

# The driving force of the refractory industry

Company presentation



# Disclaimer

The consolidated financial statements presented here are consistent with the criteria of international accounting standards – IFRS issued by the International Accounting Standards Board – IASB, based on audited financial information. Non-financial information contained herein, as well as other operational information, were not audited by independent auditors and may include forward-looking statements and reflects the current views and perspectives of the management on the evolution of macro-economic environment, conditions of the mining and refractories industries, company performance and financial results. Any statements, projections, expectations, estimates and plans contained in this document that do not describe historical facts, and the factors or trends affecting financial condition, liquidity or results of operations, are forward-looking statements and involve several risks and uncertainties.

This presentation should not be construed as legal, tax, investment or other advice. This presentation does not constitute an offer, or invitation, or

solicitation of an offer, to subscribe for or purchase any securities, and neither any part of this presentation nor any information or statement contained herein shall form the basis of or be relied upon in connection with any contract or commitment whatsoever. Under no circumstances, neither the Company nor its subsidiaries, directors, officers, agents or employees be liable to third parties (including investors) for any investment decision based on information and statements in this presentation, or for any damages resulting therefrom, corresponding or specific.

The information presented or contained in this presentation is current as of the date hereof and is subject to change without notice. RHI Magnesita has no obligation to update it or revise it in light of new information and / or in face of future events, safeguard the current regulations which we are submitted to. This presentation and its contents are proprietary information of the Company and may not be reproduced or circulated, partially or completely, without the prior written consent of the Company.

# Table of contents

- 1 Refractory industry overview
- 2 RHI Magnesita overview
- 3 Strategy



# Refractories are essential for our modern world



**1 tonne of  
STEEL**

demands ~10-15 kg  
of refractories



**1 tonne of  
CEMENT**

demands ~1 kg  
of refractories



**1 tonne of  
GLASS**

demands ~4 kg  
of refractories



**1 tonne of  
ALUMINIUM**

demands ~6 kg  
of refractories



**1 tonne of  
COPPER**

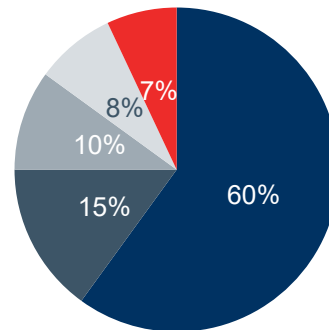
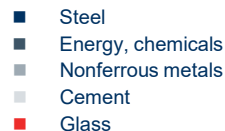
demands ~3 kg  
of refractories

# Refractories are critical to all high-temperature industrial processes

- Refractories are critical consumable or investment goods for high-temperature manufacturing processes
- Fireproof materials consumed whilst protecting clients' production processes, retaining physical and chemical characteristics when exposed to extreme conditions
- Critical, yet represent less than 3% of COGS in steel manufacturing and less than 1% in other applications

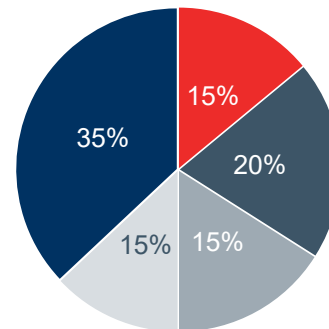
## Main end markets

€20 billion worldwide industry




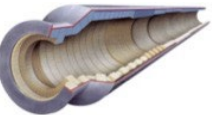

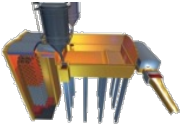

Source: Company estimates

## Global refractory industry



Source: Company estimates of market share in US\$

# Refractories are continuously consumed during finished goods production

Key industries	Applications	Replacement	Costs	Refractory characteristics
Steel	Basic oxygen-, electric arc furnace casting ladles 	20 minutes to 2 months	~3.0%	<b>Consumable product</b>  Systems and solutions for complete refractory management  Demand correlated to output
Cement/Lime	Rotary Kiln 	Annually	~0.5%	<b>Investment goods</b>  Longer replacement cycles  Customized solutions based on the specific requirements of various industrial production processes  Complete lining concepts including refractory engineering  Wide areas of application  Project driven demand cycles
Nonferrous metals	Copper-converter 	1 – 10 years	~0.2%	
Glass	Glass furnace 	Up to 10 years	~1.0%	
Energy / Environmental / Chemicals	Secondary reformer 	5 – 10 years	~1.5%	

# A complex range of tailored refractory products

## Bricks



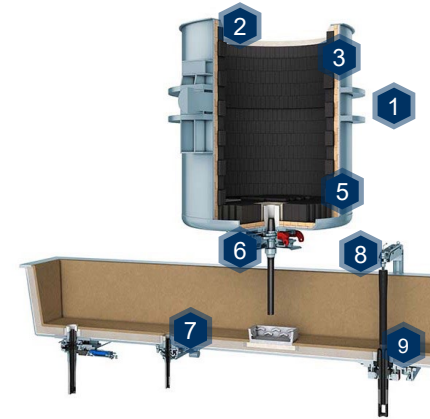
## Monolithics and pre casts



## Functional products



## Example of refractory application for steel ladle



## Digital Solutions



## Systems & Machinery



# Table of contents

- 1 Refractory industry overview
- 2 RHI Magnesita overview
- 3 Strategy





We are the world leader in refractories and a truly global company

---

**€2.6bn**

2021 revenue

---

**12,000**

Employees

---

**€63m**

Annual investment in R&D and  
Technical Marketing

---

**28**

Main production sites

---

**125+**

Countries shipped to worldwide

## Full Year 2021 – Financial highlights

Inventory levels and net debt increased to ensure customer deliveries

Revenue<sup>1</sup>

€2.6bn

↑ 16%

Adjusted EBITA<sup>1</sup>

€280m

↑ 9%

Adjusted EBITA margin

11.0%

↓ (70)bps

Adjusted Earnings per share

€4.52ps

↑ 38%

Cash returned to shareholders

€167m

↑ 315%

Capex

€252m

↑ 61%

Working Capital intensity<sup>3</sup>

23.3%

↑ 740bps

Net debt to adjusted EBITDA<sup>4</sup>

2.6x

↑ 1.1x

1. Denoted on a constant currency basis

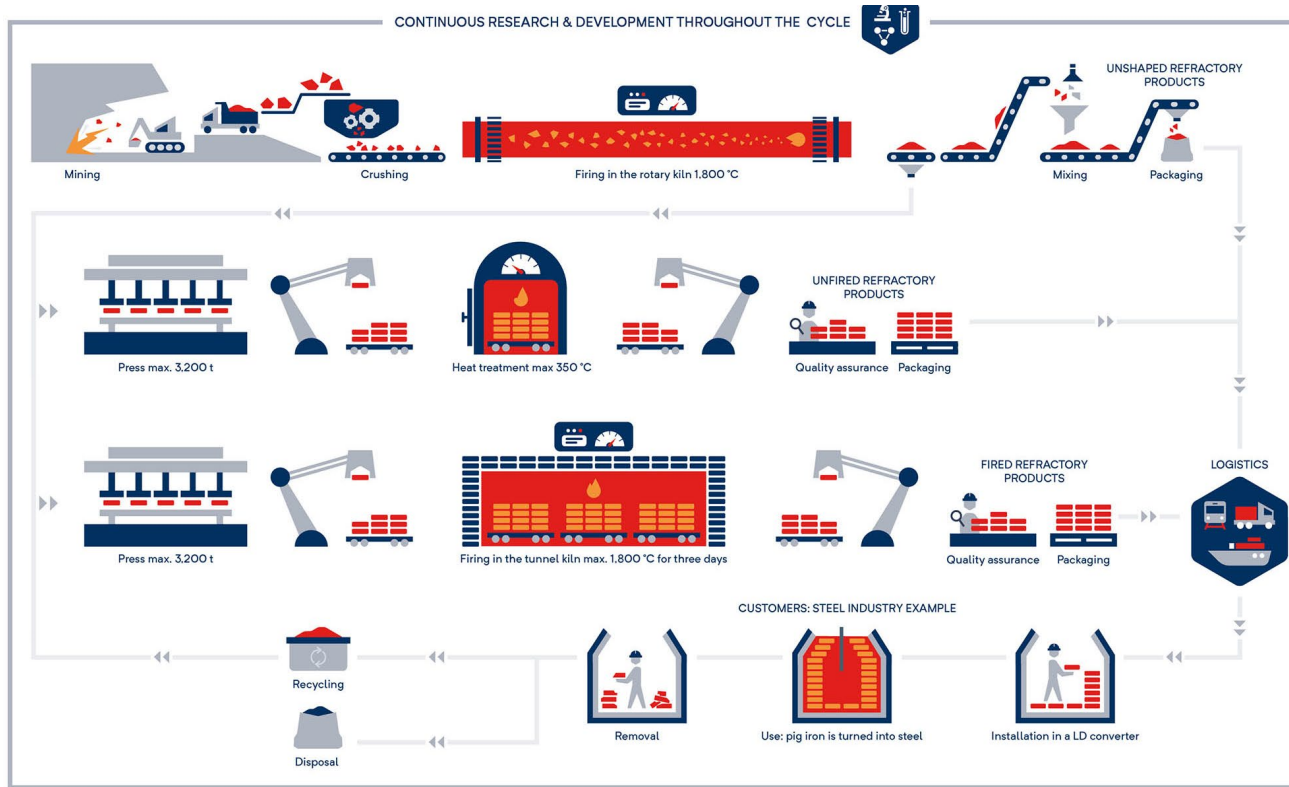
2. Operating cash flow comprises Adjusted EBITA, plus changes in working capital and other assets/liabilities, plus depreciation and minus capex

3. Working capital includes working capital financing, €2,911m and is denoted on a L3M revenue basis. Compared against FY20

4. Including IFRS 16 Leases of €56m

# The refractory world of RHI Magnesita

Value creation from the raw material to the refractory product



\* Example magnesita product line

## Serving a blue chip client base

### STEEL



TATA STEEL



POSCO



OUTOKUMPU



Severstal



Steel Dynamics, Inc.



Serving 1,070  
of 1,300 plants<sup>1</sup>

### CEMENT



LafargeHolcim

HEIDELBERGCEMENT



Votorantim

Sinoma  
中国中材



CNBM

Serving 1,350  
of 1,500 plants<sup>1</sup>

### GLASS

SCHOTT

ArdaghGlass



Serving 800  
of 900 plants<sup>1</sup>

### METALS



GLENCORE

RioTinto

Serving 650  
of 2,000 plants<sup>1</sup>

Note: 1) Approximate number of plants worldwide, excluding China, based on Company estimates

# Experienced management team with solid financial and strategic background

Executive Management Team	Joined	Background
<b>Stefan Borgas</b> <i>CEO</i>	2016	<ul style="list-style-type: none"> <li>Former CEO of Israel Chemicals Ltd and Lonza Group</li> <li>Several management positions at BASF</li> </ul>
<b>Ian Botha</b> <i>CFO</i>	2019	<ul style="list-style-type: none"> <li>Former Finance Director of Anglo American Platinum</li> <li>Several management positions at Anglo American plc, including CFO Ferrous Metals, CFO Coal and Group Financial Controller</li> </ul>
<b>Luis R. Bittencourt</b> <i>CTO</i>	1989	<ul style="list-style-type: none"> <li>Former Vice President R&amp;D and Raw Materials at Magnesita</li> <li>BA in mining engineering (UFMG), MS degree in metallurgical engineering (University of Utah) and PhD in ceramic engineering (University of Missouri)</li> </ul>
<b>Rajah Jayendran</b> <i>COO</i>	2021	<ul style="list-style-type: none"> <li>Former Senior Vice President Performance Management at Linde Group</li> <li>Holds an engineering degree from the Ruhr University Bochum</li> </ul>
<b>Gustavo Franco</b> <i>CSO</i>	2019	<ul style="list-style-type: none"> <li>Former Global Sales &amp; Marketing VP at RHI Magnesita</li> <li>18 years of experience in Sales for the Refractory Industry, being based in South America, North America and Europe</li> </ul>
<b>Simone Oremovic</b> <i>People, Projects &amp; Global Supply Chain</i>	2017	<ul style="list-style-type: none"> <li>19 years of experience in leadership positions in HR, among other fields at GE, Telekom Austria, IBM and Shire/Baxter</li> </ul>
<b>Ticiana Kobel</b> <i>Legal, Corporate Communications &amp; Purchasing</i>	2019	<ul style="list-style-type: none"> <li>More than 20 years of experience in management positions in a wide range of global business branches such as the aviation industry, the technology industry, the service sector and the engineering industry</li> </ul>

# Table of contents

- 1 Refractory industry overview
- 2 RHI Magnesita overview
- 3 Strategy



## Our strategic framework



### Competitiveness

#### Execute cost reductions

Cost-competitive global producer of technologically advanced refractory materials with safe production network and a focus on sustainable value generation.



### Markets

#### Drive market leadership

RHI Magnesita has a worldwide presence with strong local organisations and solid positions in all major markets.



### Business model

#### Enhance business model

The leading service and solutions provider in the refractory industry, with an extensive portfolio based on innovative technologies and digitalisation – the building blocks for a strong and sustainable future.

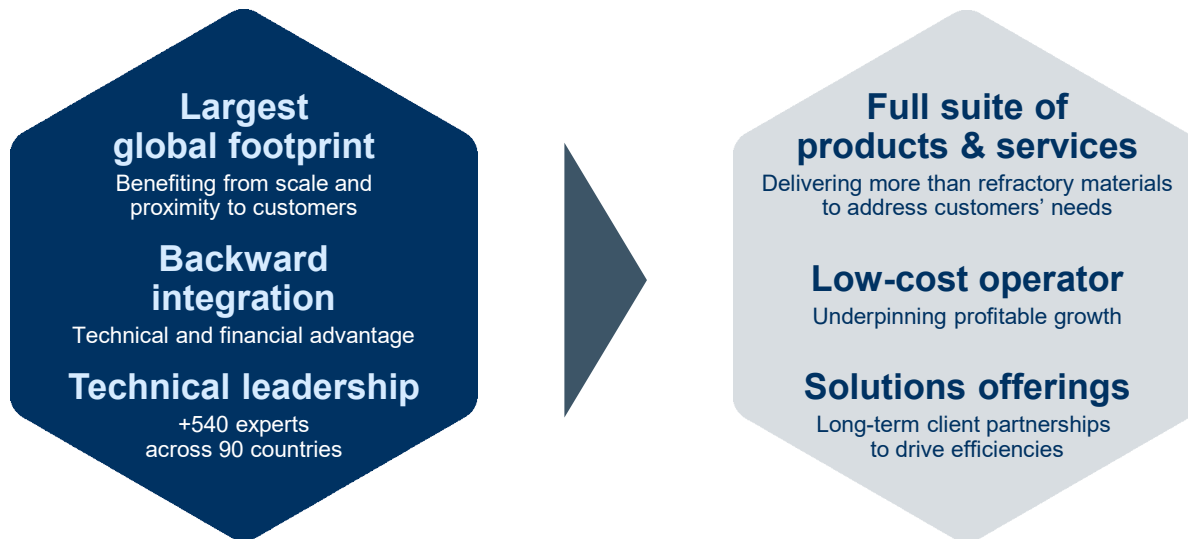


### People and Culture

#### The driving force of our strategy

Our skilled, motivated people, our customer-centric culture and our strong stakeholder partnerships are critical to RHI Magnesita's long-term success.

## Our strategic difference

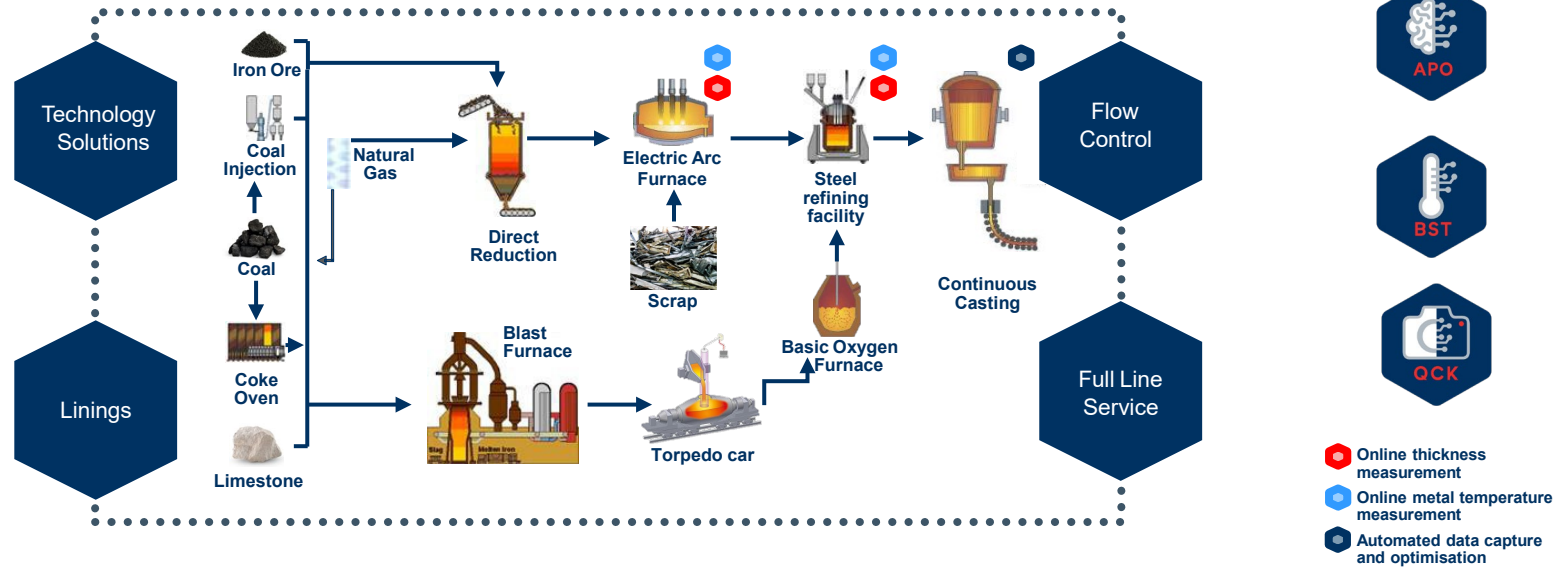


**Underpinned by the strength of our people and culture and our commitment to a sustainable business model**



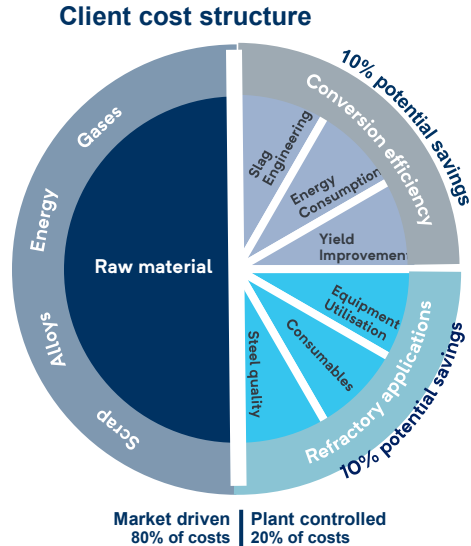
# Full suite of products complemented by knowledge and services

Example: Steel customer



# Offering full solutions to drive value at customers

>20% of revenue comes from cost per performance contracts



## Client benefit

- ✓ Reduced downtime
- ✓ Lower refractory consumption
- ✓ Lower energy and other raw materials consumption
- ✓ Higher productivity

## RHI Magnesita benefit

- ✓ Higher market share
- ✓ Higher client retention
- ✓ Lower competition
- ✓ Longer contracts

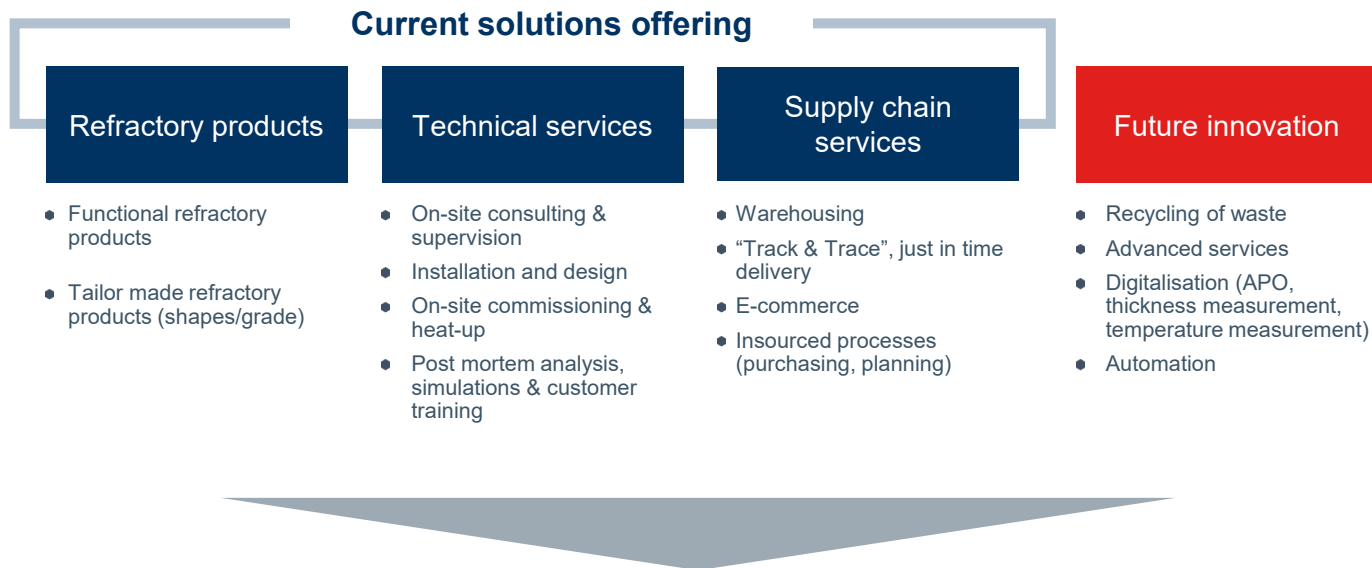
## Current solutions portfolio



127 solutions contracts worldwide

# Expanding our solutions offering

Innovation to further enhance business model



**Drive percentage of sales from solutions from 27% in 2020 to 40% by 2025 and improve Group margin**

## R&D – From raw materials to refractories

**+540**

technical experts across

**90 countries**

to consult, develop and deliver innovative solutions directly to our customers



**2**

R&D Hubs  
(Austria and Brazil)



**3**

R&D Centers  
(USA, China, India)



**+540**

Experts<sup>1</sup>



**+1,550**

Active patents



**2.5%**

R&D and Technical  
Marketing expenditure  
as % of sales<sup>1</sup>



**16%**

Revenue from new  
products<sup>2</sup> as % of total  
revenue

**Notes:**

1) R&D, Product Management and Technical Excellence & Solutions; 2) Defined as products and brands less than 3 years old

# High quality sites globally

Supporting unique solutions to the market

Raw material	Production sites	Annual production
<b>Standard DBM<sup>1</sup></b> 90%-97%	Brumado (Brazil) Eskisehir (Turkey) Hochfilzen (Austria) Breitenau (Austria)	~720 k tonnes
<b>High purity DBM<sup>1</sup></b> 97%+	Brumado (Brazil)	~240 k tonnes
<b>Fused Magnesia</b>	Contagem (Brazil)	~17 k tonnes
<b>Other sintered or fused materials</b>	Radenthein (Austria) Contagem (Brazil)	~80 k tonnes
<b>DBD<sup>2</sup></b>	York (USA) Chizhou (China) Hochfilzen (Austria)	~380 k tonnes



**1.5 million**  
tonnes of raw materials  
produced per year



**70%**  
backward integration in basic raw  
materials and 50% for all raw  
materials/products ingredients

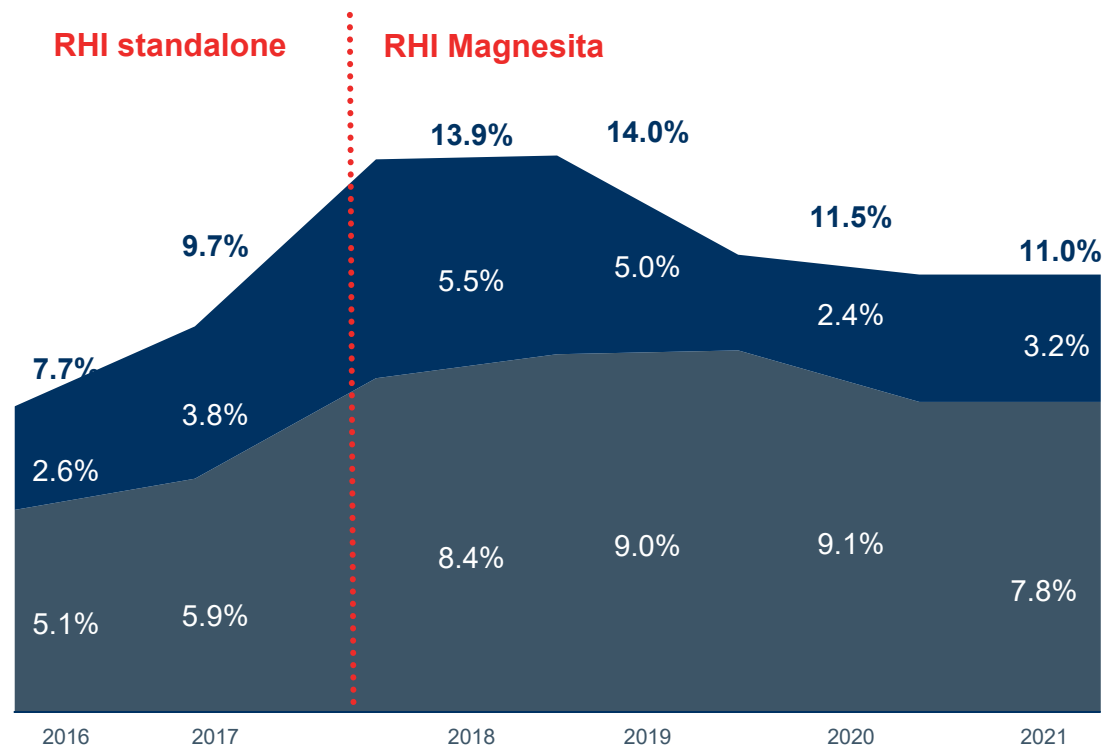
**Notes:**

1) DBM, Dead burned magnesita

2) DBD, Dead burned dolomite

# Refractory margin

Strategic initiatives will drive further growth in refractory and backward integration margins



	2020	2021
Refractory EBITA (€m)	205	199
Vertical integrated EBITA (€m)	55	81

Increasing market price of raw materials leads to higher raw material margin

Higher freight, energy and externally purchased raw material costs impacts refractory margin

- Vertical integration margin
- Refractory margin

## Resilient business model with a clear strategy

1

Resilient margins with further potential in refractories

- Stable refractory margin at 7.8% in 2021
- Adjusted EBITA margin contribution from backward integration in 2021 at 3.2%

2

Strong cash conversion and robust balance sheet

- Strong cash flow generation and significant liquidity
- Capital flexibility to pursue both growth and shareholder returns

3

Strong competitive position

- Market leader with a global footprint and a “local for local” strategy – 15% global market share (30% ex-China). Clear market leadership in Americas, Europe and Middle East
- Innovation leadership, with opportunity to develop technology and digital solutions across regions and portfolio
- Low cost, high quality vertical integration providing security of supply and unique solutions for the market, alongside high return on assets

4

Growth opportunity from new markets, solutions offering and M&A

- Opportunity to grow materially in under-represented markets such as India and China
- Greater penetration of value-added solutions offering to customers, improving refractory margins and retention
- Opportunity for further consolidation through M&A

## Our 2025 Sustainability targets



### **CO<sub>2</sub> emissions**

Reduce by 15% per tonne<sup>1</sup>



### **Energy**

Reduce by 5% per tonne



### **Recycling**

Increase use of secondary raw materials to 10%



### **Diversity**

Increase women on our Board and in senior leadership to 33%



### **Safety**

Strong safety culture with goal of zero accidents



### **NO<sub>x</sub> and SO<sub>x</sub> emissions**

Reduce by 30%<sup>2</sup> (achieved in China already)



# Sustainability leadership: €50 million R&D investment in CO<sub>2</sub> reduction technologies

Creating the path to de-carbonisation

- Capture of geogenic CO<sub>2</sub> emissions (>50% of our emissions)
- Utilisation of captured CO<sub>2</sub> through external partnerships
- R&D supporting switch away from fossil fuels in own operations

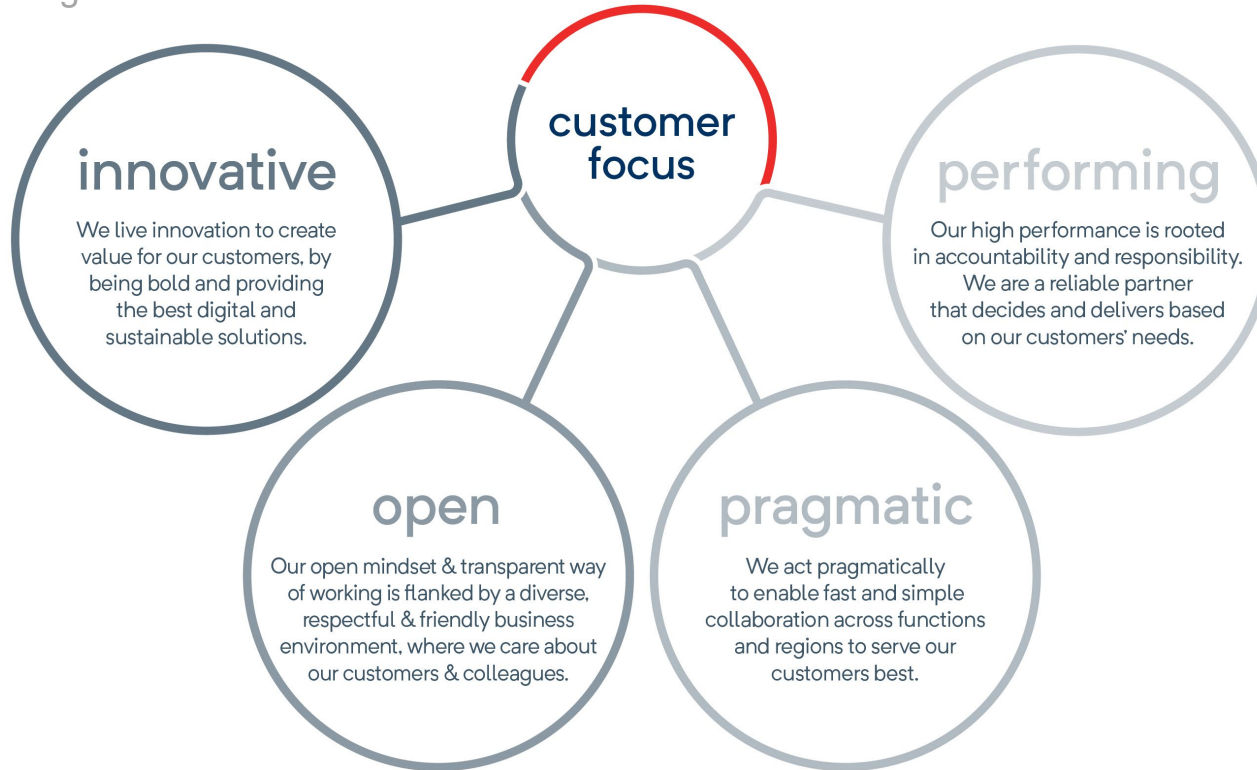


**We aim to have the technology solution by 2025 which will create the path for a full de-carbonization of the company**

Significant further opportunity to develop customer solutions to minimise energy consumption and emissions

# Culture

Critical to future growth



## Get in touch

RHI Magnesita

Kranichberggasse 6

1120 Vienna Austria

Phone: +43 50213 6200

E-mail:

[corporate.communications@rhimagnesita.com](mailto:corporate.communications@rhimagnesita.com)

[rhimagnesita.com](http://rhimagnesita.com)

### Important notice:

These materials do not constitute or form part, or all, of any offer of invitation to sell or issue, or any solicitation of any offer to purchase or subscribe for, any securities in any jurisdiction in which such solicitation, offer or sale would be unlawful, nor shall part, or all, of these materials form the basis of, or be relied on in connection with, any contract or investment decision in relation to any securities.

These materials contain forward-looking statements based on the currently held beliefs and assumptions of the management of RHI Magnesita N.V. or its affiliated companies, which are expressed in good faith and, in their opinion, reasonable. These statements may be identified by words such as "expectation" or "target" and similar expressions, or by their context. Forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the actual results, financial condition, performance, or achievements of RHI Magnesita N.V. or its affiliated companies to differ materially from the results, financial condition, performance or achievements express or implied by such forward-looking statements. Given these risks, uncertainties and other factors, recipients of this document are cautioned not to place undue reliance on these forward-looking statements. RHI Magnesita N.V. or its affiliated companies disclaims any obligation to update these forward-looking statements to reflect future events or developments.

