

## Vale's Performance in 3Q19

Rio de Janeiro, October 25<sup>th</sup>,2019



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- 1. Opening remarks
- 2. Highlights of Vale's performance in 3Q19
- 3. Business segment performance



## **Opening remarks**

Eduardo Bartolomeo, Chief Executive Officer, commented: "In the third quarter of 2019, we made progress towards stabilizing our business and advanced with our objective of full reparation of Brumadinho. The decharacterization of 9 upstream dams is ongoing, with the completion of the first dam expected by the first quarter of 2020. We have fulfilled our commitment of reducing the C1 cost and stoppage expenses compared to the previous guarter. We are evolving with a premium product portfolio tailored to market demands. Together with our commitment to **safety** and disciplined capital allocation, our actions reduce uncertainties and lead us to sustainable results"

## The reparation of Brumadinho and region advances

### **Restoring dignity of people affected**

#### Emergency support:

- Hospitals, health units and psychological support
- Supply of water, food, medicine and others
- Accommodation and transportation
- Donations and financial support
- Animal rescue and care, etc

### Compensating for damages

R\$ 2.25 billion already paid in compensations:

- 108,000 people with emergency compensations
- 232 victims with labor indemnifications signed
- +700 civil agreements signed (individual/groups)

25 legal agreements signed, with diverse themes and actions

### **Restoring local productive capacity**

#### Alliance for Brumadinho:

- Development of alternative economic fronts
- Educational actions, public services / structures
  Development Plan for Impacted Territories:
- R\$190 million for initiatives in Macacos (Nova Lima), Barão de Cocais and Itabirito

#### **Recovering the environment**

- US\$ 1.2 billion provisioned to:
- Plan with integrated structures
  - 2 water treatment stations already operating
  - Paraopeba river dredging has already begun
- Ensure water supply to Belo Horizonte region
  - Restore water withdrawal in Paraopeba river

## The de-characterization of dam structures in Brazil is ongoing

	2019	2020	2021	2022+
3 dams to be completely de-characterized <sup>1</sup>				
Grupo				
Fernandinho			1	
8B	·	1		
4 dams to be de-characterized as upstream dams with downstream embankments				
Forquilha I		<u>,</u>	,	
<b>Forquilha II</b>		·	1	
Forquilha III			1	
Vargem Grande				
2 dams with safety index increased by structural strengthening				
B3/B4	*		 	
Sul Superior	· · · · · · · · · · · · · · · · · · ·			
Improving/ maintaining safety index	Engineering, drilling, removal of interference	Strengthening embankment	Tailings removal/ de-characterization	Conclusion of containment structures

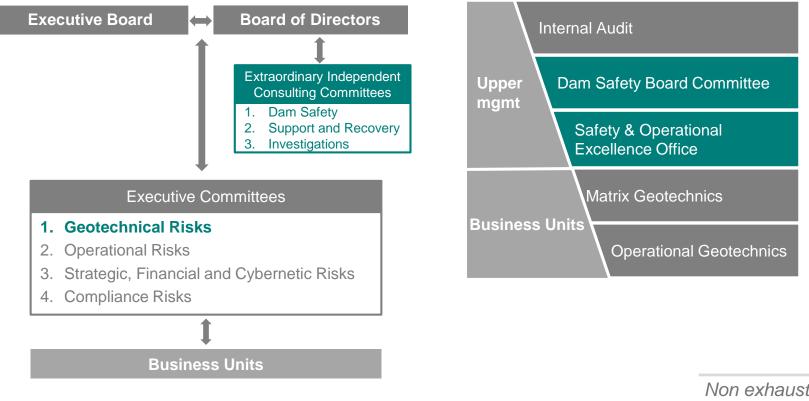
<sup>1</sup> The remaining 6 dams will be de-characterized according to standards defined by ANM's Norm 13.

## Our governance and dam management have evolved

#### **Risk Governance - Overview**

Before Brumadinho After Brumadinho

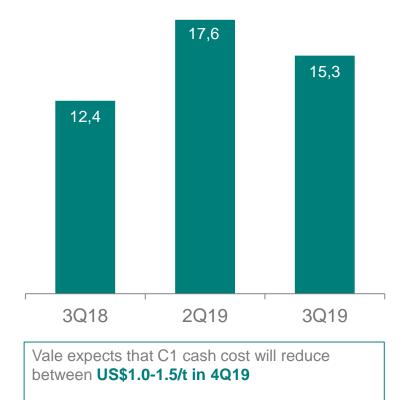
#### Internal Lines of Defense Dam management



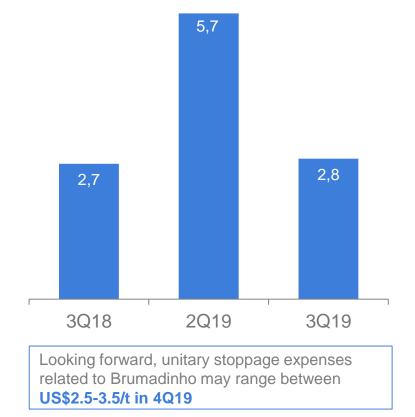
Non exhaustive

## 3Q19 was a period of stabilization and sustaining cash flow generation

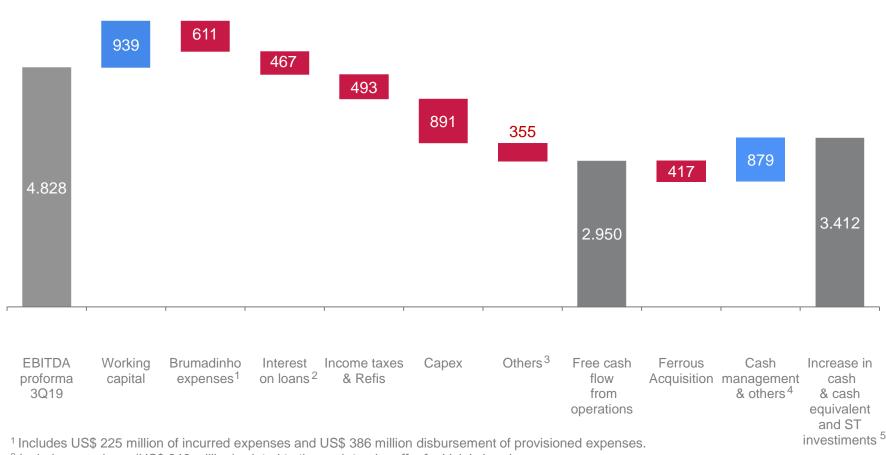
Iron Ore fines C1 cash cost US\$/t



Stoppage expenses related to Brumadinho US\$/t



## 3Q19 was a period of stabilization and sustaining cash flow generation



<sup>2</sup> Includes premiums (US\$ 246 million) related to the cash tender offer for Vale's bond.

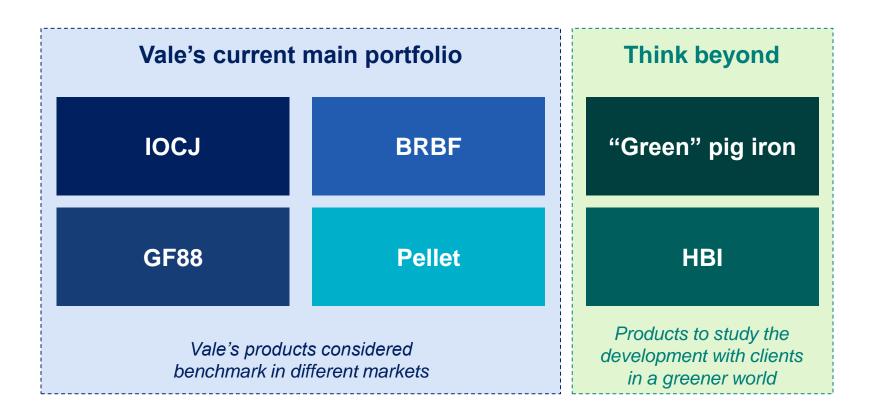
<sup>3</sup> Includes derivatives, Samarco, dividends and interest on capital paid to noncontrolling interest and others.

<sup>4</sup> Includes US\$ 1.8 billion release of frozen funds, US\$ 0.7 billion of net debt repayment and US\$ 0.2 billion exchange rate variation.

<sup>5</sup> Includes US\$ 0.9 billion of investments in Brazilian treasury securities.

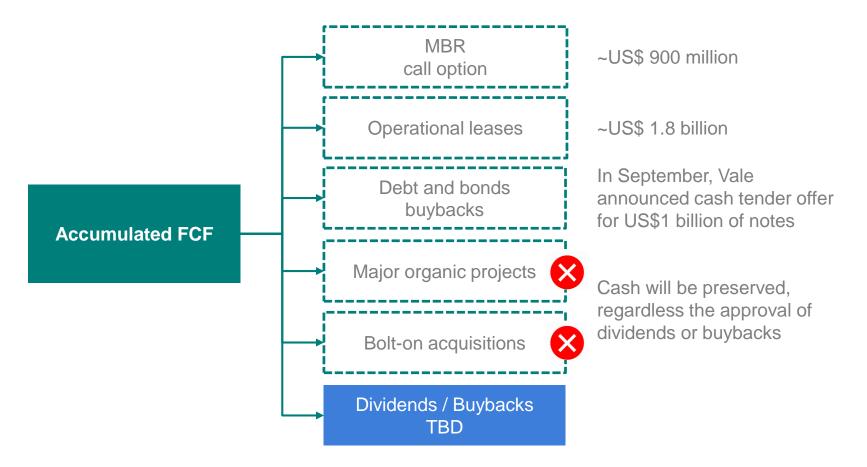
US\$ million

## Vale has great potential to be the preferred supplier in the low-carbon economy





## Capital allocation relies on the progress of reparation, but cash will be preserved





### The roadmap for de-risking Vale

Reparation of Brumadinho

Assuring dam safety and asset integrity



Stabilizing production and leveraging competitiveness

Sustaining solid cash flow generation

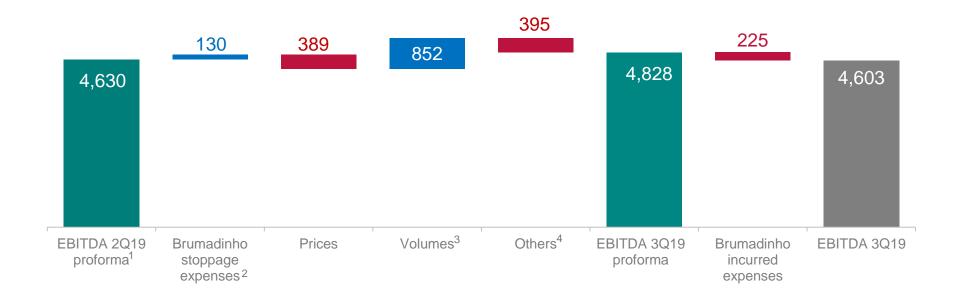




## Highlights of Vale's performance in 3Q19

## EBITDA proforma increased in 3Q19 due to higher sales volumes and lower stoppage expenses related to Brumadinho

US\$ million



<sup>1</sup> Net of Brumadinho provisions.

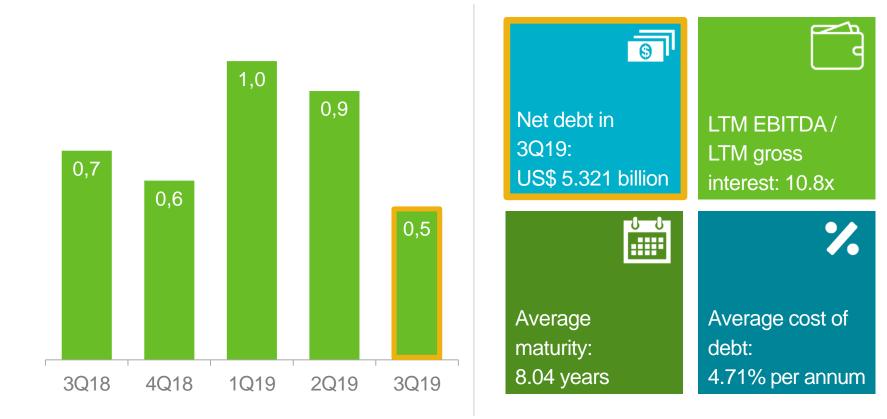
<sup>2</sup> Difference between effects of 2Q19 (US\$ 364 million) and 3Q19 (US\$ 234 million).

<sup>3</sup> Including halted operations resumption related to Brumadinho event.

<sup>4</sup> Including freight (US\$ 177 million) and dividends (US\$ 192 million).

Net debt reached the lowest level since 4Q08 as a result of the release of frozen funds and strong cash generation during 3Q19

Net debt / LTM<sup>1</sup> EBITDA Ratio

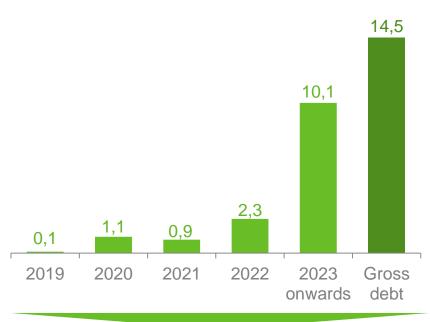


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Gross debt decreased by US\$ 1 billion as a result of net debt repayment mostly related to the repurchase of bonds in 3Q19



#### **Gross debt amortization schedule**<sup>1</sup>



70% of our debt settlement will occur after 2023





Business segment performance

Ferrous Minerals delivered solid performance due to the resumption of halted operations and strong performance in the Northern System

130 157 478 177 150 929 4,634 4,223 Volumes<sup>1</sup> EBITDA 2Q19 C1 cash cost<sup>2</sup> Brumadinho Prices Freight Others EBITDA 3Q19 stoppage expenses<sup>3</sup>

<sup>1</sup> Including resumption of halted operations related to Brumadinho event.

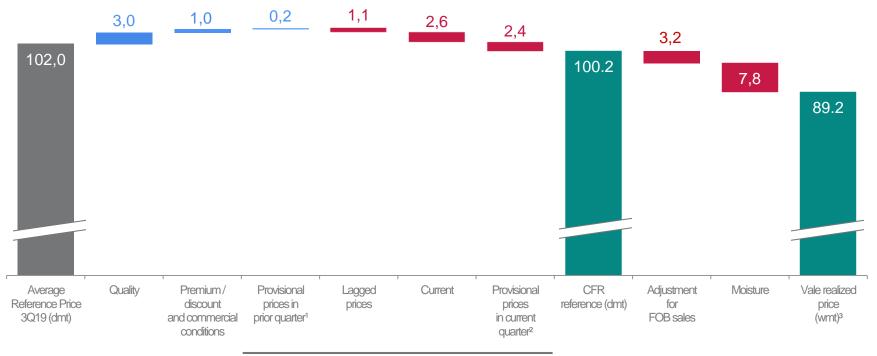
<sup>2</sup> Excluding volume effect and FX.

US\$ million

<sup>3</sup> Difference between effects of 2Q19 (US\$ 364 million) and 3Q19 (US\$ 234 million).

## Higher 62% Fe reference prices partially offset the decrease of US\$ 5.4/t in Vale's realized price

US\$/t, 3Q19



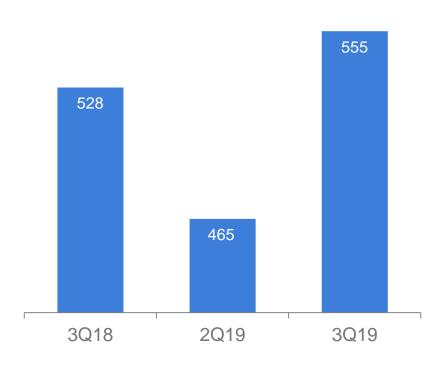
Impact of pricing system adjustments

- <sup>1</sup> Adjustment as a result of provisional prices booked in 2Q19 at US\$ 109.9/t.
- <sup>2</sup> Difference between the weighted average of the prices provisionally set at the end of 3Q19 at US\$ 88.7/t based on forward curves and US\$ 102.0/t from the 3Q19 62% Fe reference price.
- <sup>3</sup> Vale price is net of taxes.

## Base Metals EBITDA increased as a result of higher realized prices and lower costs

#### **Base Metals EBITDA**

US\$ million



#### **Highlights 3Q19**

Base Metals operations in the North Atlantic achieved a solid performance after the scheduled and unscheduled maintenance at its refineries during the previous quarter which were completed throughout 3Q19

Likewise, following the conclusion of scheduled maintenance activities at both Matsusaka and Clydach refineries, **PTVI had a significant boost in nickel volumes in 3Q19, one of the main factors for its QoQ increase in EBITDA** 

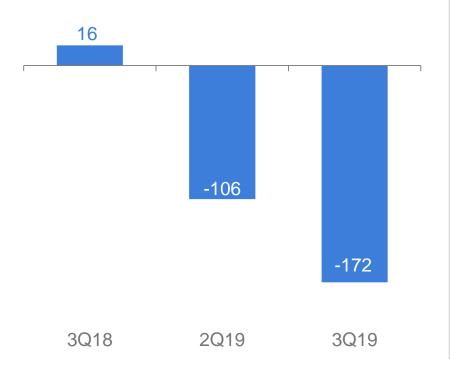
In Brazil, the judicial authorization to **resume both mining and processing operations at Onça Puma**, granted in September, was another milestone achieved towards production stability



## Coal EBITDA was negatively impacted by lower prices, higher logistics costs and higher maintenance at the processing plants

#### **Coal Adjusted EBITDA**

US\$ million



#### **Highlights 3Q19**

Vale's Coal operations demanded the reassessment of the business strategy, with the implementation of a **new mining plan and a maintenance program for the plant recovery** 

The new mining plan was designed to better access the ore bodies and to improve the economic value of the asset. As a result, cost will decrease as the lower stripping ratio represents moving less overburden to gather the same amount of ore, which would allow cost savings



# Additional Information

### Investments

## Project execution and sustaining investments

US\$ million



#### **Highlights 3Q19**

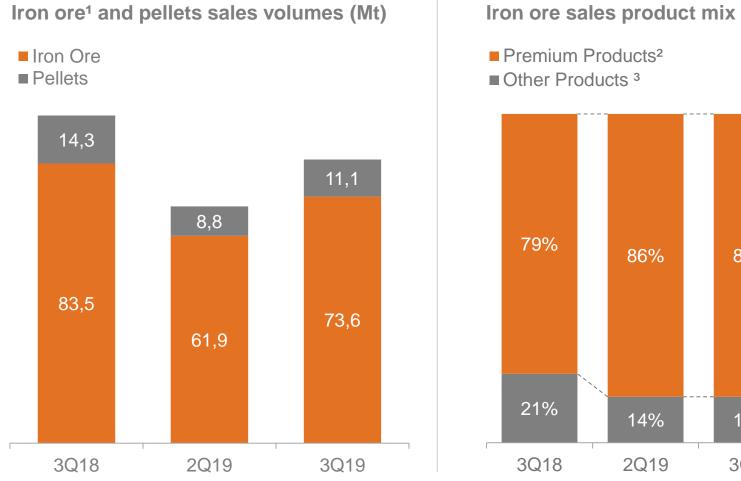
Total investments of US\$ 891 million in 3Q19

The Northern System 240 Mtpy project had some secondary crushers replaced at local plants and continued to receive mobile equipment. The project also had earthworks and the construction of superstructure started for the rail yard and loop line

The Salobo III project received the first loads related to the long distance conveyor belt (TCLD) at the site, while base plates of gearless drives arrived at the Vila do Conde port. Concrete foundation for mills and primary crushers' bases was completed



## Iron ore and pellets sales volumes and sales mix composition

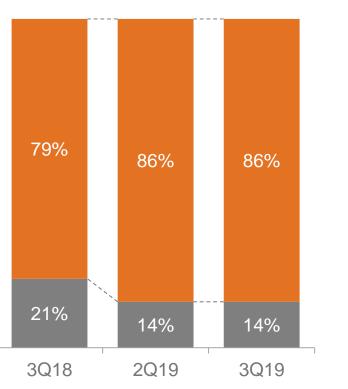


<sup>1</sup> Iron ore fines including ROM

<sup>2</sup> Composed by pellets, Carajás, Brazilian Blend Fines (BRBF), pellet feed and Sinter Feed Low Alumina (SFLA)

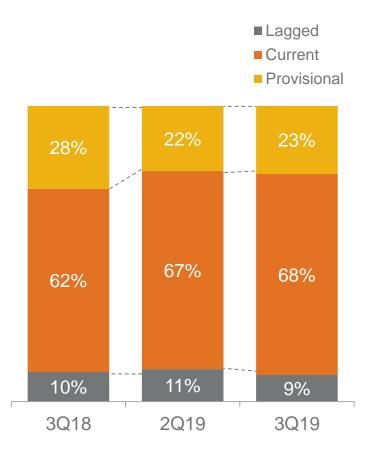
<sup>3</sup> Composed by standard sinter feed, lump and high silica

#### Iron ore sales product mix (%)

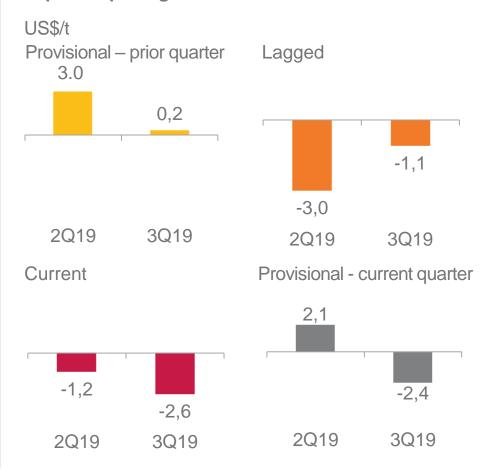


## Iron ore pricing systems

Pricing system breakdown (%)

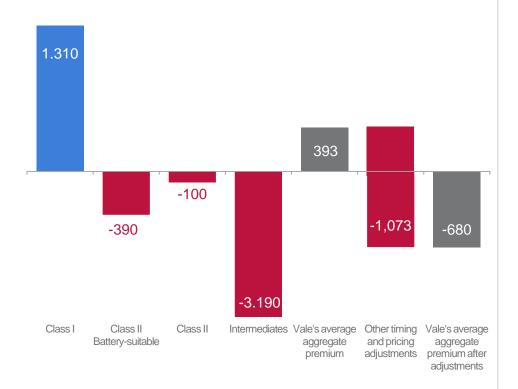


#### Impact of pricing mechanisms

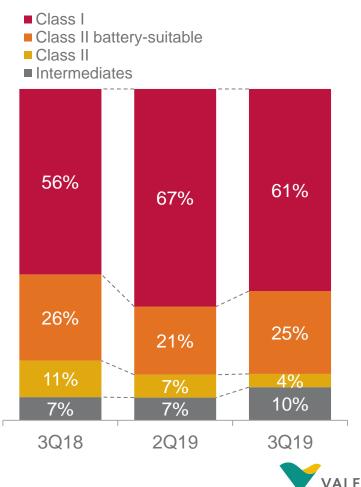


## Nickel premium/discount by product and sales product mix

Nickel premium/discount by product and average aggregate premiums (US\$/t)

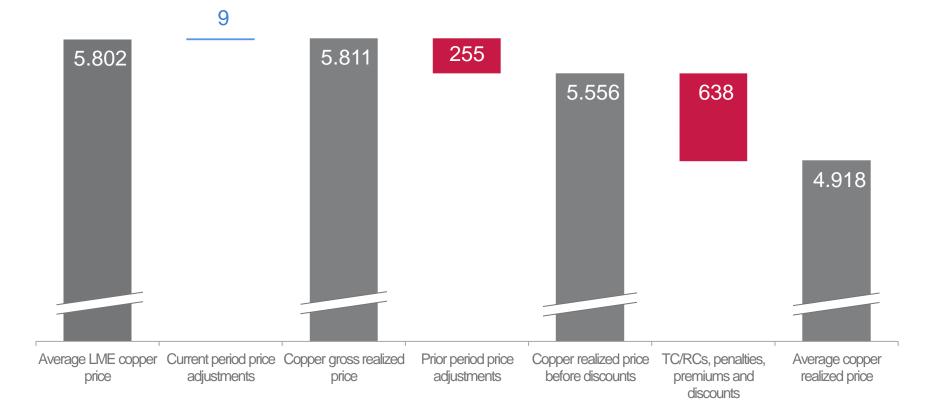


#### Nickel sales product mix (%)



## **Price realization – copper operations**

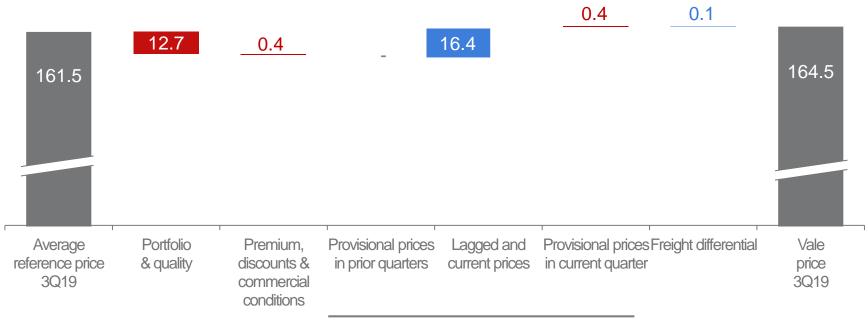
US\$/t, 3Q19





## Price realization – metallurgical coal

US\$/t, 3Q19



Impact of pricing system adjustments

### Price realization – thermal coal

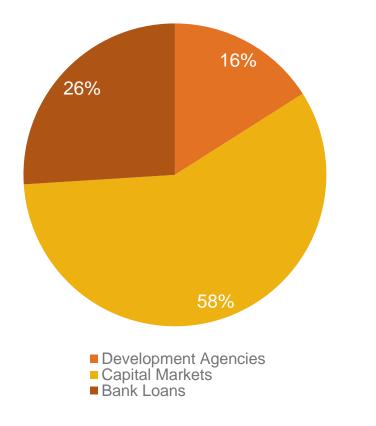
US\$/t, 3Q19



Impact of pricing system adjustments

### Debt position breakdown

Debt breakdown by instrument (%)



Debt breakdown by currency (after hedge) (%)

