



## Vale - 1Q11 Production Report

### A GOOD START

Rio de Janeiro, May 5, 2011 –Vale S.A. (Vale) operations had a good performance in 1Q11.

Production in the first quarter of the year tends to be the weakest of the year due to weather related seasonality. The combination of the summer season in the Southern Hemisphere with the winter in the Northern Hemisphere usually increases constraints on mining production. 1Q11 was characterized by abnormally heavy rainfall in several countries, including Brazil and Australia, causing floods and human and economic losses. In addition, an earthquake hit the Island of Sulawesi, in Indonesia, where we have significant nickel operations.

Although global industrial production proceeded at a brisk pace in 1Q11, a severe winter in the Northern Hemisphere caused some drag on economic activity.

However, even in the face of these adverse weather conditions and natural disasters, Vale has improved its operational performance compared to 1Q10 in almost all products, such as iron ore, pellets, manganese, ferroalloys, coal, nickel, copper and cobalt, allowing us to continue to benefit from a strong global demand for minerals and metals.

Iron ore production in 1Q11 reached 71.5 Mt<sup>1</sup>, 3.7% higher than in the same quarter of 2010, a year in which Vale reached an all-time high output of 308 Mt. For 2011 we continue to pursue the goal of 322 Mt – including the 11 Mt attributable production from Samarco.

Pellet output reached a record level for the first quarter, at 12.5 Mt., thus surpassing the mark of 10.8 Mt. achieved in 1Q08.

Nickel operations also showed a good performance in spite of the challenges, which included some operational issues.

Production is starting in newly commissioned projects. Onça Puma, our first ferronickel operation, with capacity to produce 53,000 metric tons per year and located in the state of Pará, Brazil, delivered the first metal in March. Tres Valles, our 18,500 tpy copper SX-EW operation in Chile, continued the ramp up process. The Oman operations, which include two pellet plants with total capacity of 9 Mtpy, started production in April.

---

<sup>1</sup> Mt = million metric tons  
Kt = thousand metric tons  
t = metric tons



## Production Report

### BULK MATERIALS

#### Iron ore

000' metric tons	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
<b>IRON ORE</b>	<b>69,059</b>	<b>80,262</b>	<b>71,540</b>	<b>-10.9%</b>	<b>3.6%</b>
Southeastern System	25,319	30,028	28,694	-4.4%	13.3%
Itabira	7,907	10,036	9,081	-9.5%	14.8%
Mariana	8,255	8,933	9,374	4.9%	13.5%
Minas Centrais	9,156	11,058	10,239	-7.4%	11.8%
Midwestern System	839	1,268	914	-27.9%	8.9%
Corumbá	552	876	609	-30.5%	10.3%
Urucum	287	392	305	-22.1%	6.2%
Southern System	16,423	18,214	16,779	-7.9%	2.2%
Minas Itabirito	6,473	7,470	7,177	-3.9%	10.9%
Vargem Grande	5,179	5,127	4,459	-13.0%	-13.9%
Paraopebas	4,772	5,617	5,144	-8.4%	7.8%
Northern System	23,871	28,007	22,651	-19.1%	-5.1%
Carajás	23,871	28,007	22,651	-19.1%	-5.1%
Samarco <sup>1</sup>	2,606	2,746	2,501	-8.9%	-4.0%

<sup>1</sup> Vale's attributable production of 50%.

Vale's iron ore production reached 71.5Mt in 1Q11, a 10.9% quarter-on-quarter decrease, as mentioned mostly due to the abnormally heavy rains in Brazil.

Production at the Carajás mining site was the most affected by the adverse weather conditions. In addition to a more intense rainfall than in the Southern and Southeastern Systems, there were several nights with very poor visibility, forcing stoppages of operations for safety reasons. The rains also caused some landslides which temporarily blocked the passage of trains. As a consequence, iron ore output from Carajás reached 22.7 Mt in 1Q11, showing a quarter-on-quarter reduction of 19.1% and 5.1% year-on-year.

However, with the end of the rainy season, production is back to normalcy.

The Southeastern System, which encompasses the Itabira, Mariana and Minas Centrais mining sites,

reached a production level of 28.7 Mt, 4.4% lower than 4Q10. There was a 13.3% year-on-year increase, which resulted from investments in new equipment and the additional processing plant that started operating at the end of 2Q10.

The Southern System produced 16.8 Mt in 1Q11 against 18.2 Mt in 4Q10, and had a slightly higher production than 1Q10.

Our iron ore mines, Urucum and Corumbá, located in the state of Mato Grosso do Sul, Brazil, near the border with Bolivia and Paraguay, were aggregated under the Midwestern System. It is the smallest of our Systems, with a production of 0.9 Mt in 1Q11, a 27.9% quarter-on-quarter decrease due to the heavy rainfalls. There was an 8.9% year-on-year production increase, reflecting the start up of a new processing plant in February 2011 and the operation of other new equipment.



## Production Report

### ▼ Pellets

000' metric tons

	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
<b>PELLETS</b>	<b>10,492</b>	<b>12,210</b>	<b>12,516</b>	<b>2.5%</b>	<b>19.3%</b>
Tubarão I and II	1,315	1,189	1,336	12.4%	1.6%
Fábrica	679	1,016	947	-6.8%	39.5%
São Luís	295	1,154	1,337	15.9%	352.9%
Vargem Grande	1,247	1,061	1,276	20.2%	2.3%
Nibrasco	1,996	2,493	2,408	-3.4%	20.6%
Kobrasco	1,186	1,201	1,222	1.7%	3.0%
Hispanobrás <sup>1</sup>	438	493	542	9.9%	23.7%
Itabasco	831	769	1,020	32.7%	22.8%
Samarco <sup>2</sup>	2,504	2,833	2,428	-14.3%	-3.1%

<sup>1</sup> Vale's attributable production capacity of 50.89%.

<sup>2</sup> Vale's attributable production capacity of 50%.

In 1Q11, pellet production was 12.5 Mt, the highest level achieved in a first quarter. It increased 2.5% on a year-on-year basis and 19.3% compared to 1Q10, when some of our plants were ramping up after the stoppages caused by the 2008/2009 recession.

Output of the plants that were under maintenance during 4Q10, Itabasco, São Luís, Tubarão I and II, and Hispanobrás, rose by 32.7%, 15.9%, 12.4% and 9.9%, respectively, on a quarter-on-quarter basis. Vargem Grande overcame its operational issues and raised production to 1,276 Mt, a 20.2% quarter-on-quarter increase. Fábrica delivered 6.8% less volume than in 4Q10 due to scheduled maintenance stoppages in 1Q11.

The attributable production of the three pellet plants of the 50%-owned Samarco JV, was 2,428

Mt in 1Q11, 14.3% lower than 4Q10. The decrease was due to the scheduled stoppages for maintenance in the concentration plant, limiting the supply of pellet feed to the plants.

The Oman operations, in the industrial site of Sohar, Oman, are coming on stream. It has two pellets plants, each with a capacity to produce 4.5 Mtpy, thus adding 9.0 Mtpy to our total capacity. The two plants will produce direct reduction pellets.

Oman's plant 1 started operations in April and its first figures will be shown in 2Q11 production report.



## Production Report

### ▼ Manganese ore and ferroalloys

000' metric tons	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
<b>MANGANESE ORE</b>	<b>397</b>	<b>477</b>	<b>498</b>	<b>4.4%</b>	<b>25.5%</b>
Azul	356	391	417	6.6%	16.9%
Urucum	41	41	52	27.9%	29.0%
Other mines	0	46	29	-35.4%	n.m.
<b>FERROALLOYS</b>	<b>110</b>	<b>116</b>	<b>113</b>	<b>-2.2%</b>	<b>3.5%</b>
Brazil	51	55	52	-5.5%	1.7%
Dunkerque	31	36	37	3.4%	20.2%
Mo I Rana	28	26	25	-3.1%	-11.5%

In 1Q11, manganese output was 4.4% higher than the previous quarter, reaching 498,000 t against 477,000 t in 4Q10.

In 1Q11, the production of Azul – our largest manganese mine – increased 6.6% when compared to 4Q10, amounting to 417,000 t. The improved operational performance reflects the adjustments made in maintenance activities during 2010. Urucum had a stronger performance, caused by the higher productivity made feasible by the larger

number of trucks used to transport mine output to the beneficiation plant.

In 1Q11, ferroalloy production presented only slight changes relative to 4Q10 and 1Q10.

Production in 1Q11 was comprised of 51,700 t of ferrosilicon manganese alloys (FeSiMn), 57,200 t of high-carbon manganese alloys (FeMnHc) and 4,500 t of medium-carbon manganese alloys (FeMnMC).



## Production Report

### Coal

000' metric tons	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
<b>METALLURGICAL COAL</b>	<b>717</b>	<b>770</b>	<b>488</b>	<b>-36.6%</b>	<b>-31.8%</b>
Integra Coal	327	279	186	-33.4%	-43.2%
Broadlea	32	0	0	n.m.	n.m.
Carborough Downs	283	367	231	-37.0%	-18.3%
Others	75	124	71	-42.5%	-4.5%
<b>THERMAL COAL</b>	<b>701</b>	<b>976</b>	<b>933</b>	<b>-4.4%</b>	<b>33.1%</b>
El Hatillo	522	830	835	0.6%	59.9%
Integra Coal	57	74	71	-4.6%	23.8%
Broadlea <sup>1</sup>	48	0	0	n.m.	n.m.
Others	74	72	28	-61.8%	-63.0%

<sup>1</sup> Broadlea Coal was placed in care and maintenance in December 2009. The washing of the ROM stockpiles was finalized in June 2010.

In 1Q11, Vale's coal production reached 1.42 Mt, slightly above 1Q10. It was comprised of 488,000 t of metallurgical coal and 933,000 t of thermal coal.

The Bowen Basin, in the state of Queensland, Australia, where more than 60% of our metallurgical coal output is sourced, has been significantly affected by above average rainfall since mid-2010, posing a major challenge to mining activities. Moreover, there were operational problems at Integra Coal, in New South Wales, Australia.

Production of metallurgical coal at Integra, reached 186,000 t in 1Q11, a 33.4% quarter-on-quarter decrease. This was due to the partial collapse of the roof in front of the longwall, forcing the operations to be stopped for recoveries and repairs. In light of this, the pace of production in 2Q11 will remain subdued. Operations are expected to be normalized by the end of the quarter.

The production of thermal coal by Integra was 71,000 t in 1Q11, 4.6% lower than 4Q10 but 23.8% higher than 1Q10.

Production at Carborough Downs, in the Bowen Basin, was 231,000 t versus 367,000 t in 4Q10 and 283,000 t in 1Q10. Although Carborough Downs completed a longwall move in 4Q10, production was negatively affected not only by the adverse weather but also by geotechnical conditions of mining in a steep profile of the coal seam, which caused some roof falls.

Coal production in other mines in the Bowen Basin was also negatively affected by the bad weather conditions, which caused the flooding of all the mine pits. They have been gradually dewatered and we expect to resume normal operations in May.

El Hatillo, our Colombian thermal coal mine, is ramping up production to reach its nominal capacity of 4.5 Mtpy. In 1Q11 its output reached 835,000 t, representing 89.5% of our total thermal coal production in the quarter.

In April 2011, a railroad accident caused the loss of one of our locomotives used for the transportation of El Hatillo coal to the port. Given the tight global supply of locomotives, this has raised a logistics constraint to the normal ramp up process, which was expected to be concluded at the end of this year.



## Production Report

### BASE METALS

#### ✓ Nickel

000' metric tons					
	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
<b>NICKEL</b>	<b>33</b>	<b>65</b>	<b>59</b>	<b>-10.3%</b>	<b>77.5%</b>
Sudbury	0	8	14	71.8%	n.m.
Thompson	8	8	8	-1.8%	-3.6%
Voisey Bay	4	25	16	-36.9%	346.6%
Sorowako	20	20	18	-9.9%	-12.3%
VNC	n.a.	n.a.	0	n.m.	n.m.
Onça Puma	<u>n.a.</u>	<u>n.a.</u>	0	n.m.	n.m.
Others*	0	3	2	-37.1%	n.m.

\*External feed purchased from third parties and processed into finished nickel in our operations

Total finished nickel production in 1Q11 was 58,800 t, 6,000 t lower than 4Q10 but 26,100 t higher than in 1Q10. The quarter-on-quarter reduction was mostly due to the problem in furnace #2 of the Copper Cliff smelter in Sudbury, which will remain shut down for a minimum of 16 weeks. As announced on February 18, 2011, this is expected to generate an estimated output loss of 15,000 t of finished nickel, accounting for 5% of our total nickel production planned for 2011.

Finished nickel production from Sudbury in 1Q11 was 14,300 t, up 6,000 t from 4Q10 reflecting the ramp-up of production following the end of the labor interruption.

Production at Thompson in 1Q11 was 8,100 t, slightly below the levels reached in 4Q10 and 1Q10.

Production from Voisey's Bay source nickel in 1Q11 was 16,000 t, down 9,400 t from 4Q10, as a large portion of its accumulated inventory of concentrates was processed during 4Q10, to

support the resumption of refining operations at Sudbury.

Nickel in matte production from the Indonesian operations at Sorowako was 16,500 t in 1Q11, implying quarter-on-quarter losses of 9.9% and year-on-year of 12.3%. The fall in output level was caused by production interruption as a consequence of the earthquake that in February 2011 hit the Island of Sulawesi, where our operations are located.

Finished nickel production sourced from Sorowako was 17,700 t, down 1,900 t from 4Q10 as there was a reduced amount of nickel in matte production from Sorowako.

Vale New Caledonia (VNC) produced 0.4 t of nickel hydroxide cake, a nickel and cobalt intermediate product resulting from the High Pressure Acid Leaching (HPAL) process.

The Onça Puma operations started to ramp-up in March 2011, with an output of 0.3 t of nickel in ferronickel.



## Production Report

### ✓ Copper

000' metric tons	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
<b>COPPER</b>	<b>34</b>	<b>76</b>	<b>70</b>	<b>-7.6%</b>	<b>107.9%</b>
Sossego	26	30	23	-24.4%	-13.2%
Sudbury	3	14	25	86.6%	740.8%
Thompson	0	1	1	n.m.	n.m.
Voisey's Bay	2	16	13	-18.3%	702.1%
Tres Valles	0	0	1	n.m.	n.m.
Others	3	15	7	-53.5%	163.0%

Vale's copper production was 69,800 t in 1Q11, decreasing 7.6% on a quarter-on-quarter basis.

Production of copper in concentrates from the Sossego mine at Carajás was 24.4% lower due to the stoppage for maintenance and the lower grade of copper received by the processing plant during the 1Q11.

On the other hand, output from the Canadian operations reached 46,200 t in 1Q11, remaining in line with the number for 4Q10. The increased production in Sudbury was offset by lower output

in Voisey's Bay. Moreover, in 1Q11 we bought copper ores from small miners equivalent to 7,000 t of copper metal, a significant cut from the 15,000 t acquired in 4Q10. These ores are processed in our Clarabelle Mill at Sudbury.

Operations at Tres Valles continued to ramp-up reaching a production of 0.9 Mt of copper cathodes in 1Q11. Tres Valles has an annual capacity of 18,500 t of copper cathodes.



## Production Report

### ▼ Nickel by-products

	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
<b>COBALT (metric tons)</b>	<b>129</b>	<b>624</b>	<b>580</b>	<b>-7.0%</b>	<b>348.5%</b>
Sudbury	0	258	41	-84.1%	n.m.
Thompson	52	30	51	71.4%	-1.8%
Voisey Bay	77	288	427	48.2%	456.9%
VNC	0	0	22	n.m.	n.m.
Others	0	48	38	-20.9%	n.m.
<b>PLATINUM (000' oz troy)</b>	<b>1</b>	<b>26</b>	<b>57</b>	<b>122.2%</b>	<b>4,874.3%</b>
Sudbury	1	26	57	122.2%	4,874.3%
<b>PALLADIUM (000' oz troy)</b>	<b>3</b>	<b>35</b>	<b>72</b>	<b>107.6%</b>	<b>2,037.5%</b>
Sudbury	3	35	72	107.6%	2,037.5%
<b>GOLD (000' oz troy)</b>	<b>4</b>	<b>27</b>	<b>30</b>	<b>11.6%</b>	<b>581.3%</b>
Sudbury	4	27	30	11.6%	581.3%
<b>SILVER (000' oz troy)</b>	<b>137</b>	<b>443</b>	<b>595</b>	<b>34.3%</b>	<b>334.7%</b>
Sudbury	137	443	595	34.3%	334.7%

Cobalt production in 1Q11 was 580 Mt, falling 7.0% quarter-on-quarter, which reflected the impact of the shutdown of furnace #2 at the Copper Cliff Smelter.

Production of platinum and palladium in 1Q11 was 129,000 troy ounces, 68,000 troy ounces higher than in 4Q10 and 125,000 troy ounces higher than in 1Q10.



## Production Report

### FERTILIZER NUTRIENTS

#### ▼ Potash

000' metric tons	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
<b>POTASH</b>	<b>158</b>	<b>169</b>	<b>134</b>	<b>-20.6%</b>	<b>-15.1%</b>
Taquari-Vassouras	158	169	134	-20.6%	-15.1%

In the case of fertilizers there was also a seasonality effect determined by the demand side. As our sales are focused in Brazil, the demand for nutrients is more concentrated in second half of the year.

Production of potash was 134,000 t in 1Q11, decreasing 20.6% quarter-on-quarter and 15.1% year-on-year. The output reduction was caused by some maintenance stoppages and the lower average grade of the feed received by the plant.

#### ▼ Phosphates

000' metric tons	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
<b>PHOSPHATE ROCK</b>	<b>954</b>	<b>1.788</b>	<b>1.743</b>	<b>-2.5%</b>	<b>82.6%</b>
Vale Fertilizantes	954	1.205	1.148	-4.7%	20.33%
Bayóvar	0	582	595	2.2%	n.m.
<b>MAP - MONOAMMONIUM PHOSPHATE</b>	<b>239</b>	<b>245</b>	<b>210</b>	<b>-14.5%</b>	<b>-12.4%</b>
Vale Fertilizantes	239	245	210	-14.5%	-12.4%
<b>TSP - TRIPLE SUPERPHOSPHATE</b>	<b>201</b>	<b>162</b>	<b>233</b>	<b>44.4%</b>	<b>16.1%</b>
Vale Fertilizantes	201	162	233	44.4%	16.1%
<b>SSP - SINGLE SUPERPHOSPHATE</b>	<b>441</b>	<b>545</b>	<b>545</b>	<b>0.2%</b>	<b>23.7%</b>
Vale Fertilizantes	441	545	523	-3.9%	18.7%
Others	0	0	22	n.m.	n.m.
<b>DCP - DICALCIUM PHOSPHATE</b>	<b>109</b>	<b>101</b>	<b>151</b>	<b>49.3%</b>	<b>38.3%</b>
Vale Fertilizantes	109	101	151	49.3%	38.3%

As from February 1, 2011, Vale Fosfatados was incorporated by Vale Fertilizantes. Therefore, Vale Fertilizantes now comprises two phosphate rock mines, Araxá, in the state of Minas Gerais, and Cajati, in the state of São Paulo, Brazil. Alongside the mining operations, the assets also comprise four processing plants for the production of phosphates fertilizers located at: (a) Araxá, state of Minas Gerais; (b) Cajati, state of São Paulo; (c) Cubatão, state of São Paulo; (d) Guará, state of São Paulo.

In 1Q11, the total production of phosphate rock, which is used to feed the output of phosphate nutrients, was 2.5% lower than in 4Q10.



## Production Report

Bayóvar, our Peruvian phosphate rock mine, started to ramp up its production in 2H10. In 1Q11 it produced 595,000 t.

The output of Vale Fertilizantes fell 4.7% on a quarter-on-quarter basis due to maintenance stoppages and the impact of the rainy season in Brazil.

The production of MAP (monoammonium phosphate) was 210,000 t, down 14.5% quarter-on-quarter, in response to the seasonally weaker demand in the Brazilian market.

TSP (triple superphosphate) production increased 44.4% compared to 4Q10, showing a recovery after the maintenance stoppage in 4Q10.

The production of SSP (single superphosphate) was in line with 4Q10, but 23.7% higher than in 1Q10.

DCP (dicalcium phosphate) increased by 49.3% on a quarter-on-quarter basis due to a maintenance stoppage at the Araucária plant in 4Q10.

**Comentário [HMJ1]:** umentou devido a uma parada? Soa esquisito!

### ▼ Nitrogen

000' metric tons

#### AMMONIA

Vale Fertilizantes

	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
AMMONIA	148	140	157	12,7%	6,5%
Vale Fertilizantes	148	140	157	12,7%	6,5%

#### UREA

Vale Fertilizantes

	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
UREA	144	146	159	8,9%	10,8%
Vale Fertilizantes	144	146	159	8,9%	10,8%

#### NITRIC ACID

Vale Fertilizantes

	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
NITRIC ACID	111	120	107	-10,5%	-3,5%
Vale Fertilizantes	111	120	107	-10,5%	-3,5%

#### AMMONIUM NITRATE

Vale Fertilizantes

	1Q10	4Q10	1Q11	% Change 1Q11/4Q10	% Change 1Q11/1Q10
AMMONIUM NITRATE	111	115	103	-10,8%	-7,7%
Vale Fertilizantes	111	115	103	-10,8%	-7,7%

In 1Q11, ammonia and urea production increased by 12.7% and 8.9%, respectively, when compared to 4Q10 due to the operational issues which occurred last quarter.

Urea production increased by 8.9% on quarter-on-quarter basis, recovering from the operational issues during 4Q10.

The output of nitric acid and ammonium nitrate was reduced when compared to the previous quarter due to the maintenance stoppage in 1Q11.

For further information, please contact:  
+55-21-3814-4540

Roberto Castello Branco: roberto.castello.branco@vale.com

Viktor Moszkowicz: viktor.moszkowicz@vale.com

Carla Albano Miller: carla.albano@vale.com

Andrea Gutman: andrea.gutman@vale.com

Christian Perlingiere: christian.perlingiere@vale.com

Fernando Frey: fernando.frey@vale.com

Marcio Loures Penna: marcio.penna@vale.com

Samantha Pons: samantha.pons@vale.com

Thomaz Freire: thomaz.freire@vale.com



## *Production Report*

This press release may include statements that present Vale's expectations about future events or results. All statements, when based upon expectations about the future and not on historical facts, involve various risks and uncertainties. Vale cannot guarantee that such statements will prove correct. These risks and uncertainties include factors related to the following: (a) the countries where we operate, especially Brazil and Canada; (b) the global economy; (c) the capital markets; (d) the mining and metals prices and their dependence on global industrial production, which is cyclical by nature; and (e) global competition in the markets in which Vale operates. To obtain further information on factors that may lead to results different from those forecast by Vale, please consult the reports Vale files with the U.S. Securities and Exchange Commission (SEC), the Brazilian Comissão de Valores Mobiliários (CVM), the French Autorité des Marchés Financiers (AMF), and The Stock Exchange of Hong Kong Limited, and in particular the factors discussed under "Forward-Looking Statements" and "Risk Factors" in Vale's annual report on Form 20-F.