

# Developer of high purity silica sand – a critical mineral in global demand.

Neil McIntyre, CEO, Diatreme Resources Noosa Mining Investor Conference

24 July 2025



## Important Information

#### **Resource Estimates and Production Targets**

The Resource Estimates and Production Targets reported by Diatreme Resource Limited's (DRX or the Company) on 23 June 2025 continue to apply and have not materially changed. The Company confirms that it is not aware of any new information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

#### **Cautionary Statement**

This presentation contains certain forward-looking statements and forecasts which include without limitation, expectations regarding future performance, exploration, mineral resources, the financial position of the Company, industry growth or other trend projections. Whilst this presentation is based on information from sources which are considered reliable, the Company, its directors, employees and consultants do not represent, warrant or guarantee, expressly or impliedly, that the information in this presentation is complete or accurate.

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Whilst the Company has concluded that it has a reasonable basis for providing the forward looking statements included in this presentation, the Company advises that given the current price of silica and the company's current market capitalisation (compared to the capital expenditure required in connection with the Galalar Silica Sand Project and/or the Northern Silica Project), the production targets and forecast financial information contained in this presentation do not provide an absolute assurance of economic development at this stage.

The stated production targets and forecast financial information contained in this presentation are based on detailed PFS studies and the Company's current expectations of future results or events, including sourcing of project development finance within the targeted timeline and/or attracting suitable project major financial partners and should not be relied upon by investors when making investment decisions.

#### ASX Announcements as of 18 July 2025

This presentation should also be read in conjunction with the DRX Annual Report for 2024 and the March 2025 Quarterly Activities report, together with any announcements made by the Company in accordance with its continuous disclosure obligations under the Corporations Act including but not limited to the following ASX releases:

- 23 June 2025 Mineral Resource Estimate upgrade paves way for NSP PFS
- 17 June 2025 Northern Silica Project awarded Major Project Status
- 23 April 2025 Quarterly Activities / Appendix 5B Cash Flow Report
- 17 April 2025 Annual Report to Shareholders
- 20 March 2025 2024 Exploration Program results for Northern Silica Project
- 22 January 2025 NSP environmental studies progress to final stages
- 11 December 2024 Silica sand offtake MOU signed with Mitsui & Co.
- 27 November 2024 New director adds global silica sands expertise
- 31 October 2024 Bulk sample drilling for Cyclone Zircon Project complete
- 9 October 2024 New directors strengthen Diatreme's silica development
- 25 September 2024 Drilling program to unlock value from Cyclone Zircon Project
- 23 September 2024 Final Terms of Reference released for NSP EIS
- 18 September 2024 Diatreme completes takeover of Metallica



# Developer of world class silica sands projects

Our vision is to be Australia's pre-eminent listed producer of high purity, "low iron" silica sands used in growing global solar PV & specialty glass markets.



One of the world's purest silica sands portfolios of scale.

Total Mineral Resource @ 99.1% SiO<sub>2</sub>

501Mt

Potential delivery of three (or more) world-class, low iron high purity silica projects.

Northern Silica, Cape Flattery Silica and Galalar Projects



Global high purity silica consumption growing fast.

Solar PV panels whose primary component is glass sheeting showing sustained demand growth



Robust economics, NSP advancing fast.

Pre-Feasibility Study underway First production target 2027 Expansion potential



# Corporate snapshot

Share price

A\$0.019

As of 18 July 20205 52 week high \$0.031, low \$0.016 Market capitalisation

A\$95M

Shares on issue

5,008M

Cash

A\$17.9M

31 March 2025 (includes corporate and silica joint venture cash) Debt facility (unsecured & undrawn)

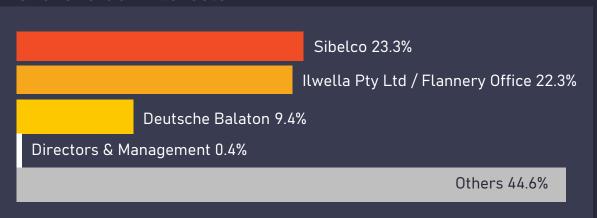
A\$1.0M

Options |

70M

10.0m - Exp 27/5/26 @ \$0.025 10.0m - Exp 27/5/26 @ \$0.030 10.0m - Exp 27/5/26 @ \$0.035 3.3m - Exp 26/5/27 @ \$0.025 3.3m - Exp 26/5/27 @ \$0.030 3.4m - Exp 26/5/27 @ \$0.035 6.6m - Exp 25/7/27 @ \$0.040 6.7m - Exp 25/7/27 @ \$0.040 3.3m - Exp 8/8/28 @ \$0.035 3.3m - Exp 8/8/28 @ \$0.040 3.4m - Exp 8/8/28 @ \$0.040

#### Shareholder interests



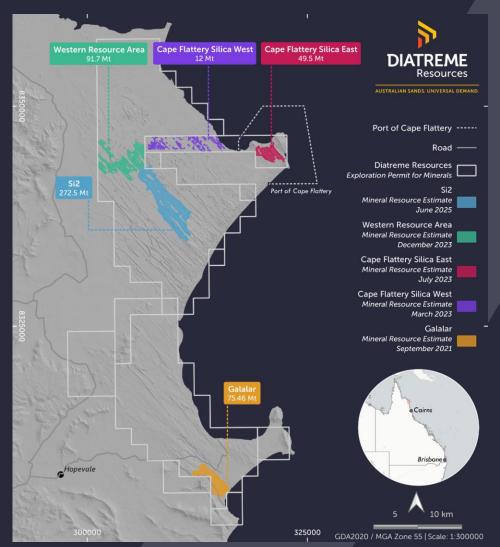




# High purity, low iron silica sands projects

# Developing in partnership with global material solutions leader Sibelco

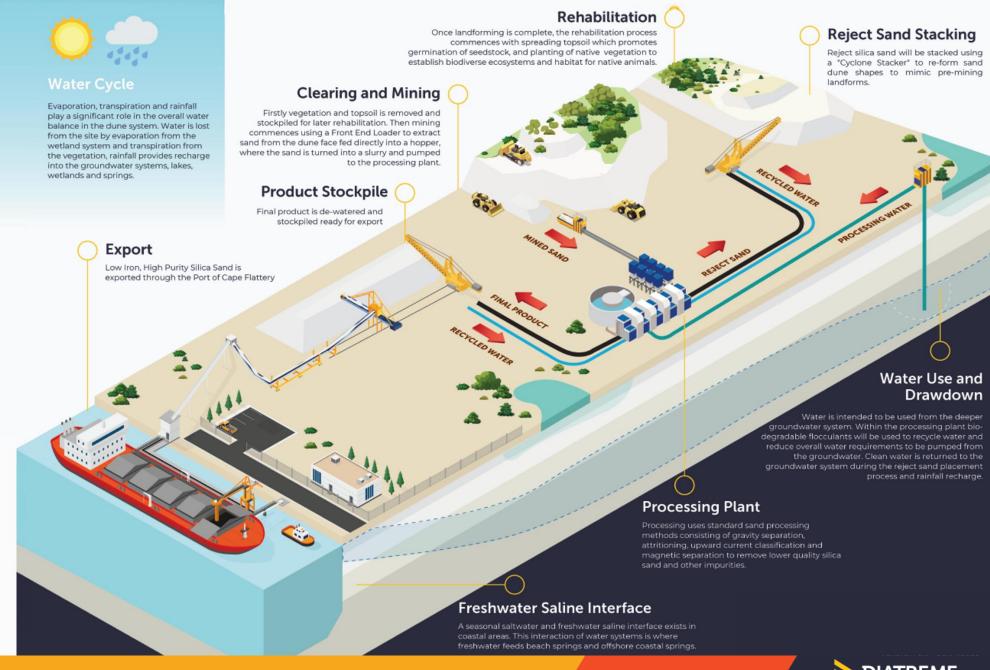
- Long life, sustainable operations with excellent logistics
- Diatreme exploration acreage (630 sq km) adjoins the world's largest high purity silica sand mine at Cape Flattery (CFSM-Mitsubishi)
- Multi-phase high purity sand dunes located 20-50km north-east of Hope Vale, FNQ, extending inland for 10-15km
- Cape Flattery Silica Project acquired following successful Metallica Minerals takeover





# Northern Silica Project

OPERATIONS OVERVIEW





# Silica sand projects advancing towards production



2024 PFS Underway FID Target 2H 2026



Metallica Metals Limited takeover completed 18 September 2024 with DRX gaining 100% relevant interest in MLM



NSP environmental studies progress

Lodgement of EIS for adequacy review & Final EIS submission 3Q CY25



Mitsui & Co. offtake MOU Dec 24

Flat Glass Group offtake MOU July 23



DRX awarded Major Project Status by Federal Government, facilitating development approvals



NSP Si2 MRE Upgrade to187.5Mt Measured, up 278%

Global silica sand resource exceeds 500Mt



PFS fully funded with DFS planning advanced and post FID financing discussions commenced

EPBC Act approval & Mining Leases 1H 2026

3-5 Mtpa supporting > 25 year LOM



## Northern Silica Project

Positive Scoping Study strengthens development Plans - Pre-Feasibility Study now underway

#### **TARGET**

Production of 121Mt of high purity silica sand over 25 years

Target production

3Mtpa rising to 5Mtpa

A\$356m

CAPEX (Stage 1)

Capital development costs include a 15% contingency (A\$46.4m)

Annual average sales revenue

A\$391m

Silica price A\$81/t for a low iron, silica sand product suitable for solar PV (FOB – Cape Flattery Port)

Annual operating costs (Av LOM)

**A\$92m** 

Shipping/marketing A\$24.00/t Production A\$27.40/t

NPV (pre-tax)

A\$1.41 billion

IRR (pre-tax)

33%

Average annual operating margin

A\$299.4m

Gross revenue (LOM)

A\$9.8 billion

**NOTE:** Refer to ASX announcement 14 June 2023 – "Positive Scoping Study for Northern Silica Project strengthens development plans". Diatreme confirms it is not aware of any new information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.



# Northern Silica Project

- Production of 3Mtpa; transhipping via barge to oceangoing vessel (OGV) within Port of Cape Flattery using existing berthing "pocket"
- Potential Phase 2: Production of 5Mtpa; direct loading from jetty to OGV docked at wharf subject to PFS optimisation
- New maritime infrastructure (barge ramp, wharf extension) included in proposal; but may not be required if existing underutilised (nameplate 6m tonnes) port facilities can be shared/accessed
- Mining footprint focused on minimising environmental impact; buffers to lakes and progressive rehabilitation of vegetation habitats post-mining
- Mining occurs above the natural groundwater table





# Workforce, Traditional Owners and Community

- Commitments and protections will be captured in Cultural Heritage Management Plans. Our relationships with the Traditional Owners including the Dingaal, Dharrpa, Nguurruumungu, Gulaal and Thanil clans are strong and mature
- Project benefits to Hope Vale and Cooktown communities via Social Impact Management Plan
- Focus on local employment and procurement

#### **Positions**



129 EARLY CONSTRUCTION OF CONTRACTORS / 49 EMPLOYEES



214 PEAK CONSTRUCTION
102 CONTRACTORS / 112 EMPLOYEES



155 MINE
COMMISSIONING
CONTRACTORS / 128 EMPLOYEES



128 NSP OPERATIONS O CONTRACTORS / 128 EMPLOYEES

#### Highlights

#### **JOB DIVERSITY**

Nearly 60 distinct job types

#### WORKFORCE SIZE

214 positions during peak construction, settling to 128 during operations

#### INDIGENOUS EMPLOYMENT

50% indigenous employment target

#### CAREER PATHWAYS

Clear progression routes from entry-level to management positions













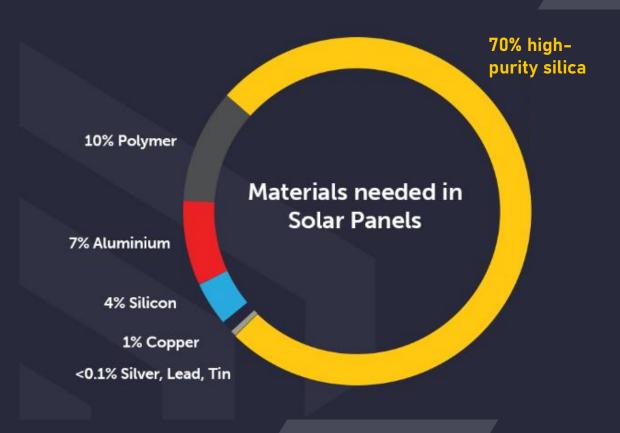


# Why silica

# 70% of a solar panel is comprised of glass made from high purity, low iron silica.

- High-grade low iron silica sand is an essential raw material in production of solar panels, smartphones and other specialty glass uses
- Solar panel manufacturers' feed stock requires >99% purity silica with less than 120ppm iron oxide levels
- Supply diminishing as much of the sand used in Asia comes from areas where environmental concerns are increasingly restricting extraction

High-purity silica is vital for the manufacture of solar panels – crucial to the energy transition



Source: World Bank 2020: "Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition."

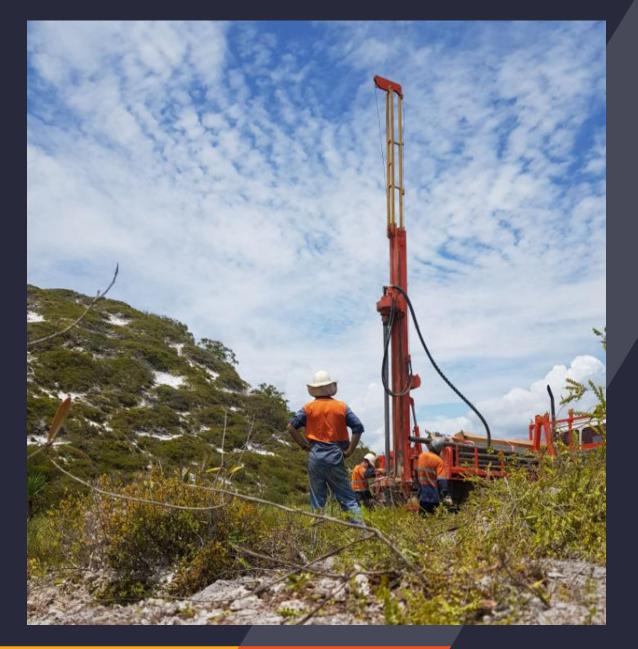


## Silica surge

US\$32B global market by 2028

IMARC predicts global silica sand market will grow from US\$25.4B in 2024 to US\$38.3B in 2033, with CAGR of 4.7%.

- Investment in solar, both utility-scale and rooftop, is expected to reach \$450 billion in 2025, making it the single largest item in the global energy investment inventory" (International Energy Agency (IEA), June 2025)
- IEA projects reaching net zero by 2050 will require annual additions of 630 GW of solar PV and 390 GW of wind by 2030 – four times the record levels set in 2020 – "equivalent to installing the world's current largest solar park roughly every day"





# Chinese supply needs

Demand exceeds production forecasts

# China is facing a bottleneck for the supply of low iron, PV grade silica sand due to strong global demand

- Chinese PV glass production capacity has doubled in past two years
- Steady increase in PV glass production and demand for PV grade silica sand anticipated
- Chinese demand for PV grade silica sand in 2023 was materially larger than Diatreme's estimate
- Annual low iron silica sand consumption seen rising from 23.43Mt in 2023 to 28Mt in 2024 and 31.68Mt in 2025

Source: China Photovoltaic Industry Association Reports & Research

# China PV Glass production & silica sand consumption





#### Sibelco

One of the world's leading providers of industrial minerals

# World class silica processing and technical knowledge, marketing and development expertise

- Leading supplier of silica to the Asian market for specialty glass
- Global leader in supply of cristobalite (refined silica) used in engineered stone, polymers and coatings
- Leaders in high purity quartz used in production of photovoltaics and microprocessors
- World leader in glass recycling
- Invested c A\$49M in DRX and silica sand JV



Sibelco has production facilities around the world with exposure to every major market.



# Mineral Resource Estimate has risen by 513% since 2021

2025 Measured, Indicated & Inferred Mineral Resource

501Mt

Northern Silica Project

272.5Mt

>99.33 (SiO<sub>2</sub>%)

Note: Under the JORC Code, 2012 Edition an Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to support mine planning and evaluation of the deposit's economic viability. An Inferred Mineral Resource has a lower level of confidence than an Indicated or Measured Mineral Resource.

Note: Total Resource Estimates current as of 23 June 2025 and has not materially changed since – refer attached annexures for full resource tables and competent persons statements.

Cape Silica Project

61.5Mt

>99.33 (SiO<sub>2</sub>%)

Galalar Project

75.46Mt

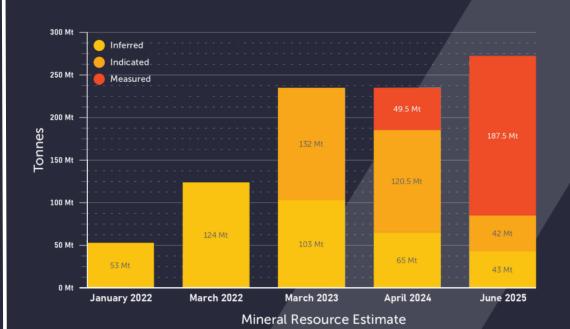
>99.18 (SiO<sub>2</sub>%)

Western Resource Area

91.7Mt

>99.36 (SiO<sub>2</sub>%)

68.7% Measured Si2 = Long LOM > 25 years



Si2 deposit growth



# Experienced leadership

#### Our team has extensive experience in the government, mining and resources sector



#### Wayne Swan Chairman

Mr Swan enjoyed a lengthy career in Australian federal politics, serving as Treasurer of Australia from 2007 to 2013 and Deputy Prime Minister of Australia from 2010 to 2013.

Since retiring from Parliament in 2019, Mr Swan has served as a Director of Stanwell Corporation and Chairman of CBUS.



Kara Keys Non-Exec Director/ Deputy Chair

Ms Keys has a strong board and financial background, with previous roles including serving as a trustee director at Cbus Super, Powerlink and United Super Asset Management. She has worked closely with Indigenous communities.



Neil McIntyre MBE CEO

Highly experienced resources and banking executive with over 30 years of management experience in Australia, Asia and the Pacific. He has held positions as Chairman, Executive Director. Director Finance and Non-Executive Director in various listed and unlisted minerals and petroleum exploration companies.



Michael Chapman Non-Exec Director

Experienced mining engineer with more than 40 years' experience in the development, engineering, construction and management of open-cut and underground mining projects in Australia and overseas.

Recently served as COO of White Energy Co (ASX:WEC).



Cheng (William) Wang Non-Exec Director

Mr Wang has held senior management positions in several major Chinese state-owned companies, including CEO of an international commodities trading arm with group assets exceeding \$1.5 billion. He has held directorships with China Century Capital, Jupiter Mines and Gulf Alumina.



**Brian Flannery** Non-Exec Director

Globally experienced mining business leader and executive, with more than 40 years' global experience as a mining engineer. He has an outstanding track record of successful resources development, with expertise in all aspects of project management.

His family office interests span resources, energy and property development.



Tom Cutbush Non-Exec Director

Globally experienced mining executive with over 30 years' executive management and board experience in Australia and overseas, including in the global silica sands industry. Currently serving as a director of Sibelco Australia, previous roles include CEO of Sibelco Europe and Global Operations Manager.





#### **APPENDICES**

## Mineral Resources Statement

Global Resources: Northern Silica, Galalar Silica, Western Resource Area, Cape Flattery Silica

	Mineral Resource Category	Silica sand (Mt)	SiO <sub>2</sub> %	Fe <sub>2</sub> 0 <sub>3</sub> %	TiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %
	Measured	43.12	99.21	0.09	0.11	0.13
Galalar	Indicated	23.12	99.16	0.09	0.13	0.10
	Inferred	9.22	99.10	0.11	0.16	0.11
	Sub Total	75.46	99.18	0.09	0.12	0.12
	Measured	187.5	99.24	0.10	0.14	0.11
C:a	Indicated	42	99.15	0.12	0.16	0.11
Si2	Inferred	43	99.11	0.11	0.15	0.11
	Sub Total	272.5	99.21	0.11	0.14	0.11
	Indicated	10.3	99.20	0.15	0.24	0.02
WRA	Inferred	81.4	99.38	0.09	0.15	0.10
	Sub Total	91.7	99.36	0.10	0.16	0.09
	Measured	16.1	99.2	0.08	0.12	0.22
CFS East	Indicated	33.2	99.05	0.1	0.18	0.25
CFS East	Inferred	0.2	99.00	0.12	0.27	0.28
	Sub Total	49.5	99.1	0.09	0.16	0.24
CFS West	Inferred	12	99.15	0.09	0.16	0.12
Combined	Total	501.16	99.22	0.10	0.15	0.12

Mineral Resource estimate current as of 13 November 2024



### Mineral Resources Statement

#### Cyclone Zircon Project: Western Australia

Category	HM cut-off	Material Mt	НМ	НМ	Slime	0S			Неа			Zircon	
	%		%	Mt	%	%	Zircon %	Rutile %	Leuco %	HiTi %	Alt Ilm %	Si Ti0x	Kt
Measured	2.0	69	3.7	2.58	3.6	3.8	1.06	0.11	0.24	0.88	0.45	0.82	735
Measured	1.5	102	3.1	3.14	3.9	4.4	0.88	0.09	0.20	0.73	0.38	0.67	896
Measured	1.0	156	2.4	3.81	4.2	5.0	0.69	0.07	0.16	0.58	0.30	0.53	1,079
Indicated	2.0	13	3.2	0.41	3.8	4.4	0.66	0.07	0.18	1.06	0.55	0.60	83
Indicated	1.5	24	2.5	0.60	4.1	5.0	0.52	0.05	0.12	0.84	0.41	0.46	123
Indicated	1.0	48	1.9	0.89	4.4	5.1	0.38	0.04	0.09	0.62	0.30	0.34	183
Total	2.0	82	3.6	2.99	3.6	3.9	1.00	0.10	0.23	0.91	0.47	0.79	818
Total	1.5	126	3.0	3.75	3.9	4.5	0.81	0.08	0.18	0.75	0.38	0.63	1,019
Total	1.0	203	2.3	4.70	4.2	5.0	0.62	0.06	0.14	0.59	0.30	0.49	1,262
					Mineral Ass	semblage	27%	3%	6%	26%	13%	21%	

#### NOTES

- Refer to ASX release 15 June 2016 "Cyclone Study Reaffirms Project Profitability" for more detail.
- Rounding may generate differences in last decimal place.
- A constant SG of 1.7 has been used to derive material tonnes.
- Slime refers to material typically <53um; OS refers to material typically >2mm.
- Mineral Assemblage derived from QEMSCAN® analysis.
- High Titanium Oxides (HiTi) Ti-oxides containing 70 95% TiO<sub>2</sub>, Altered Ilmenite (Alt Ilm) Ti-oxides containing <70% TiO<sub>2</sub>, Siliceous Ti-Oxide (Si TiOx) Ti-oxides containing >10% silica-rich Ti minerals.
- Resources are inclusive of Reserves (refer to ASX announcement 27 April 2017).



### **Ore Reserves Statement**

#### Global Ore Reserves: Galalar Silica, Cape Flattery Silica

	Mineral Resource Category	Silica sand Mt	Waste (Mt)	SiO <sub>2</sub> %	Fe <sub>2</sub> 0 <sub>3</sub> %	TiO <sub>2</sub> %	LOI %	Al <sub>2</sub> O <sub>3</sub> %
Galalar	Probable	32.5	0.04	99.2	0.08	0.11	0.16	0.13
CFS East	Probable	47	4.0	99.11	0.09	0.14	0.24	0.15
Combined	Total	79.5	4.04	99.14	0.09	0.13	0.2	0.14

#### Reserves: Cyclone Zircon Project

Category	HM cut-off	Material Mt		НМ	Slime	0S	Head Grade						Zircon
	%		%	Mt	%	76	Zircon %	Rutile %	Leuco %	HiTi %	Alt Ilm %	Si Ti0x %	Kt
Probable	0.4	138	2.6	3.52	4.6	5.3	0.72	0.07	0.17	0.59	0.32	0.57	990
Total	0.4	138	2.6	3.52	4.6	5.3	0.72	0.07	0.17	0.59	0.32	0.57	990
					Mineral Ass	semblage	28%	3%	7%	23%	13%	27%	

\* Ore Reserve estimate current as of 13 November 2024 # Cut-off parameters include sand colour, Ti/Fe ratio, Fe203 content, and amenability to metallurgical testwork



# Competent person's statement

Statement in accordance with the Australasian code for reporting of exploration results, mineral resources and ore reserves (the JORC code)

#### **Mineral Resources**

The information in this announcement that relates to Mineral Resources at the Si2 deposit is extracted from the Company's ASX announcement "Mineral Resource Estimate paves way for NSP PFS" dated 23/06/2025, and is based on, and fairly represents, information compiled by Mr Frazer Watson (MAIG, MAusIMM) and Mr Chris Ainslie (MAIG). Mr Ainslie is a Principal Geologist at Measured Group Pty Ltd, and Mr Watson is the Technical Services Lead of the Diatreme Resources and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code.

The information in this announcement that relates to Mineral Resources at the CFS East deposit is extracted from the Company's ASX announcement "Cape Flattery Silica DFS Confirms Excellent Economics" dated 17/07/2023 by Metallica Minerals, and is based on, and fairly represents, information compiled by Mr Brice Mutton (MAusIMM).

The information in this announcement that relates to Mineral Resources at the Galalar deposit is extracted from the Company's ASX announcement "Galalar Silica Resource Expands by 22% to 75.5Mt" dated 20/09/2021 and is based on, and fairly represents, information compiled by Mr Brice Mutton (MAusIMM).

The information in this announcement that relates to Mineral Resources at the CFS West deposit is extracted from the Company's ASX announcement "Maiden Inferred Mineral Resource of 12Mt at 99.15% SiO2, 0.09% Fe2O3, Estimated for Cape Flattery Silica West" dated 03/03/2023 and is based on, and fairly represents, information compiled by Mr Brice Mutton (MAusIMM). Mr Mutton is a geological consultant at AusRocks and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code.

The information in this announcement that relates to Mineral Resources at the Western Resource Area deposit is extracted from the Company's ASX announcement "New maiden 91.7Mt silica resource at Western Resource Area" dated 06/12/2023 and is based on, and fairly represents, information compiled by Mr Carl Morandy (MAusIMM). Mr Morandy is a mining engineer consultant at AusRocks and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code.

The information in this announcement that relates to Mineral Resources at the Cyclone deposit is extracted from the Company's ASX announcement "Quarterly Activities Report" dated 27/04/2017, and is based on, and fairly represents, information compiled by Mr Ian Reudavey (MAIG). Mr Reudavey was a Chief Geologist of Diatreme Resources and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements relating to Mineral Resources, and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



# Competent person's statement

Statement in accordance with the Australasian code for reporting of exploration results, mineral resources and ore reserves (the JORC code)

#### **Ore Reserves**

The information in this announcement that relates to Ore Reserves at the Galalar deposit is extracted from the Company's ASX announcement "Galalar Maiden Ore Reserve, PFS delivers substantial boost to new Silica mine dated 09/11/2021 and is based on, and fairly represents, information compiled by Mr Carl Morandy (MAusIMM).

The information in this announcement that relates to Ore Reserves at the CFS East deposit is extracted from the Company's ASX announcement "Cape Flattery Silica DFS Confirms Excellent Economics" dated 17/07/2023 and is based on, and fairly represents, information compiled by Carl Morandy (MAusIMM).

Mr Morandy is a consultant at AusRocks and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code.

The information in this announcement that relates to Ore Reserves at the Cyclone deposit is extracted from the Company's ASX announcement "Cyclone Study Reaffirms Project Profitability" dated 15/06/2016 and is based on, and fairly represents, information compiled by Mr Phil McMurtrie (MAusIMM). Mr McMurtrie is a mining engineer and a consultant to Diatreme Resources and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements relating to Ore Reserves, and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

