore fines expenses ² & royalties	4.9	4.1	3.5
Iron ore fines moisture adjustment	3.4	3.6	4.0
Iron ore fines quality adjustment	(5.3)	(4.6)	(5.7)
Iron ore fines EBITDA break-even (US\$/dmt)	36.3	40.5	42.6
Iron ore fines pellet adjustment	(2.2)	(0.6)	(5.7)
Iron ore fines and pellets EBITDA break-even (US\$/dmt)	34.1	39.9	36.8
Iron ore fines sustaining investments	8.1	9.4	4.5
Iron ore fines and pellets cash break-even landed in China (US\$/dmt)	42.2	49.3	41.3

¹ Measured by unit cost + expenses + sustaining investment adjusted for quality

² Net of depreciation and includes dividends received

Manganese and ferroalloys

Adjusted EBITDA of manganese ore and ferroalloys was US\$ 15 million in 2Q20, US\$ 19 million higher than in 1Q20, mainly due to higher prices (US\$ 19 million) and the positive impact of the Brazilian real devaluation (US\$ 8 million), which were partially offset by higher expenses, mainly as a result of suspension of operations at Azul mine based on the contingent of employees considered at COVID-19 risk group (US\$ 10 million).

¹² Does not include the impact from the iron ore fines and pellets pricing system mechanism

Volume sold by destination – Iron ore and pellets

'000 metric tons	2Q20	1Q20	2Q19
Americas	4,937	7,986	9,013
Brazil	4,459	6,558	6,720
Others	478	1,428	2,293
Asia	51,011	43,119	50,530
China	43,144	34,239	38,984
Japan	3,428	4,355	5,818
Others	4,439	4,525	5,728
Europe	3,629	6,069	8,242
Germany	720	2,500	3,272
France	114	994	1,353
Others	2,795	2,575	3,617
Middle East	1,139	707	1,485
Rest of the World	849	1,086	1,517
Total	61,565	58,967	70,787

Selected financial indicators - Ferrous Minerals

US\$ million	2Q20	1Q20	2Q19
Net Revenues	5,895	5,296	7,315
Costs ¹	(2,214)	(2,215)	(2,807)
Expenses ¹	(56)	(14)	(150)
Pre-operating and stoppage expenses ¹	(149)	(195)	(249)
R&D expenses	(27)	(25)	(30)
Dividends and interests on associates and JVs	53	-	144
Adjusted EBITDA	3,502	2,847	4,223
Depreciation and amortization	(478)	(422)	(532)
Adjusted EBIT	3,024	2,425	3,691
Adjusted EBIT margin (%)	51.3	45.8	50.5

¹ Net of depreciation and amortization

Selected financial indicators - Iron ore fines

US\$ million	2Q20	1Q20	2Q19
Adjusted EBITDA (US\$ million)	2,907	2,411	3,348
Volume Sold (Mt)	54.6	51.4	61.9
Adjusted EBITDA (US\$/t)	53	47	54

Selected financial indicators - Pellets

US\$ million	2Q20	1Q20	2Q19
Adjusted EBITDA (US\$ million)	560	424	847
Volume Sold (Mt)	7.0	7.3	8.8
Adjusted EBITDA (US\$/t)	81	58	96

Selected financial indicators - Ferrous ex Manganese and Ferroalloys

US\$ million	2Q20	1Q20	2Q19
Adjusted EBITDA (US\$ million)	3,487	2,851	4,212
Volume Sold (Mt) ¹	61.6	59.0	70.8
Adjusted EBITDA (US\$/t)	57	48	60

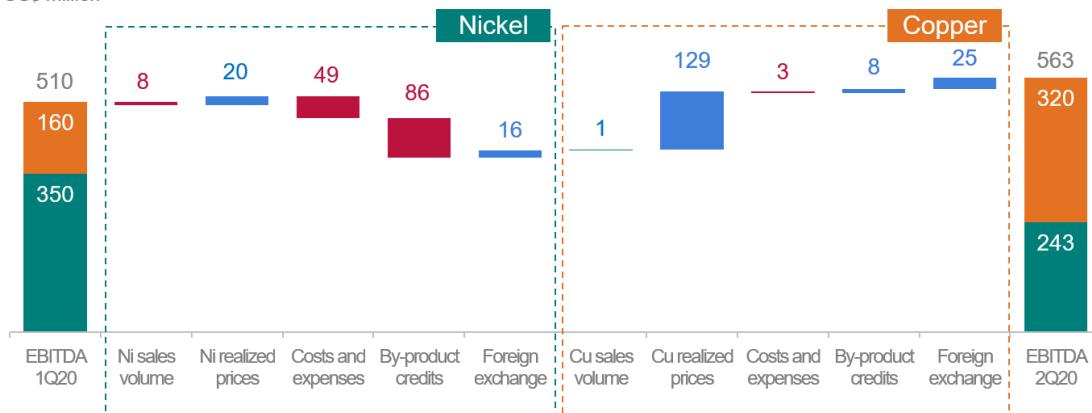
¹ Volume including iron ore fines, pellets and ROM.

Base Metals

Base Metals operations adjusted EBITDA was US\$ 563 million in 2Q20 vs. US\$ 510 million in 1Q20.

Base Metals - EBITDA 2Q20 vs. 1Q20

US\$ million



The better result in the quarter was mainly due to:

- higher copper realized prices as LME prices trended higher toward the end of the quarter and provisionally-priced invoices either settled or marked-to-market with higher prices;
- favorable exchange rate variations, as costs in South Atlantic operations benefited from the devaluation of the Brazilian real;
- higher realized prices of Upper Class I and Intermediate nickel products more than offset the decrease of realized prices of other nickel products;

which were partially offset by:

- lower by-product credits in Nickel business due to lower PGMs realized prices; and
- higher pre-operational and stoppage expenses mostly related to Voisey's Bay mine operations.

Base Metals EBITDA overview – 2Q20

US\$ million	North Atlantic	PTVI Site	VNC Site	Onça Puma	Sossego	Salobo	Others Ni & Cu	Total Base Metals
Net Revenues	603	185	57	36	137	386	67	1,471
Costs	(402)	(127)	(103)	(32)	(62)	(123)	15	(834)
Selling and other expenses	(5)	-	-	(1)	1	(4)	(10)	(19)
Pre-operating and stoppage expenses	(29)	-	-	-	-	(0)	0	(29)
R&D	(9)	1	(2)	-	(2)	-	(14)	(26)
EBITDA	158	59	(48)	3	74	259	58	563

Average prices

US\$/ metric ton	2Q20	1Q20	2Q19
Nickel - LME	12,215	12,723	12,258
Copper - LME	5,356	5,637	6,113
Nickel - realized prices	13,948	14,434	12,877
Copper - realized prices ¹	5,994	3,858	5,199
Gold (US\$/oz)	1,743	1,636	1,341
Silver (US\$/oz)	18.09	15.81	13.09
Cobalt (US\$/t)	26,816	26,916	24,222

¹Considers Salobo and Sossego operations.

Nickel operations

Nickel operations – EBITDA by operation

US\$ million	2Q20	1Q20	2Q19
North Atlantic operation ¹	158	253	262
PTVI	59	55	33
VNC	(48)	(46)	(87)
Onça Puma	3	(4)	3
Others Nickel ²	71	92	37
Total	243	350	248

¹ Includes the operations in Canada and in the United Kingdom.

² Includes the PTVI and VNC off-takes, intercompany sales eliminations, purchase of finished nickel, hedge results and trading activities.

North Atlantic operations' EBITDA was lower in 2Q20 due to (i) lower PGMs by-product credits, especially for palladium and rhodium due to lower realized prices, (ii) higher stoppage expenses due to the care and maintenance period at Voisey's Bay mine, and (iii) lower nickel sales volumes, reflecting continued weak demand derived from economic conditions brought about by the COVID-19 pandemic. The negative effects were partially offset by higher copper realized prices on the provisional price effect previously mentioned.

Voisey's Bay mine resumed operations one month earlier than anticipated after the care and maintenance period which started in March 2020. Finished nickel production was not affected as the Long Harbour Processing Plant continued to operate, given the availability of stockpiled concentrates to feed the refinery. However copper concentrate production decreased due to the stoppage of mining and milling operations. Operations resumed on July 3rd and should reach full capacity by August.

PTVI's higher EBITDA was mainly due to lower costs and higher sales volumes, which were partially offset by lower realized prices.

VNC's EBITDA was in line with 1Q20 results as higher nickel realized prices offset lower sales volumes. VNC refining activities responsible for processing the feed into nickel oxide were ramped down in 2Q20, with only the production of nickel hydroxide cake going forward at increased volumes.

Onça Puma's operations remained significantly below their potential this quarter. Productivity at the site was limited in 2Q20 due to postponed maintenance activities, which are taking place with a furnace shutdown during most of July. Processing activities will resume to full capacity from August onwards.

Net operating revenue by product - Nickel operations

US\$ million	2Q20	1Q20	2Q19
Nickel	591	637	740
Copper	133	124	170
Gold as by-product	28	25	18
Silver as by-product	5	9	2
PGMs	120	210	115
Cobalt	27	32	26
Others Nickel ¹	44	7	5
Total	948	1,044	1,076

¹ Includes US\$ 38 million of revenues associated with trading activities.

Volume sold - Nickel operations

'000 metric tons	2Q20	1Q20	2Q19
Nickel	42	44	57
Upper Class I nickel ¹	18	23	31
Lower Class I nickel ¹	3	5	7
Class II nickel ¹	13	10	14
Intermediates ¹	8	6	5
Copper	24	31	32
Gold as by-product ('000 oz)	16	16	14
Silver as by-product ('000 oz)	232	581	204
PGMs ('000 oz)	91	91	92
Cobalt (metric ton)	1,025	1,183	1,072

¹ 2Q19 reconciled as per new classification.

NICKEL REALIZED PRICES (NRP)

Vale's nickel products are classified as Upper Class I, Lower Class I, Class II and Intermediates.

- Upper Class I: lower sales volumes negatively impacted the weighted contribution to the NRP in 2Q20, despite overall premiums being 18% higher, mainly due to product and market segment mix.
- Lower Class I: lower sales volumes were the primary cause to the 4% lower contribution to the NRP in 2Q20. The decrease in sales volumes was mainly due to the lower global demand for finished nickel.
- Class II: higher sales volumes was offset by increased discounts which resulted in lower contribution to the NRP weighted premiums in 2Q20, mainly due to weakness in global demand for Class II products.
- Intermediates: higher sales volumes, together with decreased discounts, resulted in a 24% increase in intermediates weighted contribution to the NRP in 2Q20. Some of Vale's nickel intermediates are sold on a provisional pricing basis with final pricing determined in future periods. In 2Q20, the impact on the NRP was mainly due to positive provisional pricing adjustments.

Premiums / discount by nickel product

US\$/t	2Q20	1Q20	2Q19
Upper Class I nickel	1,130	960	1,270
Lower Class I nickel	300	320	300
Class II nickel	(280)	(240)	80
Intermediates	(1,460)	(2,510)	(2,820)

Note: 2Q19 reconciled as per new classification.

Nickel products by source - 2Q20

% of source sales	North Atlantic	PTVI	VNC	Onça Puma	Total % of sales
Upper Class I	84%	37%	-	-	42%
Lower Class I	16%	-	-	-	8%
Class II	-	41%	42%	100%	32%
Intermediates	-	22%	58%	-	19%
Total	100%	100%	100%	100%	100%

Nickel realized price

US\$/t	2Q20	1Q20	2Q19
LME average nickel price	12,215	12,723	12,258
Average nickel realized price	13,948	14,434	12,877

Contribution to the NRP by category:

Upper Class I nickel weighted premium contribution	470	490	719
Lower Class I nickel weighted premium contribution	20	40	(42)
Class II nickel weighted premium contribution	(90)	(60)	(5)
Intermediates weighted premium contribution	(280)	(370)	(153)
Other timing and pricing adjustments contribution	1,613	1,608	100

In March 2020, as a precautionary measure to increase its cash position and preserve financial flexibility in light of the COVID-19 outbreak, Vale decided to unwind its Nickel Revenue Hedging Program. The gain was recognized in equity in 1Q20 and is periodically reclassified to net income aligned with the hedged future nickel sales. The effect of the derivatives settled in 2Q20 on Vale's nickel realized price was positive US\$ 1,698/t.

Other timing and pricing adjustments had an aggregate positive impact of US\$ 1,613/t. The main drivers for this positive adjustment in 2Q20 are (i) the Quotational Period effects (based on sales distribution in the prior three months, as well as the differences between the LME price at the moment of sale and the LME average price), with an impact of negative US\$ 162/t; (ii) fixed price sales, with impact of US\$ 77/t; and, (iii) the above-mentioned effect of the hedging on Vale's nickel price realization, with an impact of US\$ 1,698/t in the quarter.

COSTS AND EXPENSES

North Atlantic operations' unit cash costs after by-products were higher in 2Q20 mainly due to costs associated with the COVID-19 pandemic and lower PGMs by-product credits.

PTVI's unit cash costs was lower in 2Q20 as a result of higher dilution of fixed costs on higher volumes at the site in the quarter.

VNC's unit cash costs after by-products was higher in 2Q20 mainly as a result of lower cobalt sales volumes, following the shutdown of the refinery and the ramping up of nickel hydroxide cake production, and lower cobalt prices.

Onça Puma's unit cash costs was lower in 2Q20 as a result of higher dilution of fixed costs on higher production.

Nickel COGS - 1Q20 x 2Q20

US\$ million	Variance drivers					2Q20
	1Q20	Volume	Exchange rate	Others ¹	Total variation	
Nickel operations	661	(59)	(16)	63	(12)	649
Depreciation	242	(20)	(5)	(21)	(46)	196
Total	903	(79)	(21)	42	(58)	845

¹ Includes US\$ 37 million of costs associated with trading activities.

Nickel operations – unit cash cost of sales, net of by-product credits

US\$/t	2Q20	1Q20	2Q19
North Atlantic operations ¹	4,183	3,004	5,159
PTVI	6,401	7,037	7,774
VNC	19,739	15,805	27,316
Onça Puma	9,532	13,141	9,991

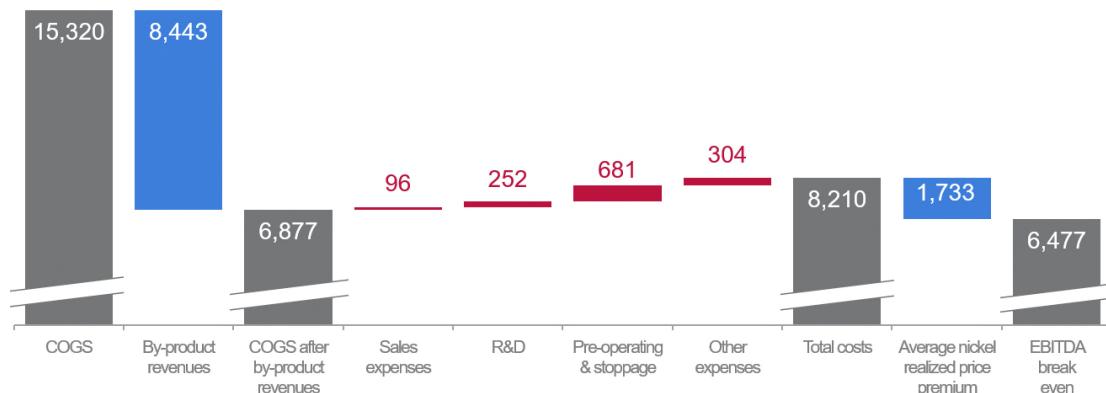
¹ North Atlantic figures include Clydach refining costs.

Selling expenses and other expenses totaled US\$ 16 million in 2Q20, including expenses related to other projects (US\$ 5 million), selling expenses (US\$ 4 million) and mines under care and maintenance in North Atlantic (US\$ 4 million).

R&D expenses were US\$ 11 million in 2Q20, lower than the US\$ 14 million recorded in 1Q20. These expenses encompass R&D initiatives for further operational improvements, with the main expenses associated with North Atlantic and VNC operations, corresponding to US\$ 9 million and US\$ 2 million, respectively, in the quarter.

EBITDA breakeven – nickel operations¹³

US\$/t, 2Q20



Selected financial indicators - Nickel operations

US\$ million	2Q20	1Q20	2Q19
Net Revenues	948	1,044	1,076
Costs ¹	(649)	(661)	(794)
Expenses ¹	(16)	(19)	(22)
Pre-operating and stoppage expenses ¹	(29)	-	(4)
R&D expenses	(11)	(14)	(8)
Dividends and interests on associates and JVs	-	-	-
Adjusted EBITDA	243	350	248
Depreciation and amortization	(201)	(242)	(310)
Adjusted EBIT	42	108	(62)
Adjusted EBIT margin (%)	4.4	10.3	(5.8)

¹ Net of depreciation and amortization

Copper operations – Salobo and Sossego

Copper – EBITDA by operation

US\$ million	2Q20	1Q20	2Q19
Salobo	259	145	187
Sossego	74	29	34
Others Copper ¹	(13)	(14)	(4)
Total	320	160	217

¹ Includes research expenses related to the Hu'u project.

¹³ Considering only the cash effect of US\$ 400/oz that Wheaton Precious Metals pays for 70% of Sudbury's gold by-product, nickel operations EBITDA breakeven would increase to US\$ 6,701/t

Salobo and Sossego's EBITDA were both higher in 2Q20 mainly due to higher copper and gold realized prices, favorable exchange rate variations and Sossego's higher gold sales volumes. The positive effects were partially offset by higher cost and expenses.

Net operating revenue by product - Copper operations

US\$ million	2Q20	1Q20	2Q19
Copper	358	226	325
Gold as by-product	163	154	134
Silver as by-product	2	3	3
Total	523	383	462

Volume sold - Copper operations

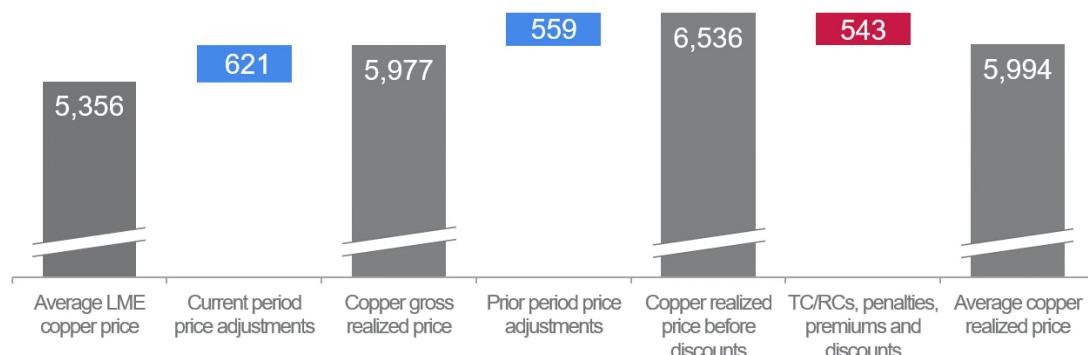
'000 metric tons	2Q20	1Q20	2Q19
Copper	60	59	63
Gold as by-product ('000 oz)	93	93	99
Silver as by-product ('000 oz)	181	186	164

COPPER REALIZED PRICES

Vale's copper products are sold on a provisional pricing basis¹⁴ during the quarter with final prices determined in a future period, generally one to four months forward.

Price realization – copper operations

US\$/t, 2Q20



- Current period price adjustments: mark-to-market of invoices from current quarter sales still open at the end of the quarter based on the copper price forward curve at the end of the quarter

¹⁴ On June 30th, 2020, Vale had provisionally priced copper sales from Sossego and Salobo totaling 55,529 tons valued at an LME forward price of US\$ 6,012/t, subject to final pricing over the following months

- Prior period price adjustment: variance between the price used in final invoices (and in the mark-to-market of invoices from previous quarters still open at the end of the quarter) and the provisional prices used for sales in previous quarters
- TC/RCs, penalties, premiums and discounts for intermediate products

The positive effects of current period price adjustments of US\$ 621/t and prior period price adjustments of US\$ 559/t were mainly due to the forward price steadily rising over US\$ 1,000/t from March to June 2020.

COSTS AND EXPENSES

Salobo had solid performance reaching consecutive negative unit cash costs after by-products in the quarter.

Unit cash costs after by-products decreased to negative US\$ 431/t in Salobo and US\$ 2,055/t in Sossego as a result of higher gold by-product credits and favorable exchange rate.

Copper COGS - 1Q20 x 2Q20

US\$ million	Variance drivers					2Q20
	1Q20	Volume	Exchange rate	Others	Total variation	
Copper operations	207	2	(25)	1	(22)	185
Depreciation	40	-	(7)	-	(7)	33
Total	247	2	(32)	1	(29)	218

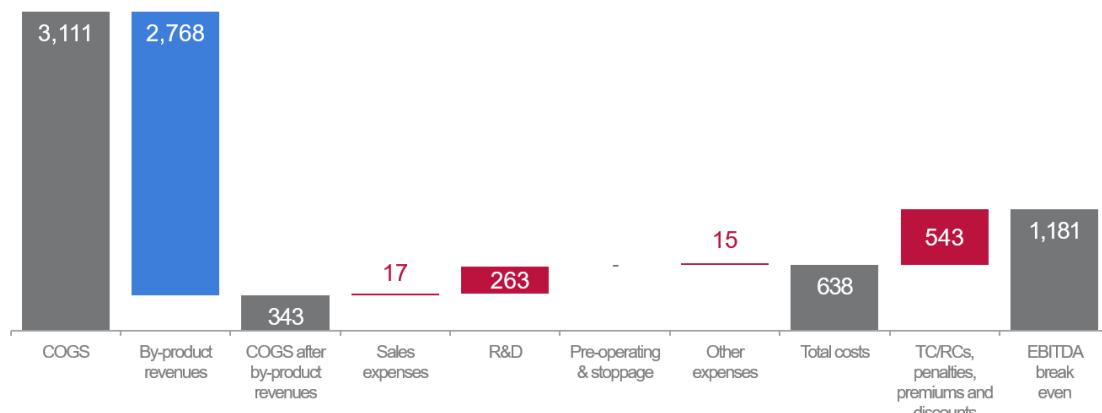
Copper operations – unit cash cost of sales, net of by-product credits

US\$/t	2Q20	1Q20	2Q19
Salobo	(431)	(264)	816
Sossego	2,055	2,985	3,293

Selling expenses and other expenses totaled US\$ 3 million in 2Q20. Research and development expenses were US\$ 15 million in 2Q20, with Hu'u-related expenditures amounting to US\$ 13 million and Sossego amounting to US\$ 2 million in the quarter.

EBITDA breakeven – copper operations¹⁵

US\$/t, 2Q20



The realized price to be used against the EBITDA break-even should be the copper realized price before discounts (US\$ 6,536/t), given that TC/RCs, penalties and other discounts are already part of the EBITDA break-even build-up.

Selected financial indicators - Copper operations

US\$ million	2Q20	1Q20	2Q19
Net Revenues	523	383	462
Costs ¹	(185)	(207)	(235)
Expenses ¹	(3)	1	(3)
Pre-operating and stoppage expenses ¹	-	-	-
R&D expenses	(15)	(17)	(7)
Dividends and interests on associates and JVs	-	-	-
Adjusted EBITDA	320	160	217
Depreciation and amortization	(33)	(40)	(46)
Adjusted EBIT	287	120	171
Adjusted EBIT margin (%)	54.9	31.3	37.0

¹ Net of depreciation and amortization

¹⁵ Considering only the cash effect of US\$ 400/oz that Wheaton Precious Metals pays for 75% of Salobo's gold by-product, copper operations EBITDA breakeven would increase to US\$ 2,683/t.

Coal

Adjusted Ebitda

Coal adjusted EBITDA was negative US\$ 269 million in 2Q20, US\$ 111 million lower than in 1Q20, mainly as a result of: (i) seasonally¹⁶ higher interest received in 1Q20, related to Nacala Logistic Corridor debt service to Vale (US\$ 75 million) and (ii) depressed average realized prices in the period (US\$ 29 million).

As previously reported, given the restrictions and uncertainties brought by the COVID-19 pandemic, a production loss of approximately 1 Mt was recorded in 2Q20, while essential maintenance works were postponed, making it impossible to achieve a sustainable ramp-up of the operation still in 2020. As long as unfavorable market conditions persist, additional temporary stoppages may occur, therefore it is not possible to provide a new coal production guidance for 2020.

For further information, please see Vale's 2Q20 production and sales report, available on the company's website.

Revenues and price realization

Revenues decreased by US\$ 54 million in 2Q20, mainly due to lower volumes (US\$ 25 million) combined with depressed average realized prices (US\$ 29 million).

Volume sold

<i>'000 metric tons</i>	2Q20	1Q20	2Q19
Metallurgical coal	516	706	1,037
Thermal coal	869	860	1,056
Total	1,385	1,566	2,093

Net operating revenue by product

<i>US\$ million</i>	2Q20	1Q20	2Q19
Metallurgical coal	52	94	194
Thermal coal	42	54	62
Total	94	148	256

¹⁶ From 1Q20 onwards, and for Adjusted EBITDA purposes only, Vale is recognizing interest on a cash basis. Therefore, interest from the Nacala Logistic Corridor will be recognized in the Adjusted EBITDA every 6 months (usually in 1Q and 3Q of each fiscal year) as provided for in the debt service contract

Coal prices

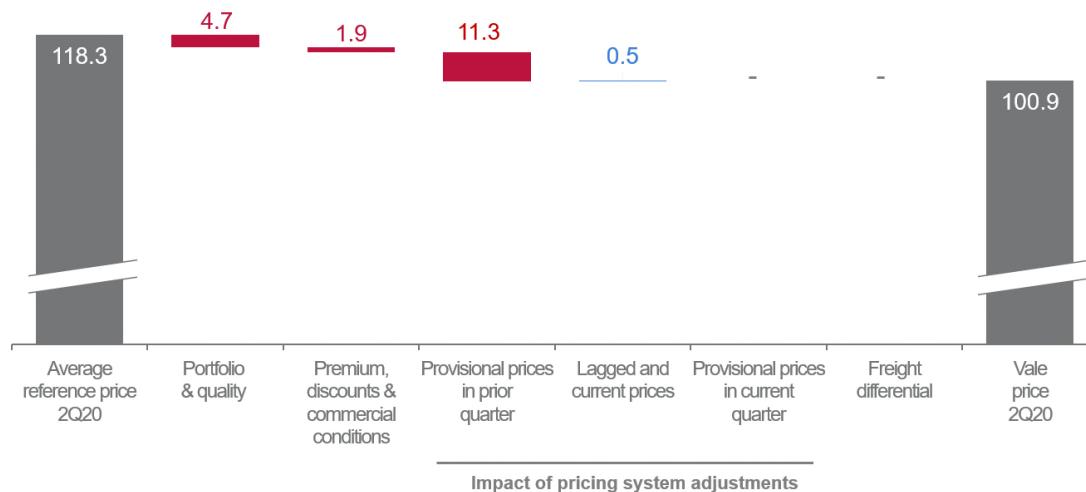
US\$/ metric ton	2Q20	1Q20	2Q19
Metallurgical coal index price ¹	118.3	155.1	203.2
Vale's metallurgical coal realized price	100.9	132.9	186.7
Thermal coal index price ²	54.8	78.0	66.0
Vale's thermal coal realized price	48.1	63.5	59.1
Vale's average realized price	67.7	94.8	122.3

¹ Reference price Premium Low Vol Hard Coking Coal FOB Australia.

² McCloskey FOB Richards Bay

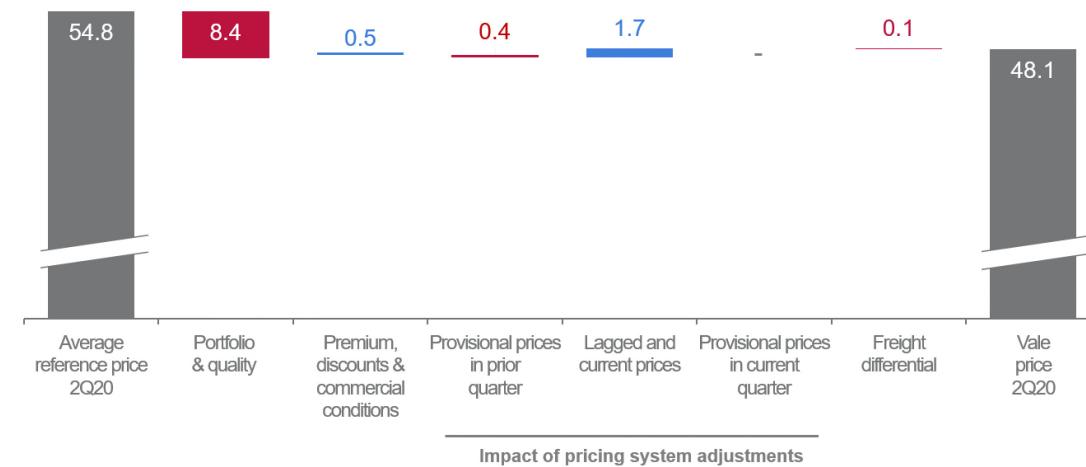
Price realization – Metallurgical coal

US\$/t 2Q20



Price realization – Thermal coal

US\$/t 2Q20



Costs and expenses

Costs totaled US\$ 361 million in 2Q20, including effects of idle capacity, an amount US\$ 13 million lower than in 1Q20, mainly due to lower variable costs resulting from lower sales volumes. Pro-forma C1 cash cost totaled US\$ 189.8/t in 2Q20, in line with 1Q20.

Pro-forma cash cost

<i>US\$/ metric ton</i>	2Q20	1Q20	2Q19
Pro-forma operational costs ¹ (A)	133.8	144.8	128.7
Nacala non-operational tariff ² (B)	56.7	58.3	46.5
Other costs (C) ³	(0.7)	35.4	7.4
Cost at Nacala Port (D = A+B+C)	189.8	238.5	182.6
NLC's debt service to Vale (E)	-	47.9	13.4
Pro-forma C1 cash cost (F = D-E)	189.8	190.6	169.2
Idle capacity	70.6	-	-
Total	260.4	190.6	169.2

¹ Includes the inferred NLC tariff components related to fixed and variable costs and excludes royalties.

² Includes the inferred NLC tariff components related to sustaining capex, working capital, taxes and other financial items.

³ Average costs of inventories are monthly tested vs. the expected sales prices leading to positive or negative variations, depending on previous provisions recorded. Variations in 1Q20 were reverted into 2Q20.

Selected financial indicators - Coal

<i>US\$ million</i>	2Q20	1Q20	2Q19
Net Revenues	94	148	256
Costs ¹ ²	(361)	(374)	(386)
Expenses ¹	3	2	2
R&D expenses	(5)	(9)	(6)
Dividends and interests on associates and JVs	-	75	28
Adjusted EBITDA	(269)	(158)	(106)
Depreciation and amortization	-	(19)	(60)
Adjusted EBIT	(269)	(177)	(166)
Adjusted EBIT margin (%)	(286.2)	(119.6)	(64.8)

¹ Net of depreciation and amortization

² Including idle capacity

ANNEXES

SIMPLIFIED FINANCIAL STATEMENTS

Income Statement

<i>US\$ million</i>	2Q20	1Q20	2Q19
Net operating revenue	7,518	6,969	9,186
Cost of goods sold and services rendered	(4,212)	(4,278)	(5,173)
Gross profit	3,306	2,691	4,013
Gross margin (%)	44.0	38.6	43.7
Selling and administrative expenses	(124)	(115)	(110)
Research and evaluation expenses	(90)	(95)	(90)
Pre-operating and operational stoppage	(238)	(268)	(335)
Brumadinho event	(130)	(159)	(1,532)
Other operational expenses, net	(237)	(62)	(35)
Impairment and disposal of non-current assets	(403)	(29)	(109)
Operating income	2,084	1,963	1,802
Financial income	135	107	122
Financial expenses	(585)	(525)	(751)
Other financial items, net	(35)	(1,867)	(99)
Equity results and other results in associates and joint ventures	(535)	(166)	(743)
Income (loss) before income taxes	1,064	(488)	331
Current tax	(326)	(347)	(366)
Deferred tax	181	996	(107)
Net income (loss)	919	161	(142)
Net income (loss) attributable to noncontrolling interests	(76)	(78)	(9)
Net income (loss) attributable to Vale's stockholders	995	239	(133)
Earnings (loss) per share (attributable to the Company's stockholders - US\$):			
Basic and diluted earnings (loss) per share (attributable to the Company's stockholders - US\$)	0.19	0.05	(0.03)

Equity income (loss) by business segment

<i>US\$ million</i>	2Q20	%	1Q20	%	2Q19	%
Ferrous Minerals	36	84	(18)	16	71	79
Coal	-	-	-	-	3	3
Base Metals	-	-	-	-	-	-
Others	7	16	(92)	84	16	18
Total	43	100	(110)	100	90	100

Balance sheet

US\$ million	6/30/2020	3/31/2020	6/30/2019
Assets			
Current assets	20,307	19,944	15,914
Cash and cash equivalents	12,113	11,788	6,048
Short term investments	93	479	16
Accounts receivable	2,597	2,096	2,983
Other financial assets	554	510	386
Inventories	4,058	4,090	4,724
Prepaid income taxes	145	176	508
Recoverable taxes	395	395	684
Others	352	410	565
Non-current assets	15,851	16,396	17,424
Judicial deposits	2,070	2,436	5,035
Other financial assets	2,300	2,247	3,118
Prepaid income taxes	583	557	695
Recoverable taxes	516	538	511
Deferred income taxes	9,804	10,060	7,698
Others	578	558	367
Fixed assets	46,989	48,242	62,394
Total assets	83,147	84,582	95,732
Liabilities			
Current liabilities	11,152	11,578	12,834
Suppliers and contractors	2,934	3,009	3,907
Loans and borrowing	988	940	1,287
Leases	220	226	239
Other financial liabilities	1,269	1,565	1,109
Taxes payable	395	385	607
Settlement program (REFIS)	321	336	445
Provisions	850	787	942
Liabilities related to associates and joint ventures	709	453	412
Liabilities related to Brumadinho	1,013	990	2,320
De-characterization of dams	312	274	388
Interest on capital	1,159	1,218	-
Others	982	1,395	1,178
Non-current liabilities	39,061	39,747	39,574
Loans and borrowing	15,915	16,135	14,503
Leases	1,432	1,468	1,601
Other financial liabilities	4,425	4,363	3,215
Settlement program (REFIS)	2,428	2,628	3,815
Deferred income taxes	1,631	1,741	1,469
Provisions	7,808	7,478	8,104
Liabilities related to associates and joint ventures	960	821	1,298
Liabilities related to Brumadinho	710	1,173	1,208
De-characterization of dams	1,374	1,538	1,630
Streaming transactions	2,031	2,046	1,461
Others	347	356	1,270
Total liabilities	50,213	51,325	52,408
Stockholders' equity	32,934	33,257	43,324
Total liabilities and stockholders' equity	83,147	84,582	95,732

Cash flow

US\$ million	2Q20	1Q20	2Q19
Cash flow from operations	2,104	2,005	3,645
Interest on loans and borrowings paid	(168)	(244)	(237)
Derivatives received (paid), net	(114)	273	(4)
Interest paid on shareholders debentures	(88)	-	(90)
Income taxes (including settlement program)	(398)	(349)	(359)
Net cash provided by operating activities	1,336	1,685	2,955
Cash flows from investing activities:			
Investment in fund applications	(96)	-	-
Capital expenditures	(967)	(1,124)	(730)
Additions to investments	-	(75)	(1)
Proceeds from disposal of assets and investments	5	1	11
Dividends received from joint ventures and associates	77	-	193
Restricted cash and judicial deposits related to Brumadinho	(18)	-	124
Short term investments (including Brazilian treasury securities)	449	181	(45)
Other investment activities, net	(120)	(54)	(145)
Net cash used in investing activities	(670)	(1,071)	(593)
Cash flows from financing activities:			
Loans and financing:			
Loans and borrowings from third-parties	-	5,000	300
Payments of loans and borrowings from third-parties	(116)	(375)	(1,636)
Payments of leasing	(49)	(50)	(3)
Payments to stockholders:			
Dividends and interest on capital paid to noncontrolling interest	(5)	(3)	(14)
Net cash provided by (used in) financing activities	(170)	4,572	(1,353)
Increase (decrease) in cash and cash equivalents	496	5,186	1,009
Cash and cash equivalents in the beginning of the period	11,788	7,350	5,008
Effect of exchange rate changes on cash and cash equivalents	(171)	(748)	31
Cash and cash equivalents at the end of period	12,113	11,788	6,048
Non-cash transactions:			
Additions to property, plant and equipment - interest capitalization	12	32	40
Cash flows from operating activities:			
Income (loss) before income taxes from continuing operations	1,064	(488)	331
Adjusted for:			
Provisions related to Brumadinho	21	-	1,374
Equity results and other results in associates and joint ventures	535	166	743
Impairment and disposal of non-current assets	403	29	109
Depreciation, depletion and amortization	807	815	966
Financial results, net	485	2,285	728
Change in assets and liabilities			
Accounts receivable	(922)	621	(557)
Inventories	(125)	(227)	229
Suppliers and contractors	108	(674)	434
Provision - Payroll, related charges and other remunerations	115	(208)	166
Payments related to Brumadinho	(155)	(217)	(222)
Other assets and liabilities, net	(232)	(97)	(656)
Cash flow from operations	2,104	2,005	3,645

REVENUES, VOLUMES SOLD, PRICES AND MARGINS

Net operating revenue by destination

US\$ million	2Q20	%	1Q20	%	2Q19	%
North America	221	2.9	494	7.1	533	5.8
USA	177	2.4	289	4.1	367	4.0
Canada	44	0.6	204	2.9	137	1.5
Mexico	-	-	1	0.0	29	0.3
South America	543	7.2	819	11.8	1,086	11.8
Brazil	528	7.0	725	10.4	941	10.2
Others	15	0.2	94	1.3	145	1.6
Asia	5,413	72.0	4,291	61.6	5,679	61.8
China	4,320	57.5	3,196	45.9	4,200	45.7
Japan	396	5.3	484	6.9	589	6.4
South Korea	265	3.5	240	3.4	320	3.5
Others	432	5.7	371	5.3	570	6.2
Europe	1,035	13.8	1,087	15.6	1,383	15.1
Germany	351	4.7	376	5.4	453	4.9
Italy	49	0.7	58	0.8	152	1.7
Others	635	8.4	653	9.4	778	8.5
Middle East	178	2.4	108	1.5	252	2.7
Rest of the World	128	1.7	170	2.4	253	2.8
Total	7,518	100.0	6,969	100.0	9,186	100.0

Volume sold - Minerals and metals

'000 metric tons	2Q20	1Q20	2Q19
Iron ore fines	54,569	51,445	61,873
ROM	46	211	72
Pellets	6,950	7,311	8,842
Manganese ore	270	219	92
Ferroalloys	10	27	39
Thermal coal	869	860	1,056
Metallurgical coal	516	706	1,037
Nickel	42	44	57
Copper	83	89	95
Gold as by-product ('000 oz)	110	109	113
Silver as by-product ('000 oz)	411	767	368
PGMs ('000 oz)	91	91	92
Cobalt (metric ton)	1,025	1,183	1,072

Average prices

US\$/ton	2Q20	1Q20	2Q19
Iron ore fines CFR reference (dmt)	100.4	93.5	106.8
Iron ore fines CFR/FOB realized price	88.9	83.8	94.6
Pellets CFR/FOB (wmt)	129.4	116.6	147.1
Manganese ore	214.3	107.4	294.6
Ferroalloys	1,005.9	870.7	1,073.8
Thermal coal	48.1	63.5	59.1
Metallurgical coal	100.9	132.9	186.7
Nickel	13,948	14,434	12,877
Copper ¹	5,884	3,924	5,206
Gold (US\$/oz)	1,743	1,636	1,341
Silver (US\$/oz)	18.09	15.81	13.09
Cobalt (US\$/t)	26,816	26,916	24,222

¹Considers Salobo, Sossego and North Atlantic operations.

Operating margin by segment (EBIT adjusted margin)

%	2Q20	1Q20	2Q19
Ferrous Minerals	51.3	45.8	50.5
Coal	(286.2)	(119.6)	(64.8)
Base Metals	22.4	15.9	7.1
Total	34.1	29.7	23.2

RECONCILIATION OF IFRS AND “NON-GAAP” INFORMATION

(a) Adjusted EBIT

US\$ million	2Q20	1Q20	2Q19
Net operating revenues	7,518	6,969	9,186
COGS	(4,212)	(4,278)	(5,173)
Sales and administrative expenses	(124)	(115)	(110)
Research and development expenses	(90)	(95)	(90)
Pre-operating and stoppage expenses	(238)	(268)	(335)
Brumadinho event	(130)	(159)	(1,532)
Other operational expenses, net	(237)	(62)	(35)
Dividends received and interests from associates and JVs	77	75	221
Adjusted EBIT	2,564	2,067	2,132

(b) Adjusted EBITDA

EBITDA defines profit or loss before interest, tax, depreciation, depletion and amortization. The definition of Adjusted EBITDA for the Company is the operating income or loss plus dividends received and interest from associates and joint ventures, and excluding the amounts charged as (i) depreciation, depletion and amortization and (ii) impairment and disposal of non-current assets. However, our adjusted EBITDA is not the measure defined as EBITDA under IFRS and may possibly not be comparable with indicators with the same name reported by other companies. Adjusted EBITDA should not be considered as a substitute for operational profit or as a better measure of liquidity than operational cash flow, which are calculated in accordance with IFRS. Vale provides its adjusted EBITDA to give additional information about its capacity to pay debt, carry out investments and cover working capital needs. The following tables shows the reconciliation between adjusted EBITDA and operational cash flow and adjusted EBITDA and net income, in accordance with its statement of changes in financial position.

The definition of Adjusted EBIT is Adjusted EBITDA plus depreciation, depletion and amortization.

Reconciliation between adjusted EBITDA and operational cash flow

US\$ million	2Q20	1Q20	2Q19
Adjusted EBITDA	3,371	2,882	3,098
Working capital:			
Accounts receivable	(922)	621	(557)
Inventories	(125)	(227)	229
Suppliers and contractors	108	(674)	434
Provision - Payroll, related charges and other remunerations	115	(208)	166
Payments related to Brumadinho	(155)	(217)	(222)
Provisions related to Brumadinho	21	-	1,374
Others	(309)	(172)	(877)
Cash provided from operations	2,104	2,005	3,645
Income taxes paid - including settlement program	(398)	(349)	(359)
Interest on loans and borrowings paid	(168)	(244)	(237)
Participative stockholders' debentures paid	(88)	-	(90)
Derivatives received (paid), net	(114)	273	(4)
Net cash provided by (used in) operating activities	1,336	1,685	2,955

Reconciliation between adjusted EBITDA and net income (loss)

US\$ million	2Q20	1Q20	2Q19
Adjusted EBITDA	3,371	2,882	3,098
Depreciation, depletion and amortization	(807)	(815)	(966)
Dividends received and interest from associates and joint ventures	(77)	(75)	(221)
Impairment and disposal of non-current assets	(403)	(29)	(109)
Operating income	2,084	1,963	1,802
Financial results	(485)	(2,285)	(728)
Equity results and other results in associates and joint ventures	(535)	(166)	(743)
Income taxes	(145)	649	(473)
Net income (loss) from continuing operations	919	161	(142)
Net income (loss) attributable to noncontrolling interests	(76)	(78)	(9)
Net income (loss) attributable to Vale's stockholders	995	239	(133)

(c) Net debt

US\$ million	2Q20	1Q20	2Q19
Total debt	16,903	17,075	15,790
Cash and cash equivalents ¹	12,206	12,267	6,064
Net debt	4,697	4,808	9,726

¹ Including financial investments

(d) Gross debt / LTM Adjusted EBITDA

US\$ million	2Q20	1Q20	2Q19
Gross debt / LTM Adjusted EBITDA (x)	1.2	1.2	1.4
Gross debt / LTM operational cash flow (x)	1.7	1.5	1.3

(e) LTM Adjusted EBITDA / LTM interest payments

US\$ million	2Q20	1Q20	2Q19
Adjusted LTM EBITDA / LTM gross interest (x)	16.5	14.8	10.4
LTM adjusted EBITDA / LTM interest payments (x)	12.9	11.9	11.8
LTM operational profit / LTM interest payments (x)	5.0	4.6	7.0