

### Disclaimer

#### IMPORTANT NOTICE

You must read the following before continuing. The following applies to the confidential information following this page, including oral statements made during the presentation (the "Confidential Information"), and you are therefore advised to read this carefully before reading, accessing or making any other use of the Confidential Information contained in this document (the "Presentation").

By attending the meeting where the Presentation is made or reading the Presentation slides, and thereby accessing the Confidential Information, you agree to be bound by the following terms and conditions. This Presentation is being provided as a source of preliminary information about the Issuer and its predecessors, subsidiaries and affiliates ("we," "us," the "Company"). This Presentation, its contents, and any related oral presentation, are confidential and may not be further copied, distributed or passed on, directly or indirectly, to any other person or published or reproduced directly or indirectly, in whole or in part, by any medium or in any form for any purpose without the Company's prior written consent.

This Presentation includes information obtained from publicly available and third party sources believed to be reliable. To the extent available, the industry, market and competitive position data contained in this Presentation come from official or third party sources. Third party industry publications, studies and surveys generally state that the data contained therein have been obtained from sources believed to be reliable, but that there is no guarantee of the accuracy or completeness of such data. While the Company believes that each of these publications, studies and surveys has been prepared by a reputable source, the Company has not independently verified the data contained therein. In addition, certain of the industry, market and competitive position data contained in this Presentation come from the Company's own internal estimates based on the knowledge and experience of the Company's management in the market in which the Company operates. While the Company believes that such estimates are reasonable and reliable, they, and their underlying methodology and assumptions, have not been verified by any independent source for accuracy or completeness and are subject to change without notice. Accordingly, undue reliance should not be placed on any of the industry, market or competitive position data contained in this Presentation.

#### Presentation not an offer

This Presentation and the information contained herein (unless otherwise indicated), has been provided by Ferroglobe PLC (the "Company") solely for informational purposes, and it does not constitute investment, legal, accounting, regulatory, taxation or other advice. The matters described in this presentation are subject to discussion and amendment.

This Presentation does not constitute or form part of, and should not be construed as, an offer or invitation to subscribe for, underwrite or otherwise acquire any securities of the Company or any subsidiary or affiliate, nor should it or any part of it form the basis of, or be relied on in connection with, any contract to purchase or subscribe for any securities of the Company or any subsidiary or affiliate, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The Presentation does not constitute, and should not be construed as, an inducement to enter into investment activity in the United States, Canada, Australia, Japan, Hong Kong, New Zealand, Singapore, South Africa or in any other state or jurisdiction in which such offer, solicitation, inducement or sale would be unlawful prior to registration, exemption from registration or qualification under the securities laws of such jurisdiction.

The Presentation is not for publication, release or distribution in any jurisdiction where to do so would constitute a violation of the relevant laws of such jurisdiction nor should it be taken or transmitted into such jurisdiction.

## Forward-Looking Statements

This Presentation contains "forward-looking statements" within the meaning of U.S. securities laws. Forward-looking statements are not historical facts but are based on certain assumptions of management and describe the Company's future plans, strategies and expectations. Forward-looking statements often use forward-looking terminology, including words such as "anticipate", "believe", "could", "estimate", "expect", "forecast", "guidance", "intends", "likely", "may", "plan", "potential", "predicts", "seek", "will" and words of similar meaning or the negative thereof.

Forward-looking statements contained in this Presentation are based on information presently available to the Company and assumptions that we believe to be reasonable, but are inherently uncertain. As a result, Ferroglobe's actual results, performance or achievements may differ materially from those expressed or implied by these forward-looking statements, which are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors that are, in some cases, beyond the Company's control. You should not place undue reliance on any forward-looking statements, which are made only as of the date of this Presentation.

## **Today's presenters**



∵Javier López Madrid ∵\_ ∵#



Pe Larrea
Chief Executive Officer



Joe Ragan
"Chief Financial Officer



Benoist Ollivier
Executive Vice President,
Production Planning & Technology



Jeff Watson
Executive Vice President,
Sales & Marketing

### **Discussion areas**

- A global leader in advanced materials
- Unique capabilities and unrivalled expertise
- Well situated to capitalize on favorable trends
- Addressing unfair trade
- **Strategy for creating value**

# A global leader in advanced materials



# Ferroglobe is a leading global player in advanced materials







- Entrepreneurial culture with strong growth track record
- Unrivaled technology development and know-how
- Disciplined financial management

## We provide critical inputs to exciting, fast growing end-markets



**Population Growth** 



**Urbanization** 



MEGATRENDS

**Energy Efficiency** 



**Alternative Energy** & Sustainability



Connectivity / IoT

#### Aluminum / Auto

Light-weighting



Increased consumer consumption

#### Solar

Grid parity



#### **Batteries and Electronics**

- Game changer
- Dependence on staying connected



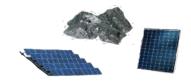






#### Steel / Specialty Steel

• Capital goods



#### Construction

Infrastructure build



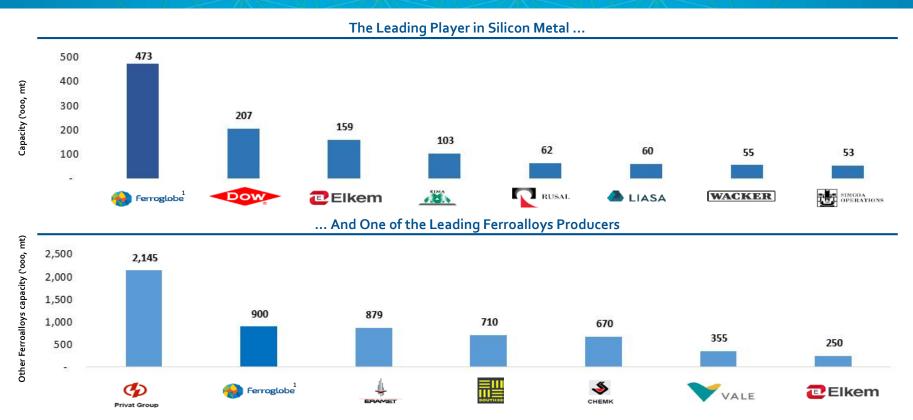








# Being a global leader in the supply of silicon metal, silicon-based alloys and manganese-based alloys



Source: CRU, Company data

<sup>&</sup>lt;sup>1</sup> Includes attributable output and capacity from wholly-owned plants and joint ventures.

# With a diversified product portfolio and a high quality customer base

#### **Summary of Capacity by Product**

	Silicon Metal	FeSi / Other Silicon based alloys	Silicon- Manganese	Ferro- Manganese	Silica Fumes	Total
erroglobe larket Position	1	2	Торз	Top 4	1	-
Ferroglobe	473	472	215	206	99	1,464
Privat Group	-	120	1,120	450	-	2,145
	-	-	130	380	-	510
₽ EPAMET	-	-	400	479	-	879
VALE	-	-	192	165	-	355
<b>S</b> CHEMK	-	500	170	_	-	670
<b>⊡</b> Elkem	159	250	-		95	487
Dow	207	-	-	_	120	327

**Diversified, High Quality Customers** 





















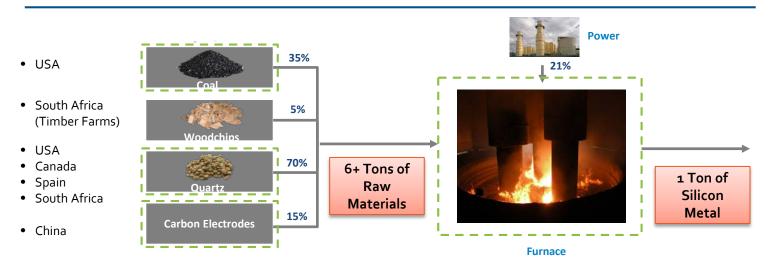


# Enjoying a balanced portfolio of products with exposure to a diversified range of end-markets



# Ferroglobe benefits from a low cost structure built upon a vertically integrated supply chain

#### **Overview of Silicon Production Process**



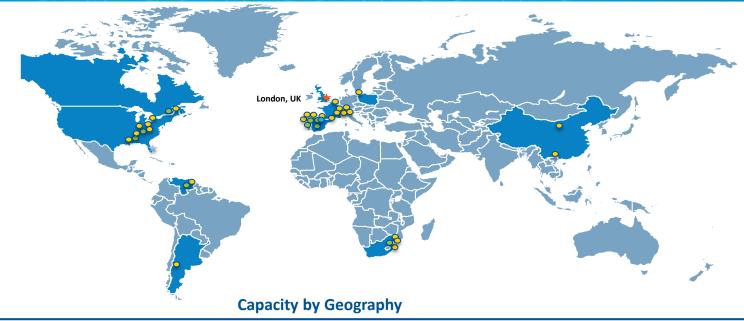
XX% Percentage self-supplied
Ferroglobe- Owned

# Unparalleled global operations and diversified product offering provides Ferroglobe and its customers unique optionality

**Factories** 

**Mining** 

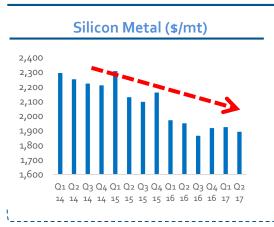
Energy



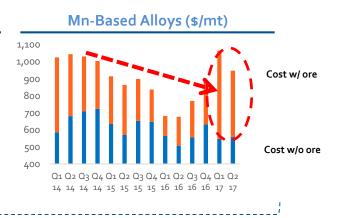
(000, mt)	Europe	North America	South America	Africa	Asia	Total
Silicon	228	137	-	72	36	473
Ferrosilicon / Foundry Alloys	154	87	109	93	-	443
Manganese-based Alloys	386	-	34	-	-	420
Other Silicon-Based Alloys	27	-	10	-	-	37
Total						1,373

# Ferroglobe has been able to continuously improve costs through operational know-how and sharing best practice

#### **Evolution of EBITDA Costs (\$/mt)**







#### **Total Synergies Captured (\$mm)**

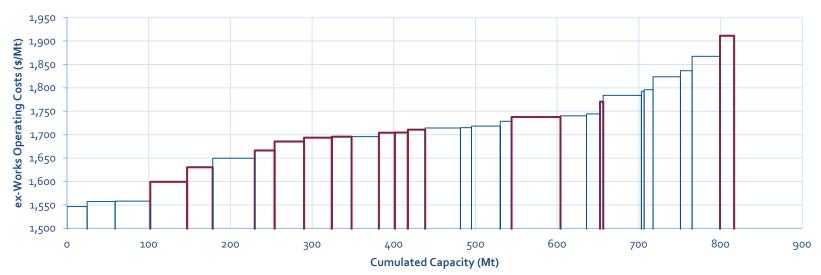


#### Working Capital Improvement (\$mm)



# Placing our plants in a unique position to compete in the long term



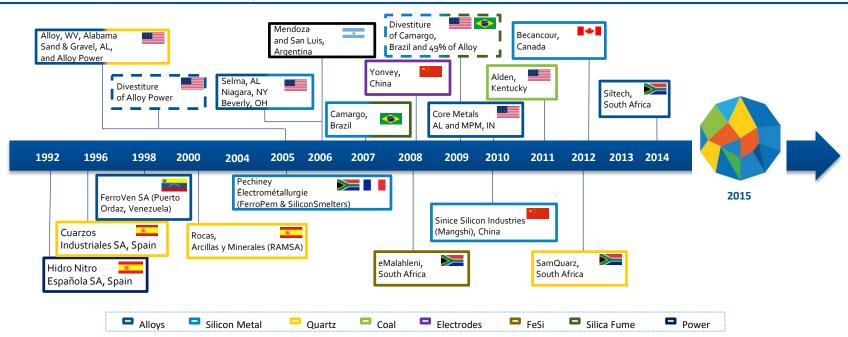


Well positioned in the global competitive landscape

Unique optionality and vertical integration ensure that a significant part of our plants remain competitive through the cycle

# History of growth through integrating bolt-on M&A and successful turnarounds

#### **Acquisitions, Divestitures and Selected Investments Over Time**

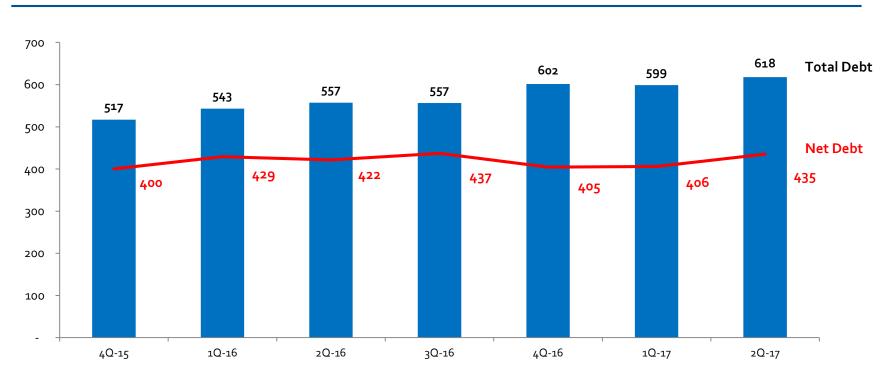


# Leading the industry in innovative technological solutions



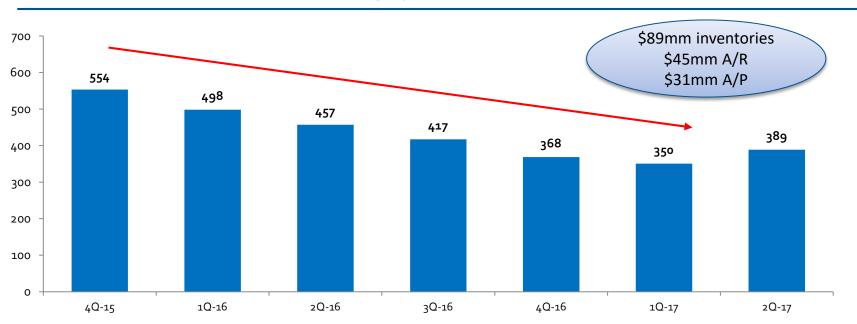
# Ferroglobe is focused on generating cash-flow, even in the worst of the downturn

#### Debt evolution (\$mm)



# An the whole organization is disciplined in maintaining a strong balance sheet through the cycle

#### Working capital evolution (\$mm)



## Ferroglobe is a leading global player in advanced materials







- Entrepreneurial culture with strong growth track record
- Unrivaled technology development and know-how
- Disciplined financial management

## Leveraging our past to build the future

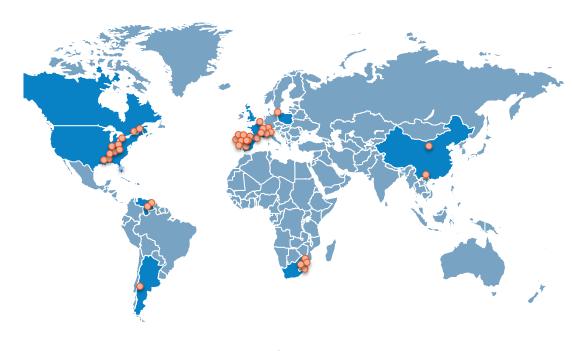


# Unique capabilities and unrivalled expertise



# Unique capabilities and unrivalled expertise

- Who we are
- What we do
- Mow we do it
- Competitive key factors
- **Cost rankings**



# Ferroglobe's unique capabilities

- Servicing our customers is our business
  - Reliability in quality
  - Reliability in volumes
  - Flexibility in seizing opportunities

- How we do it provides Ferroglobe the edge
  - Optionality
  - Cost competitiveness



Ferroglobe Manufacturing Site

# Ferroglobe is a low cost producer which enhances its competitivness

- Global footprint
  - Optionalities on cost
- Facilities benefit from attractive energy prices
- Significant integration in raw materials
  - Quartz, coal, electrodes, charcoal
- Logistical advantages
  - Import/export plants by the sea
- Unrivalled 'know-how'
  - Sharing of best practices
  - Deep knowledge gathered over decades
  - Improvement of processes; technical reliability



## Ferroglobe's backbone are our people, culture and knowledge

- Strong technical culture and heritage
  - Operating for decades
  - Technical culture worldwide
    - Post merger technical synergies
    - 'Key Technical Metrics' Project (2018)
- Relying on our own technology
  - Trustworthy and well known
  - Cheaper than third parties
- R&D department
  - Solar silicon
  - Product developments





# Leading the industry in innovative technological solutions

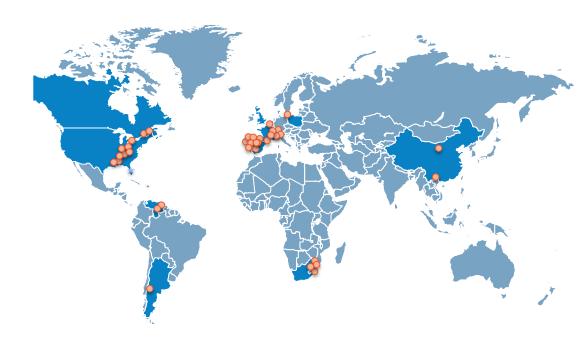


# As our customer needs widened, Ferroglobe innovated

1990	1995 20	2005	2010	2015 2017
Metallurgical grade	Chemical grade	PolySilicon grade	Solar grade	High Purity
%Fe<0.5 %Ca<0.03 %Al<0.1 ppmP <limit< td=""><td>%Fe&lt;0.4 %Ca&lt;0.03 Min&lt;%Al<max ppmP<limit Trace elements <lim< td=""><td>%Fe&lt;0.3 %Ca&lt;0.03 Min&lt;%Al<max ppmP<limit ppmB<limit Trace elements <limit< td=""><td>%Fe&lt;0.001 %Ca&lt;0.0001 %Al&lt;0.0001 ppmP&lt;1 ppmB&lt;1 ppm others &lt;10</td><td>%Fe&lt;0.001 %Ca&lt;0.0001 %Al&lt;0.0001 ppmP : tailormade ppmB : tailormade ppm others : tailorma</td></limit<></limit </limit </max </td></lim<></limit </max </td></limit<>	%Fe<0.4 %Ca<0.03 Min<%Al <max ppmP<limit Trace elements <lim< td=""><td>%Fe&lt;0.3 %Ca&lt;0.03 Min&lt;%Al<max ppmP<limit ppmB<limit Trace elements <limit< td=""><td>%Fe&lt;0.001 %Ca&lt;0.0001 %Al&lt;0.0001 ppmP&lt;1 ppmB&lt;1 ppm others &lt;10</td><td>%Fe&lt;0.001 %Ca&lt;0.0001 %Al&lt;0.0001 ppmP : tailormade ppmB : tailormade ppm others : tailorma</td></limit<></limit </limit </max </td></lim<></limit </max 	%Fe<0.3 %Ca<0.03 Min<%Al <max ppmP<limit ppmB<limit Trace elements <limit< td=""><td>%Fe&lt;0.001 %Ca&lt;0.0001 %Al&lt;0.0001 ppmP&lt;1 ppmB&lt;1 ppm others &lt;10</td><td>%Fe&lt;0.001 %Ca&lt;0.0001 %Al&lt;0.0001 ppmP : tailormade ppmB : tailormade ppm others : tailorma</td></limit<></limit </limit </max 	%Fe<0.001 %Ca<0.0001 %Al<0.0001 ppmP<1 ppmB<1 ppm others <10	%Fe<0.001 %Ca<0.0001 %Al<0.0001 ppmP : tailormade ppmB : tailormade ppm others : tailorma

# Unique capabilities and unrivalled expertise

- Who we are
- What we do
- How we do it
- Competitive intrinsic factors
- **Cost Rankings**



# Ferroglobe produces a unique combination of ferroalloys

Silicon Metal Silicon-Based Alloys Manganese-Based Alloys

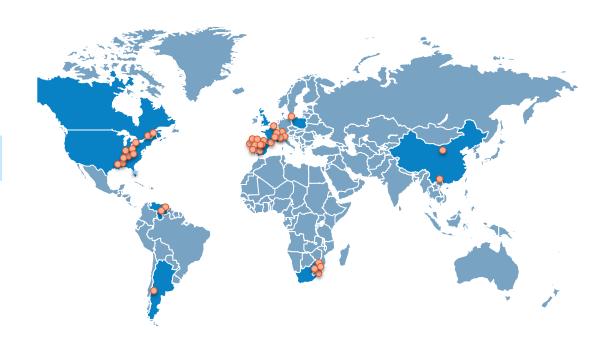
Wanganese-Based Alloys

# Ferroglobe products: markets and applications

	Silicon Metal			Silicon-Bas	sed Alloys	Manganese-Based Alloys		
TYPICAL COMPOSITION:		99% Silicon		75% Silicon		77% Mn	65% Mn	
PRODUCT:	Metallurgical (43%)	Chemical (37%)	Polysilicon (20%)	FeSiMg Inoculants	FeSi / FeSi (HP) CaSi	FeMn HC/LC	SiMn HC/LC	
MAIN MARKET:	Aluminum	Silicones	Solar	Cast Iron Foundry		ľ Steel		
USAGE:	Silicon source	Feedstock	Solar bulk material	Control of the cast iron mechanical properties	Deoxidizers for grain oriented steel	Mn source deoxidizers- desulfurizers, welding rods	Mn & Si source deoxidizers- desulfurizers, welding rods	
Production Capacity (mt)		473,200		47-	2,000	420,000		

# Unique capabilities and unrivalled expertise

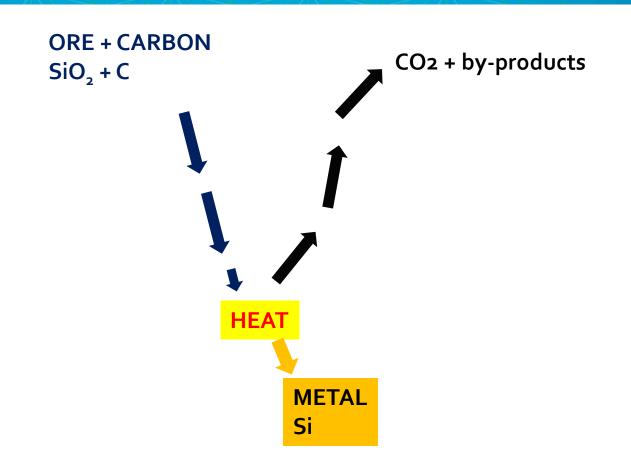
- Who we are
- What we do
- Mow we do it
- **Competitive intrinsic factors**
- **Cost Rankings**



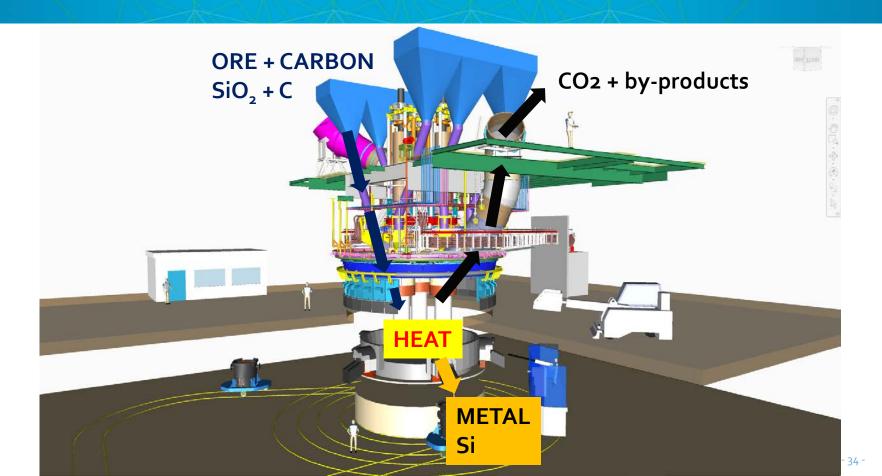
# Ferroglobe products: understanding the production process

_	Silicon Metal			Silicon-Based Alloys		Manganese-Based Alloys	
PRODUCT:	Metallurgical	Chemical	Polysilicon	FeSiMg Inoculants	FeSi / FeSi (HP) CaSi	FeMn HC/LC	SiMn HC/LC
MAIN MARKET:	Aluminum	Silicones	Solar	Cast Iron Foundry		) Steel	
TYPICAL COMPOSITION:	99% Silicon			75% Silicon		77% Mn	65% Mn
MAIN CHEMICAL REACTION:	SiO <sub>2</sub> Si			SiO <sub>2</sub> FeSi		MnO <sub>2</sub> Mn	
ORE:	High purity quartz			Quartz		Mn Ore	
CARBON SOURCE:				Coal, coke, wood		Metallurgical coke	
ENERGY REQUIRED (kWh/t)	12,000			8	8,500		4,500

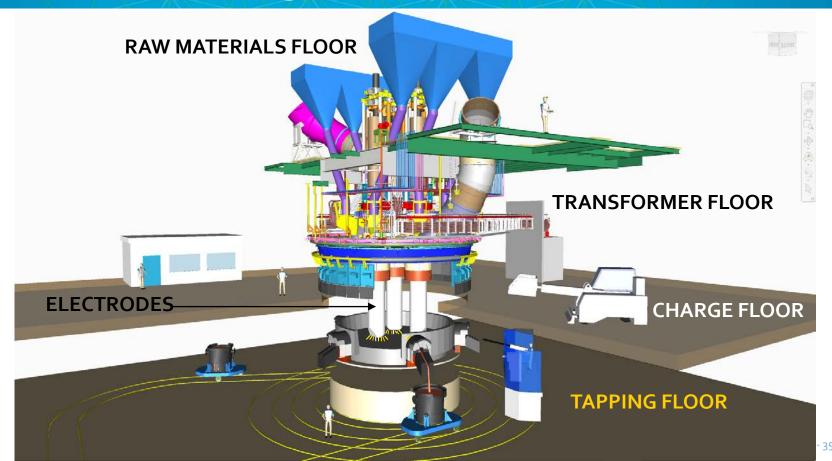
## Smelting process illustration — Submerged arc furnace



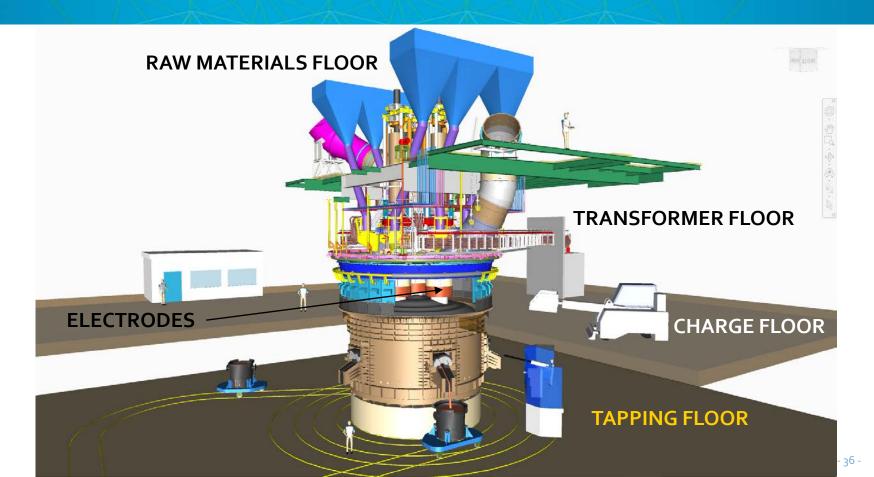
## Smelting process illustration — Submerged arc furnace



# Smelting process illustration — submerged arc furnace Electrodes: transforming electricity into heat



# Smelting process illustration — submerged arc furnace



# Smelting process illustration — submerged arc furnace

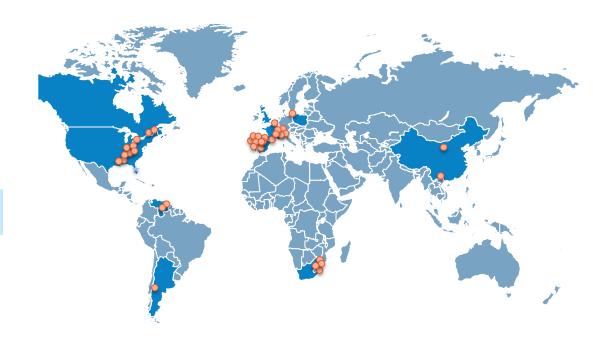


# Facility layout (Polokwane, South Africa)



# Unique capabilities and unrivalled expertise

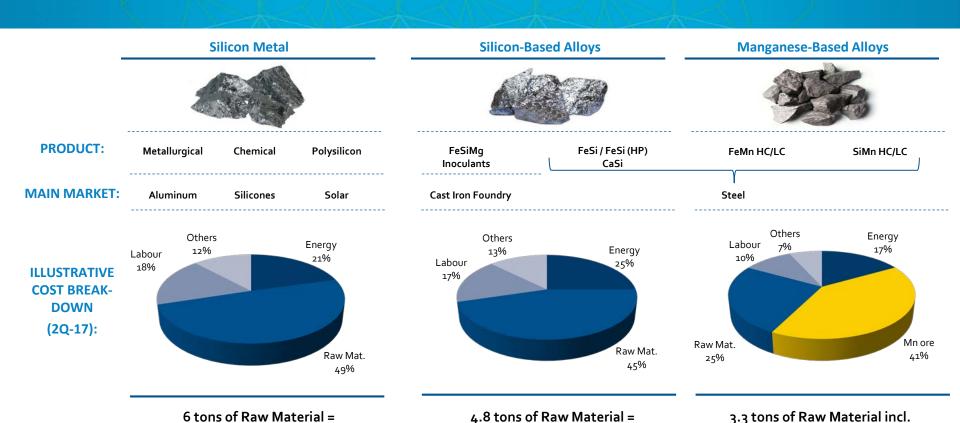
- Who we are
- What we do
- A How we do it
- **Competitive intrinsic factors**
- Cost Rankings



Ferroglobe Manufacturing Site

#### Ferroglobe's products — illustrative cost break-down

1 ton of SiMe



1 ton of FeSi

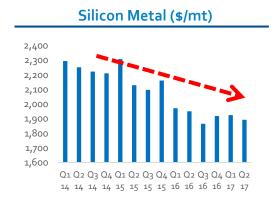
2.0 tons of ore = 1 ton of Mn-Alloys

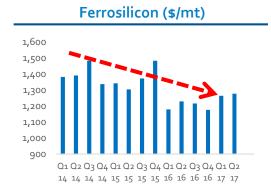
# Ferroglobe's products — impact of cost increase/decrease

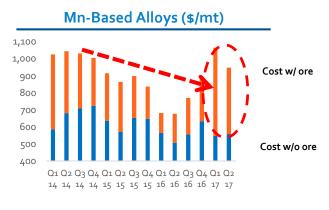
	Silicon	Metal	Silicon-Based Alloys	Manganese-Based Alloys	
POWER PRICE VARIATION	\$1 / MWh		\$1 / MWh	\$1 / MWh	
YIELD (kWh/mt)	12,000+ 1000		8,500 + 800	4,500	
COST IMPACT (\$/mt)	\$13 / mt Si = 0.59 USc / lb		\$9.3 / mt Si = 0.42 USc / lb	\$4.5 / mt Mn	
CARBON PRICE VARIATION	\$10 / mt low ash coal		\$10 / mt coal	\$10 / mt met coke	
YIELD (mt/mt)	1.300		0.900	0.500	
COST IMPACT (\$/mt)	\$13 /mt Si = 0.59 USc / lb		\$9 / mt Si = 0.41 USc / lb	\$5 / mt Mn	
MN ORE /	Graphite	Prebaked		\$1 / dmtu = \$45 / mt ore	
ELECTRODES	\$1,000 / mt	\$200 / mt			
YIELD (mt/mt)	0.018	0.100		2.000	
COST IMPACT (\$/mt)	\$18 / mt Si = 0.82 USc / lb	\$20 /mt Si = 0.91 USc / lb		\$90 / mt Mn alloy	
_				- 41 -	

# Ferroglobe has been able to continuously improve costs through operational know-how and sharing best practice

#### **Evolution of EBITDA Costs (\$/mt)**







#### **FURTHER ROOM FOR IMPROVEMENT**

#### **Key Technical Metrics plant alignment**

- Homogenizing operations down to the furnace level
- Benchmarking of various cost and efficiency drivers to achieve optimal performance across our platform
  - i.e. energy consumption per tons of finished product, yields/losses

# Ferroglobe's competitive advantage in energy

- Plants located in competitive energy cost countries
- Credibility with power suppliers
  - Track record of operating through cycles (purchasing power)
  - Strong financial position
- 🚷 Ability to negotiate favorable terms
  - Interruptibility clause which provides significant cost advantages
  - Ferroglobe takes advantage of this because of technical expertise
- 🚷 Ownership in hydro assets interests (Spain, France, Argentina)
  - Value, hedge, knowledge
- Technical performance
  - Expertise enables us to minimize furnace energy consumption

Silicon Metal	Ferrosilicon	Mn-Based Alloys
12,000 kWh	8,500 kWh	3,500 – 4,500 kWh
per ton of SiMe	per ton of FeSi	per ton of Mn-based alloys

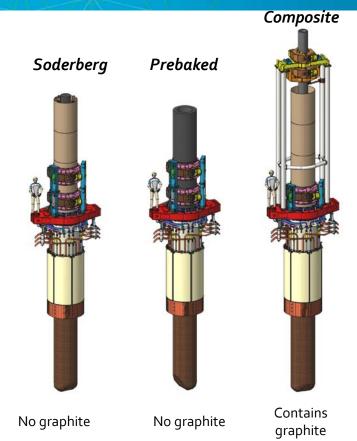




# Ferroglobe's competitive advantage in electrodes

- **Own technology on Composite electrodes** 
  - 50% of pre-baked costs
  - Key equipment for big furnace design, which drives productivity
  - High thermal stress tolerance; enables interruptibility (income)
- Integrated in Prebaked electrodes
  - Yonvey plant in Ningxia, China
- Partial integration in Söderberg paste
  - Carbon paste plant in Cee and eMalahleni

Silicon Metal	Ferrosilicon	Mn-Based Alloys
<ul><li>Composite in Europe / Canada</li><li>Pre-baked in U.S.</li></ul>	<ul> <li>Predominantly Soderberg</li> </ul>	<ul> <li>Soderberg in Europe</li> </ul>
• ~100 kg per ton of SiMe	<ul> <li>~65 kg per ton of FeSi</li> </ul>	• ~35 kg per ton of Mn-Alloy



# Ferroglobe's competitive advantage in quartz and ore

#### High purity Quartz

- Ferroglobe is world leader in metallurgical quartz mining
  - own quarries in Canada, U.S., Spain, and South Africa
- Integrated operations are located close to the plants
  - cost advantage of 35-50% versus 3rd party purchases

#### **Manganese Ore**

- Logisitical advantage (Mn alloys plants on the coast / near ports)
- In-house knowledge of various ore sources, leading to optimized mix for each furnance

#### Silicon containing slags

- Recycling in the Mn process to optimize technical performance
- All products and by-products are sold or recycled in Ferroglobe

#### **Ferromanganese**

#### Silicomanganese

- 2.0 tons of Mn ore per ton of FeMn
- 1.7 tons of Mn ore per ton of SiMn





# Ferroglobe's competitive advantage in carbon sources



- Only 2 silicon coal types worldwide for Si production; Ferroglobe has captive source of one these types
  - Blue Gem coal: Alden Resources 100% owned by Ferroglobe (supplies all of the facilities in the U.S. and Canada)
  - Colombian coal (mine owned by BHP/Anglo/Glencore): Ferroglobe currently purchases Colombian coal for its European plants



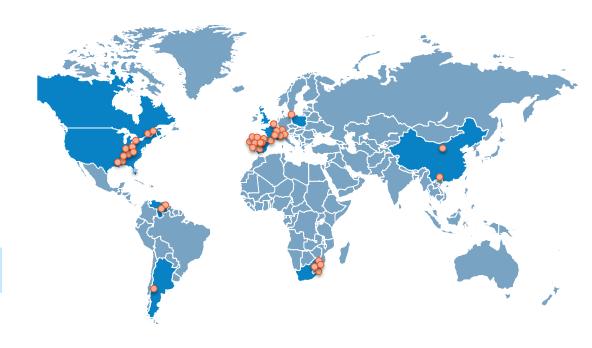
- Own production in South Africa; consumer and market maker locally
  - More expensive than coal, however will become increasingly important as environmental regulation changes globally
  - Proactivley undertaking studies on usage of charcoal going forward
- Woodchips
  - Pricing leverage due to volumes purchases locally

Silicon Metal	Ferrosilicon	Mn-Based Alloys
<ul> <li>Low ash coal:</li> <li>1.3 ton coal per</li> <li>1 ton SiMe</li> </ul>	<ul> <li>Medium ash coal: 900 kg per 1 ton of FeSi</li> </ul>	<ul><li>Coke: 500 kg per 1 ton of Mn alloy</li></ul>



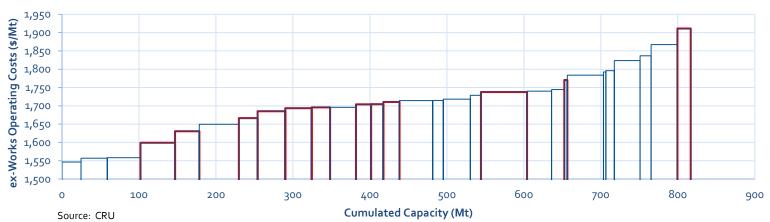
# Unique capabilities and unrivalled expertise

- Who we are
- What we do
- Mow we do it
- **Competitive intrinsic factors**
- **Cost Rankings**



# Silicon metal — 2017 competitiveness vs western world

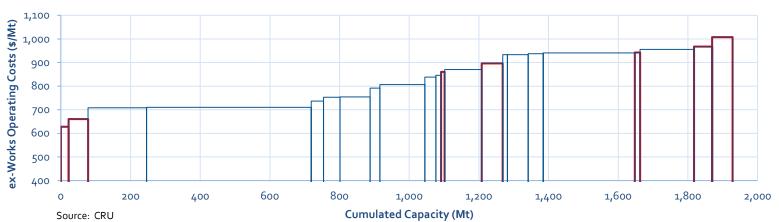




- Cost curve is based on CRU data
- Ferroglobe costs of production are actually more competitive than CRU estimates
- First 3 facilities on the left side of the graph do not reflect a real 'all-in' costs
- Ferroglobe silicon metal plants will be in the 1st and 2<sup>nd</sup> quartile in 2018

# Ferrosilicon — 2016 competitiveness vs western world





- Ferroglobe's most competitive units not producing for geo-political reasons (Venezuela, Argentina)
- Cee-Dumbria is the only FeSi standard production unit in EU much better positionned than CRU estimates
- Poorly ranked Ferroglobe plants are actually producing high purity FeSi which demands a premium sales price

# Ferroglobe's unrivalled competitive advantages

- Unique product and geographic global platform for servicing customers
- Unrivalled expertise across all disciplines of smelting



- Continuous improvement resulting in increased productivity and lower costs
- Track record for successful innovation
- Optimization of operating footprint

Optionality + operational excellence + technology innovation = World class competitiveness

# Well positioned to capitalize on favorable trends



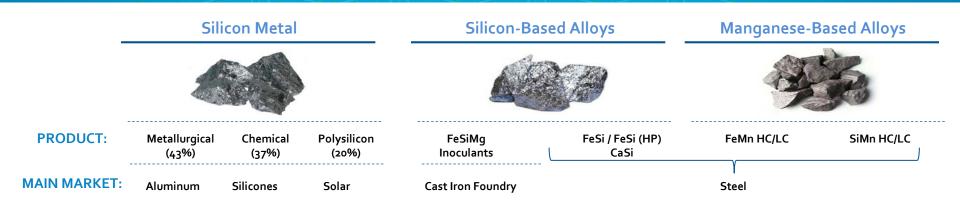
# Ferroglobe's competitive advantage is our unrivalled ability to service customers

- Ferroglobe has an extensive team of professionals dedicated to sales & marketing
- Sales coverage throughout North & South America, Europe, Middle East, South Africa and East Asia

#### Value factors

- Proximity to customers
- Realibility of supply:
  - Ability to service large sophisticated customer programs
  - Scheduling flexibility (i.e. JIT programs)
  - Range of quality and specification within each product (all plants are ISO 9001 certified)
  - Ability to service customers from multiple plants
- Track record of working with customers to develop customized solutions
- Breadth of products

# Ferroglobe is proud to have a world class customer base













**SELECT CUSTOMERS:** 























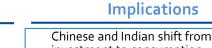






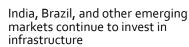
# Global Megatrends Driving Increased Demand for Ferroglobe's Key Products

#### Megatrends



Chinese and Indian shift from investment to consumption economy

Growing middle class in emerging markets





**Population Growth** 

Urbanization



**Energy Efficiency** 



Alternative Energy & Sustainability



Connectivity / IoT

Lightweighting of vehicles Aluminum Body-in-White

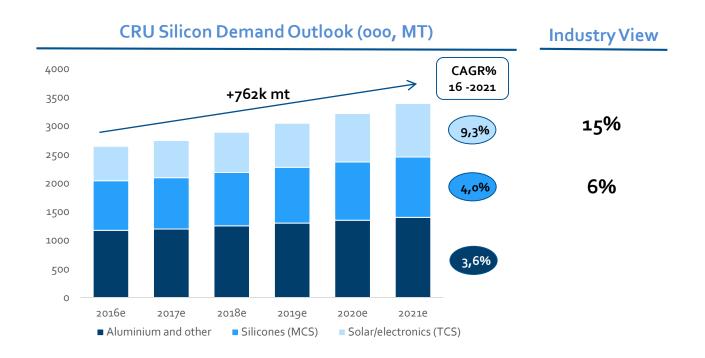
Growing demand for solar, wind, and other sources of renewable energy

Size reduction / mechanical performance in mobile devices

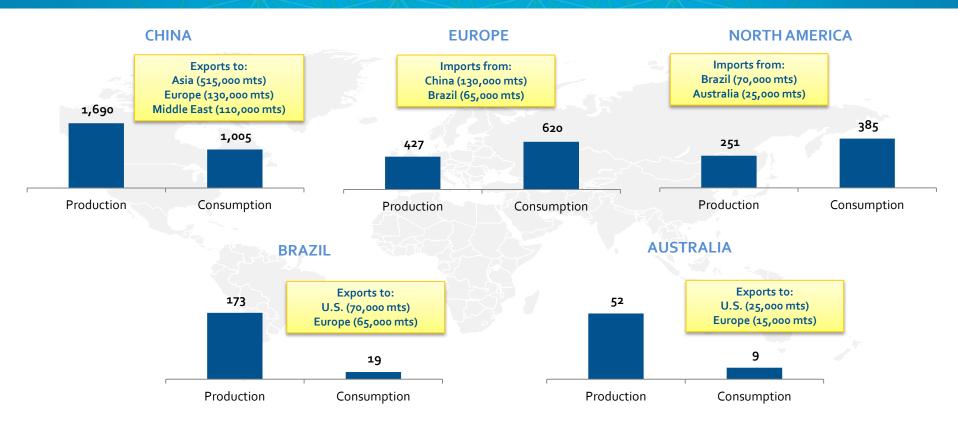
#### **Ferroglobe End Customer Products**

- Silicones for use in:
  - Healthcare
  - Cosmetics
  - Packaging
- Silicon-based alloys and manganese-based alloys in steel products
- Silicon as alloying agent for aluminum
- Silicone sealants for construction applications
- Foundry alloys in pipes for water transmission
- Silicon as alloying agent for aluminum to replace steel in vehicles
- Higher consumption of silicon for polysilicon used to make solar panels
- Increased demand for foundry alloys from windmills
- Silicon used in semi-conductors and other electronic devices
- Silicon for batteries which increases performance

#### Silicon Metal Market Demand Trends



# **Global Silicon Metal Landscape**



#### Silicon Metal Outlook — Favorable

#### China

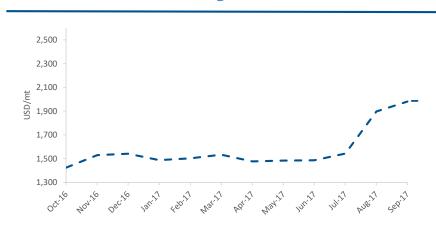
- China market consumption is ~1,000,000 mts (net exporter of 800,000 mts)
- 😥 2016 government plan of targeting several industries
  - 2017 enforcing of environmental regulations
  - Effect:
    - Closing of numerous facilities in power, coal, pulp, etc.
    - In addition, there is a current electrode shortage taking place
    - Input costs are now increasing

# Silicon Metal Pricing Environment

#### Chinese Pricing (Last 10 Years)

# 2,500 - 2,300 - 2,100 - 2,100 - 1,700 - 1,500 - 2,007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

#### Chinese Pricing (Last 12 Months)



Export pricing recently had a dramatic increase of ~20%

#### Silicon Metal Outlook — Favorable

#### **Europe**

- Market consumption is ~620,000 mts (net importer of ~190,000 mts)
- Chinese export pricing affects Europe market pricing
  - Chinese anti-dumping and import duties at +22% + freight + profit margin
  - Current China export pricing higher for 2018 than it was in early 2017
- 2018 U.S. market attractiveness

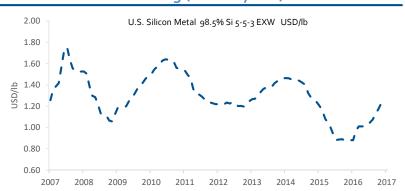
#### Silicon Metal Outlook — Favorable

#### **North America**

- North America market consumption is ~400,000 mts (net importer of ~150,000 mts)
- Possible trade cases effect
- Current index pricing is ~\$1.30 / lb (and increasing) for 2018 vs. ~\$1.00 / lb at start of 2017
- Plan for 2018 contracts
  - High fixed price option
  - Move to shorter term pricing commitments
  - Index pricing with no discount and with pricing floor clause

# Silicon Metal Pricing Environment

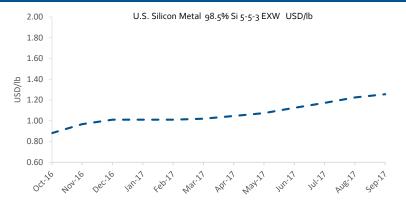




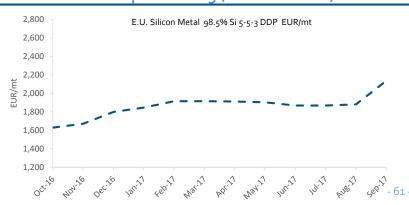
#### European Pricing (Last 10 years)



#### U.S. Pricing (Last 12 Months)



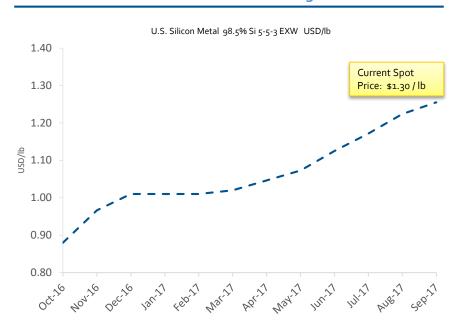
#### European Pricing (Last 12 Months)

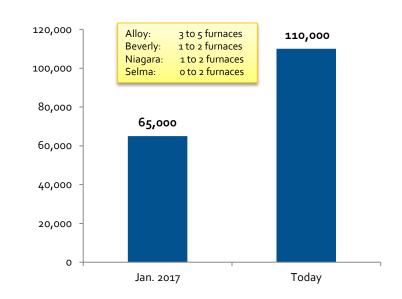


# Operational strategy beginning to take shape — leverage to upside

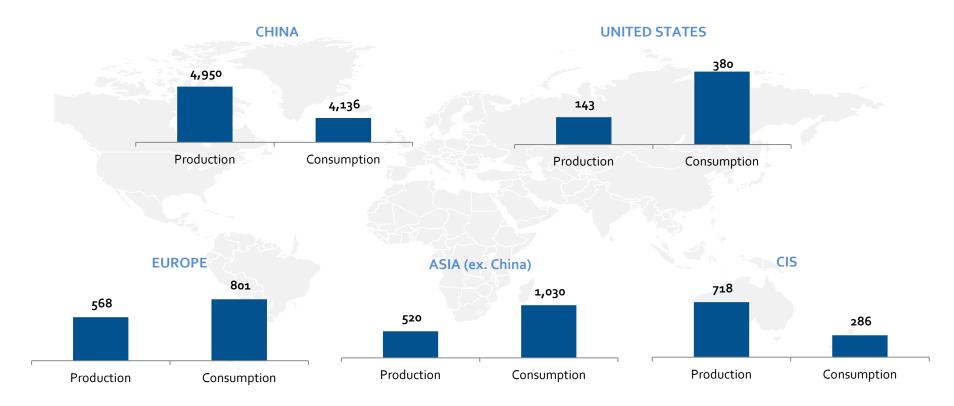
**U.S. Silicon Metal Pricing** 

Ferroglobe U.S. Silicon Metal Capacity





# **Global Ferrosilicon Landscape**



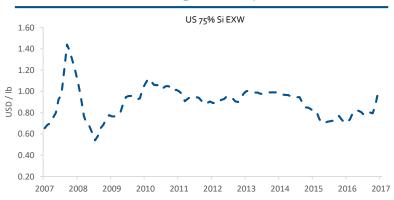
Source: CRU, Global Trade Atlas

#### Ferrosilicon Outlook — Favorable

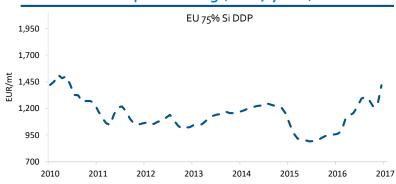
- China costs are increasing for similar reasons as stated for silicon metal
- Our position in ferrosilicon is weighted toward specialty grades at ~33%
- Balance of share in either Europe or U.S. is such that we can be selective in our business choices of valued customer relationships
- In both markets pricing will start off in 2018 higher than start of 2017
- Global economies are doing well so steel demand should remain positive

# **Ferrosilicon Pricing Environment**

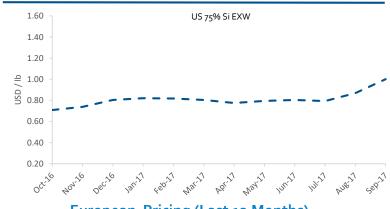




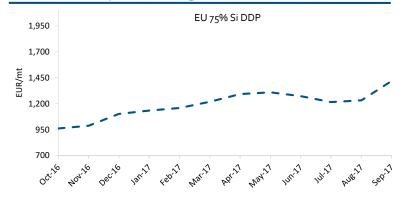
#### **European Pricing (Last 7 years)**



#### U.S. Pricing (Last 12 Months)



#### European Pricing (Last 12 Months)

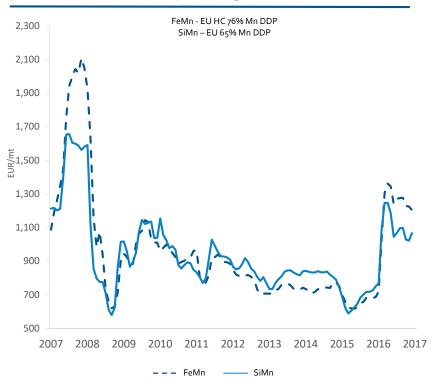


# Manganese Alloys Outlook — Favorable

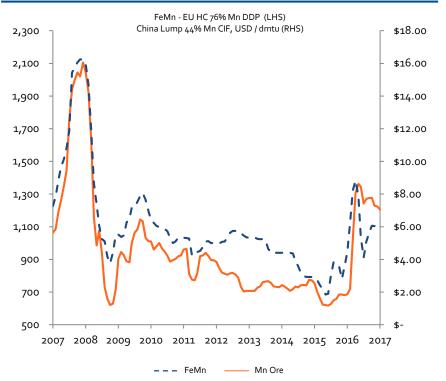
- 🚷 Spread business for us
  - Focus on the manganese ore procurement and the sales prices
  - Run correlation and regression analysis with high probability of where Mn Alloy pricing will end up
- Anticipate pricing will decline in 2018 but we will work to maintain the spread while increasing volumes
- Economies around the world are doing well so steel demand should remain positive

# **Manganese Alloys Pricing Environment**

#### Mn-Based Alloys Pricing (Last 10 Years)



#### Mn-Based Alloys vs. Mn Ore (Last 10 Years)



# Ferroglobe is well positioned to capitalize on favorable trends



**Business fundamentals improving** 

Solid demand expected



Improved and sustainable pricing

 Cost factors are reducing our competitor's competitiveness

# Addressing unfair trade



# Current measures in place

#### Ferroglobe products are protected by the European Union and the U.S. from unfairly low priced imports

	Destination	Product		Measures in Place
Imports	Europe	Silicon	■ 16.8% duty on Chinese imports¹	
	US		■ 139.49% duty on Chinese imports <sup>2</sup>	
	Canada			■ 235.0% duty on Chinese imports
	Europe	Silicomanganese	Silicomanganese	No on-going EU anti-dumping investigations
	Europe	Ferromanganese		No on-going EU anti-dumping investigations
	Europe	Ferrosilicon		■ Since 2008 Europe applies the following duties on imports:
				- China: Erdos 15.6%, Lanzhou 29.0% and others 31.2%
				– Russia: Bratsk 17.8% and others 22.7%
	US			Expire in 2014 June; extended 5 years
			_   .	Currently, no duties on FeSi entering the U.S.
China Exports	World	Silicon		Since January 2013 the 15% duty on exports has been cancelled with subsequent impact on world prices
	World	Ferromanganese and Silicomanganese		■ Duties in place for FeMn and SiMn currently at 20%

<sup>&</sup>lt;sup>1</sup> Duties of 16.3% for one company (Datong Jinneng Industrial Silicon Co.). The measures extend to imports consigned from South Korea and Taiwan, without regard to whether the y are declared as originating in those countries.

Imports from one company (Jiangxi Gangyuan Silicon Industry Co., Ltd) are subject to a 48.64% duty.

#### Summary of outstanding silicon metal trade cases



- Filed petition on December 30, 2016
- Anti-dumping and subsidy investigation
- Target countries: Brazil, Kazakhstan, Malaysia, Laos, Norway and Thailand

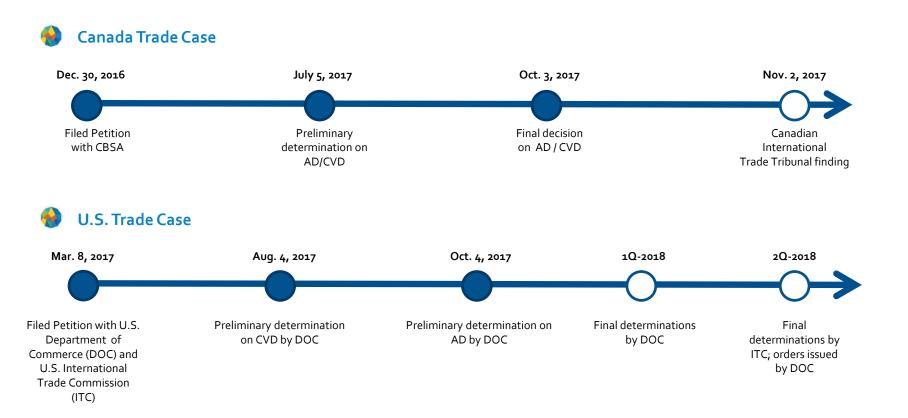
Target countries represent 96% of 2016 silicon metal imports into Canada



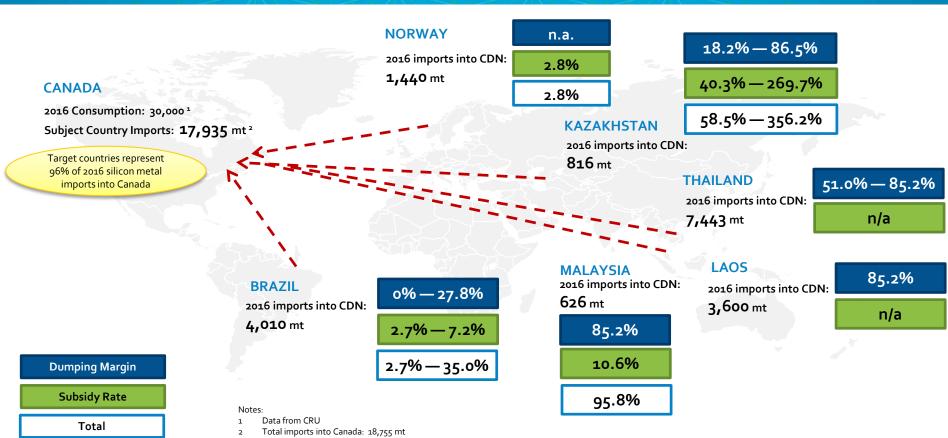
- Filed petition on March 8, 2017
- CVD target countries: Brazil, Kazakhstan, and Australia
- AD target countries: Brazil, Norway and Australia

Target countries represent 63% of 2016 silicon metal imports into the U.S.

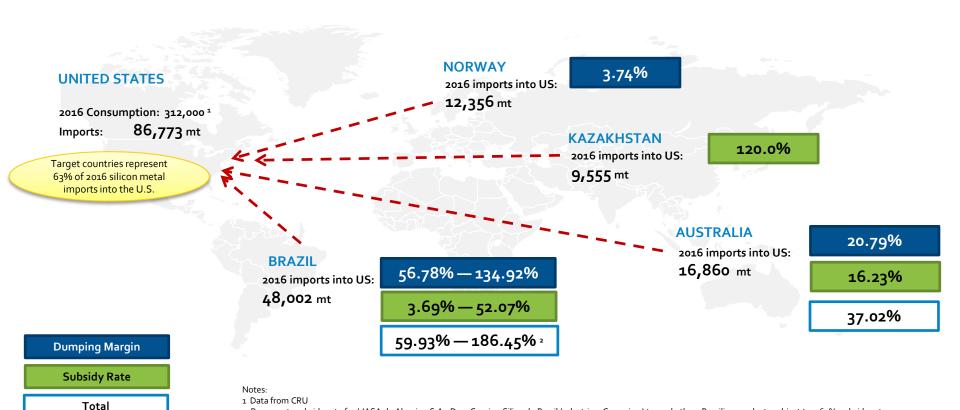
#### Summary of outstanding silicon metal trade cases



# Competitive landscape for silicon metal in Canada after trade case



# Competitive landscape for silicon metal in the U.S. after trade case



2 Represents subsidy rate for LIASA de Alumino S.A.; Dow Corning Silico do Brasil Industria e Comerico Lta. and others Brazilian products subject to 3.69% subsidy rate

- 74 -

# Strategy for value creation



## Ferroglobe is well positioned for 2018 and beyond

Actions Taken		Outcome
Operational	<b>→</b>	<ul><li>Successful navigation through downturn</li><li>Now in the process of restarting capacity</li></ul>
<b>⊗</b> Commercial	<b>→</b>	<ul> <li>Disciplined approach</li> </ul>
<b>Sinancial</b>	<b>→</b>	<ul> <li>Financial flexibility to navigate downturn and ample liquidity to fund future growth</li> </ul>
⊗ Strategic	<b>→</b>	<ul> <li>Promising outcomes in the U.S. and Canada trade cases</li> </ul>

## Ferroglobe's corporate strategy

Commitment to be best-in-class



Developing our leadership in core products

Leveraging our silicon metal technology

# Commitment to be best-in-class — Maintaining industry leading cost position



- 🚷 Ferroglobe's edge in the industry
  - Proprietary 'know how'
  - Unrivalled expertise and labor force
- Culture of continuous improvement (KTM Program)
  - Benchmarking
  - Identifying opportunities
  - Quick execution

#### **Total Synergies Captured Since Merger (\$mm)**



More savings ahead

#### **Working Capital Improvement (\$mm)**



# Commitment to be best-in-class — Optimizing locally in order to compete globally

**Production flexibility** 

**Production optionality** 

Natural F/X hedge

Broadest product range

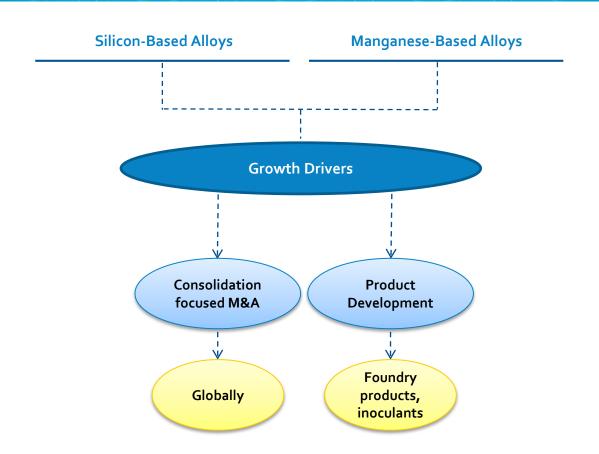
Global customer reach

Low cost operations

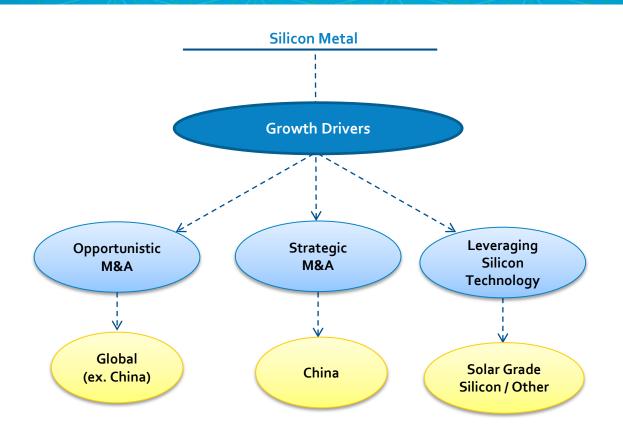
High barriers to succeed



## Developing our leadership in core products



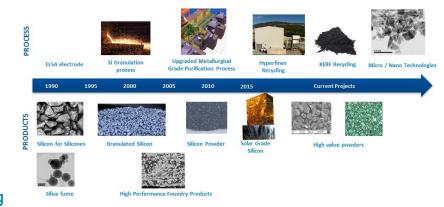
## Developing our leadership in core products (con't)



#### Leveraging our silicon metal technology

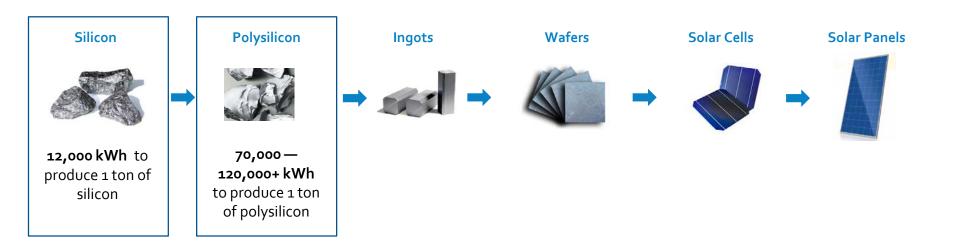
Innovation is critical for continued success

- New silicon applications demand new requirements
  - Higher and controlled purity
  - Finer particle size
- New technologies, equipment, and ideas obtained during our R&D targeting UMG
  - Leverage this towards a number of new product areas

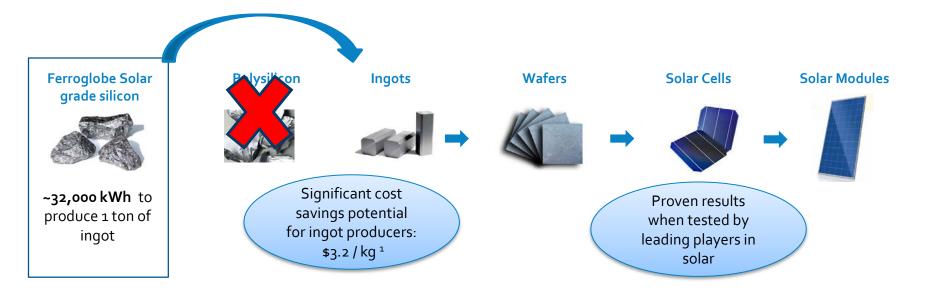


#### Leveraging our silicon technology (con't)

- Ferroglobe is focused on disrupting the solar value chain
- Current process is very energy intensive (high cost)



### Leveraging our silicon technology (con't)



Note:

<sup>1</sup> Illustration assumes 85,000 x \$40 MWh

#### Leveraging our silicon technology

#### Puertollano, Spain





#### **Industrial Plant Highlights**



Initial Phase UMG Capacity: 1,400 mt/y

 **Total Cost:** €75 million

— Amount already spent €22 million

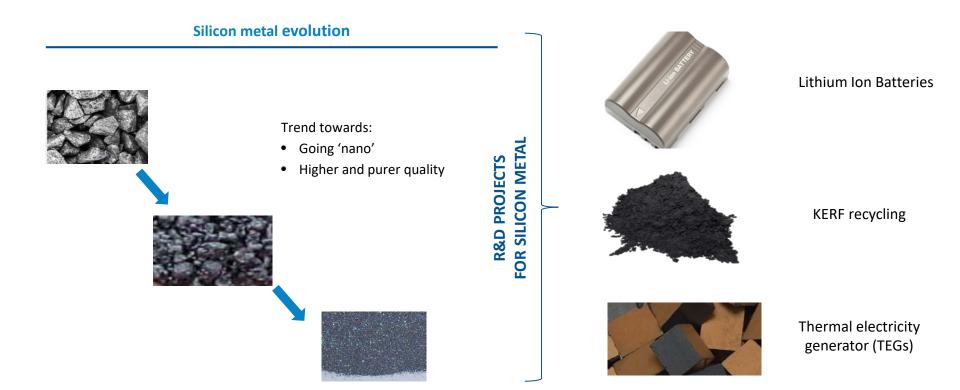
— Government grant €7 million

— Government loans €43 million

Ferroglobe Additional equity €3 million

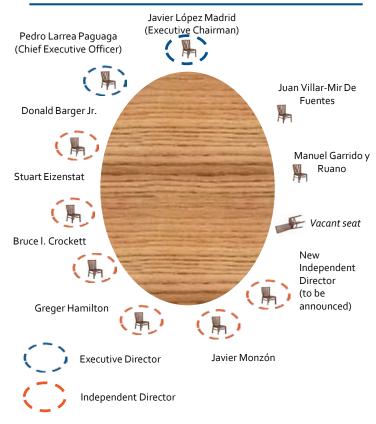
Construction completed: 2H-2018

## Leveraging our silicon technology



# Updated corporate governance to align with best practices

#### **Overview of Ferroglobe's Board of Directors**



#### **Summary of Key Corporate Governance Protections**

General Meeting on Oct. 26, 2017

- General Meeting will consider amendments to the Articles to modernize and simplify governance
- Changes will align Ferroglobe's governance more closely to US and UK best practice
- Entrenched rights of Directors will be removed
- Redundant legacy provisions from the 2015 merger will be removed

Board of Directors

- The Board will comprise a maximum of eleven directors
- A new Nominations Committee, comprising a majority of independent directors, chaired by Javier López Madrid, will have sole responsibility for recommending appointments to the Board
- All directors will be subject to annual re-election
  - Elected at AGM by simple majority
  - Board may fill vacancies by simple majority
- A new Lead Director (Senior Independent Director) will co-ordinate the Independent Directors
- Corporate Governance Policy Statement will assure that a majority of Ferroglobe's directors are independent under Nasdag rules and independent of Grupo Villar Mir



- Related party contracts with Grupo Villar Mir and connected persons will require approval of Independent Directors
- Replacement of Executive Chairman before 31 December 2019 will require approval of Independent Directors and Grupo Villar Mir nominees
- All other Board decisions will be by simple majority

### Ferroglobe's corporate strategy





- Developing our leadership in core products
- Leveraging our silicon metal technology

- Disciplined value creation through the cycle for all stakeholders
- Current initiatives expected to contribute an incremental 20%-30% in EBITDA over 24 months
- Deliver value to shareholders through a dividend policy

