



ASX: MRC

30 July 2020

## AGM PRESENTATION

Mineral Commodities Ltd provides the attached Presentation to be presented to shareholders attending the Annual General Meeting (AGM) today, set to commence at 3.00pm Perth WST.

- ENDS -

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**Authorised by** the Executive Chairman and Company Secretary, Mineral Commodities Ltd.

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### About Mineral Commodities Ltd

Mineral Commodities Ltd (ASX: MRC) is a global mining and development company with a primary focus on the development of high-grade mineral deposits within the industrial and battery minerals sectors.

The Company is a leading producer of zircon, rutile, garnet and ilmenite concentrates through its Tormin Mineral Sands Operation, located on the Western Cape of South Africa. In October 2019, the Company completed the acquisition of Skaland Graphite AS, the owner of the world's highest-grade operating flake graphite mine and one of the only producers in Europe. The planned development of the Munglinup Graphite Project, located in Western Australia, builds on the Skaland acquisition and is a further step toward an integrated, downstream value-adding strategy which aims to capitalise on the fast-growing demand for sustainably manufactured lithium-ion batteries.



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Nothing in these materials shall under any circumstances create an implication that there has been no change in the affairs of MRC since the date of this presentation.

The information, if any, in this presentation which relates to Exploration Results, Mineral Resources or Ore Reserves for Tormin is based on information compiled by Mr Bahman Rashidi, who is a member of the Australian Institute of Mining and Metallurgy (“AusIMM”) and the Australian Institute of Geoscientists (“AIG”). Mr Rashidi is Exploration Manager and a full-time employee of the Company and has over 22 years of exploration and mining experience in a variety of mineral deposits and styles. Mr Rashidi has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (“JORC Code (2012)”). The information from Mr Bahman Rashidi was prepared under the JORC Code (2012). Mr Rashidi consents to inclusion in the presentation of the matters based on this information in the form and context in which it appears.

The information, if any, in this presentation which relates to Mineral Resources for Munghlinup is based on information compiled by Mr Chris De Vitry who is a member of the AusIMM and an independent consultant to the Company. Mr De Vitry is the Director and Principal Geologist of Manna Hill GeoConsulting Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined by the JORC Code (2012). The information from Mr De Vitry was prepared under the JORC Code (2012). Mr De Vitry consents to inclusion in the presentation of the matters based on this information in the form and context in which it appears.

The information, if any, in this presentation which relates to the Ore Reserve for Munghlinup is based on information compiled by Mr Daniel Hastings, who is a Member of the AusIMM. Mr Hastings is an employee of Hastings Bell Pty Ltd and a consultant to the Company. Mr Hastings has sufficient experience relevant to the type of deposit under consideration to qualify as a Competent

Person as defined by the JORC Code (2012). Mr Hastings consents to inclusion in the presentation of the matters based on this information in the form and context in which it appears.

The information, if any, in this presentation which relates to Exploration Results, Mineral Resources or Ore Reserves for Xolobeni is based on information compiled by Mr Allen Maynard, who is a member of the AIG, a corporate member of the AusIMM and independent consultant to the Company. Mr Maynard is the Director and Principal Geologist of Al Maynard & Associates Pty Ltd and has over 38 years of exploration and mining experience in a variety of mineral deposit styles. Mr Maynard has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves (“JORC Code (2004)”). This information was prepared and first disclosed under the JORC Code (2004). It has not been updated to comply with the JORC Code (2012) on the basis that the information has not materially changed since it was last reported. Mr Maynard consents to inclusion in the presentation of the matters based on this information in the form and context in which it appears.

The information if any in this presentation which relates to Skaland Mineral Resources is based on information compiled by Mr Ché Osmond, who is a Chartered Geologist (CGeol) of Geological Society of London and Fellow of the Geological Society (FGS) a Recognised Professional Organisation (RPO). Mr Osmond is Technical Director of Wardell Armstrong International, and an independent consultant to the Company. Mr Osmond has sufficient experience that is 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 by the JORC Code (2012). Mr Osmond consents to inclusion in the presentation of the matters based on this information in the form and context in which it appears.







# MINERAL COMMODITIES

## GLOBAL OVERVIEW

### Skaland

Flake Graphite  
Production – 10ktpa Flake Graphite Concentrate  
Skaland MRE: 1.78Mt @ 22% TGC

### Tormin

Mineral Sands  
Production - 2.6Mtpa Processing facility producing: garnet, ilmenite, zircon and rutile concentrates

### Xolobeni

Mineral Sands Development - JORC Compliant Resource  
346Mt @ 5% THM

Perth  
Corporate Headquarters

*“With the acquisition of Skaland, MRC now operates two production centres, Tormin and Skaland, while advancing development at Munglinup and progressing ongoing downstream graphite studies from Perth”*

### Munglinup

Graphite Development  
Ore Reserve (Probable) of 4.24Mt at 12.8% TGC supporting mine life of 14 years with anticipated production of ~52ktpa of >95% purity graphite concentrate. Mineralisation open in all directions

# GROUP SAFETY PERFORMANCE

2018

0

2019

0

Three month rolling Total  
Recordable Injury Frequency  
Rate at year end

1.9 million working hours since  
last Lost Time Injury incident  
across both operations





# TORMIN

South Africa, one of the highest grade mineral sands operations in the world





# ZAR8.25 million

Spent on Historically Disadvantaged South Africans Social Labour Plan, including bursaries, scholarships, traineeships, apprenticeships, adult basic education programs.

Nuwerus High School Hostels will accommodate 60 more learners from neighboring settlements. The total value committed to this project was ZAR2.1 million.

224 high school learners participating in the Company-sponsored Maths & Science Spring School during October and November.

BEE preferential procurement expenditure in 2019 was ZAR254 million, exceeding all targets set under the South African Mining Charter.





# TORMIN PERFORMANCE



2.7MTPA  
PROCESSING  
FACILITY



HIGH GRADE  
PLACER BEACH  
DEPOSIT



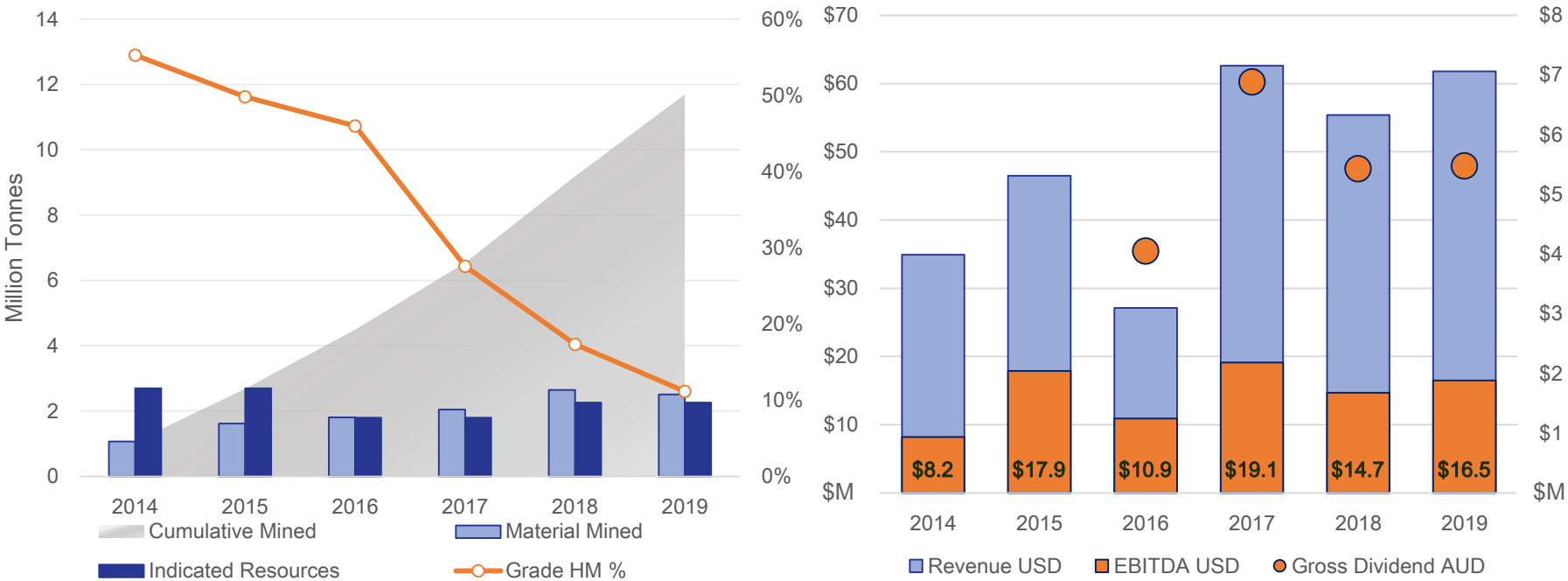
INFERRED RESOURCE  
2.4MT @8.68% THM<sup>1</sup>



TOTAL EBITDA  
US\$87.3M<sup>2</sup>  
NPAT US\$ 49.3M<sup>2</sup>



DISTRIBUTED  
AU\$21,839,358



# FINANCIAL PERFORMANCE

Full Year Highlights

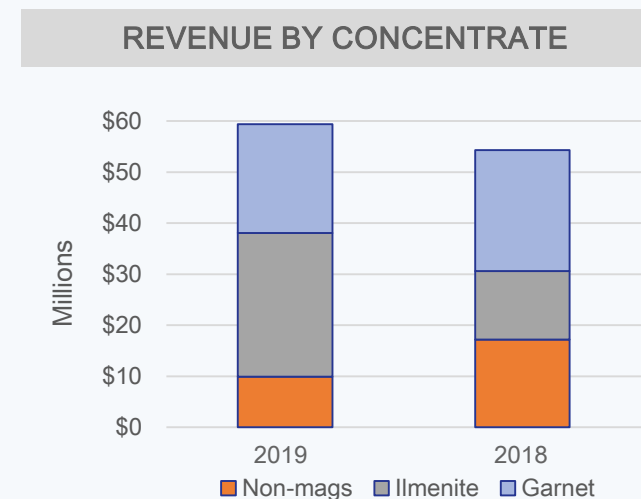
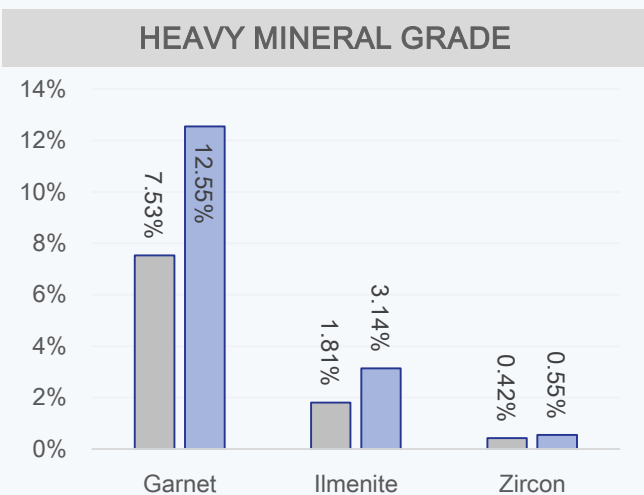
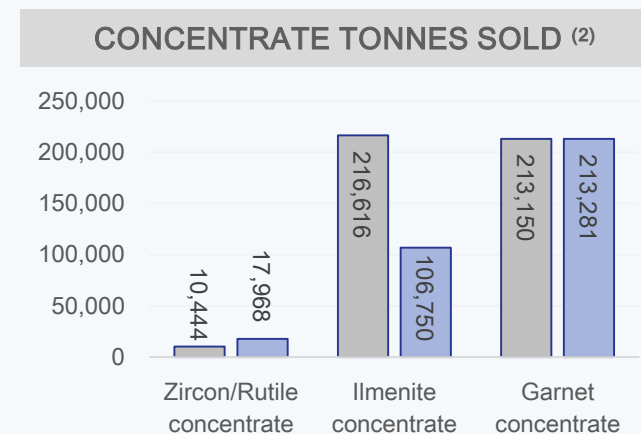
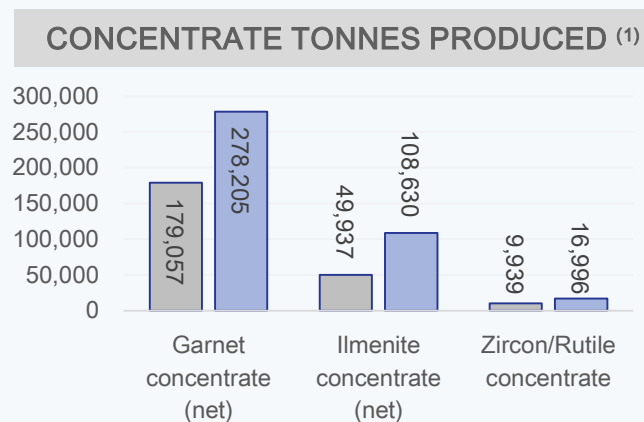
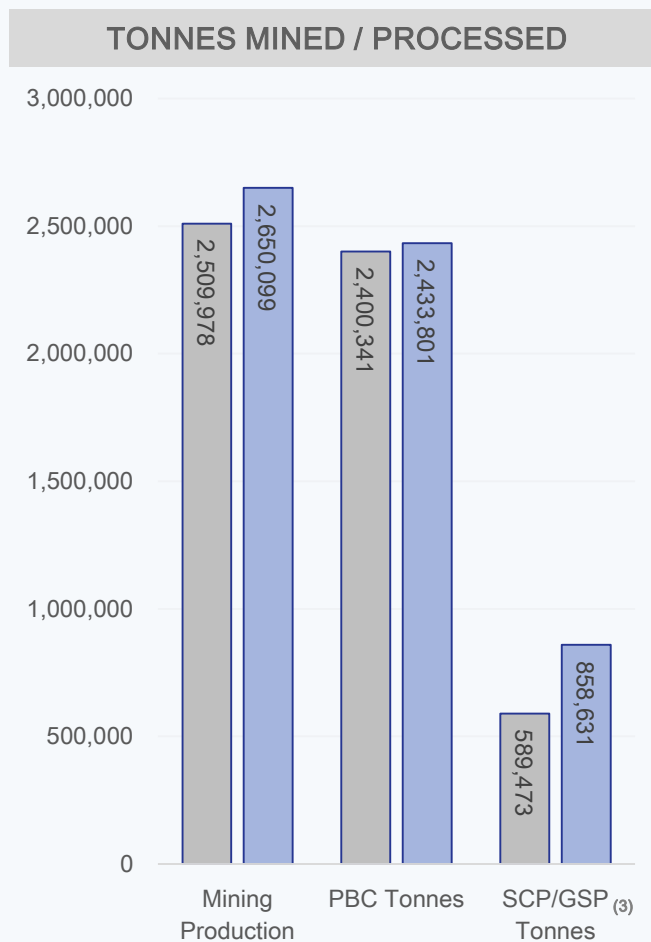
	31-Dec-19 US\$	31-Dec-18 Variance %
Revenue	61,783,570	12% ▲
EBITDA	16,483,385	12% ▲
Profit before income tax	11,867,343	14% ▲
Profit after income tax	7,828,231	-11% ▼
Diluted earnings per share	1.85	-11% ▼
Dividends paid (AUD)	5,474,790	-
Operating Cashflow	13,269,945	-8% ▼
Cash	8,092,614	-35% ▼
Net Assets	45,988,549	9% ▲





# TORMIN - PRODUCTION & SALES

Production and Sales Performance FY2019

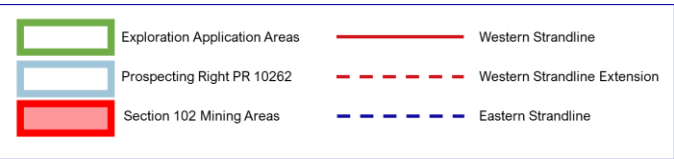
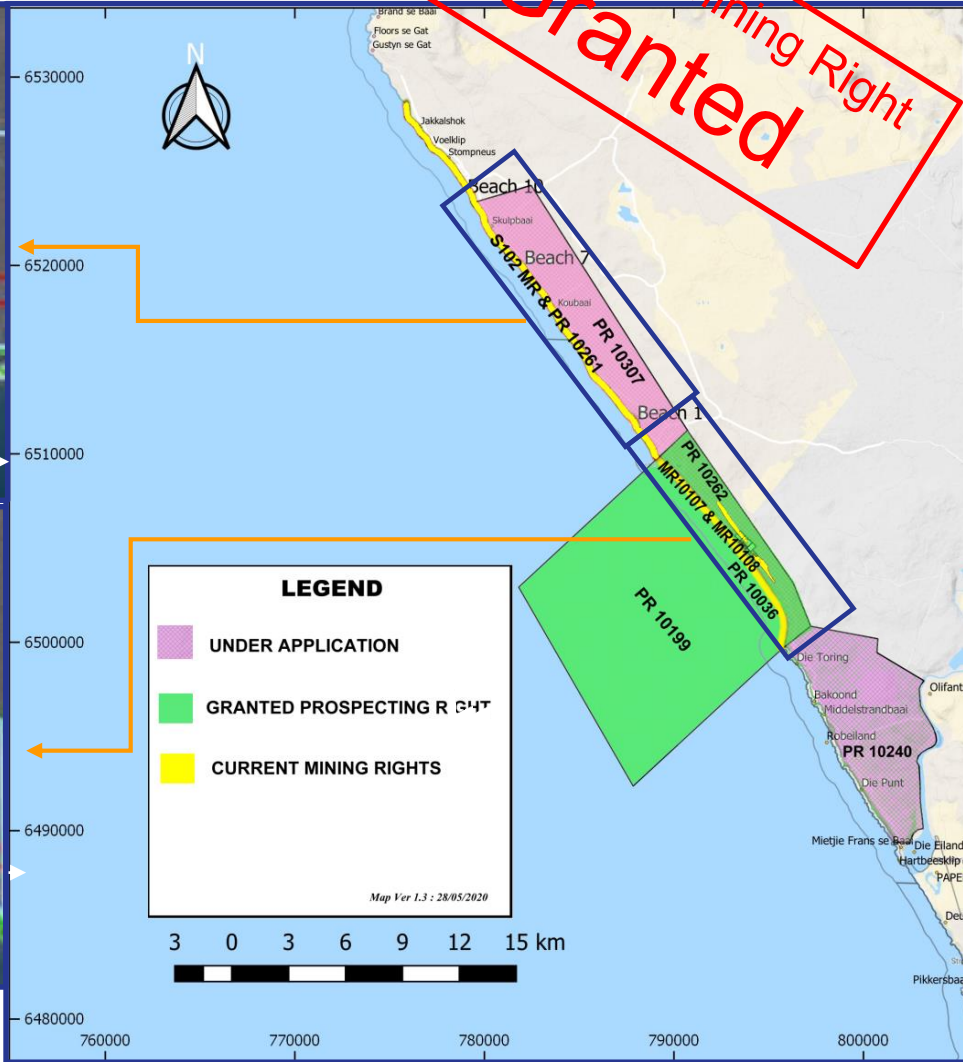
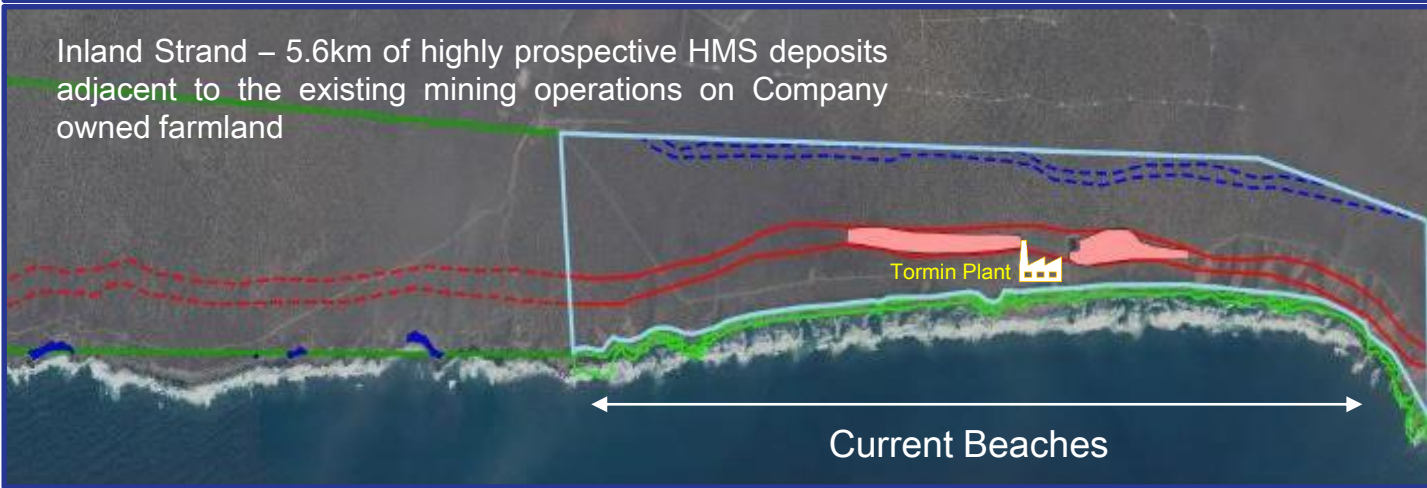
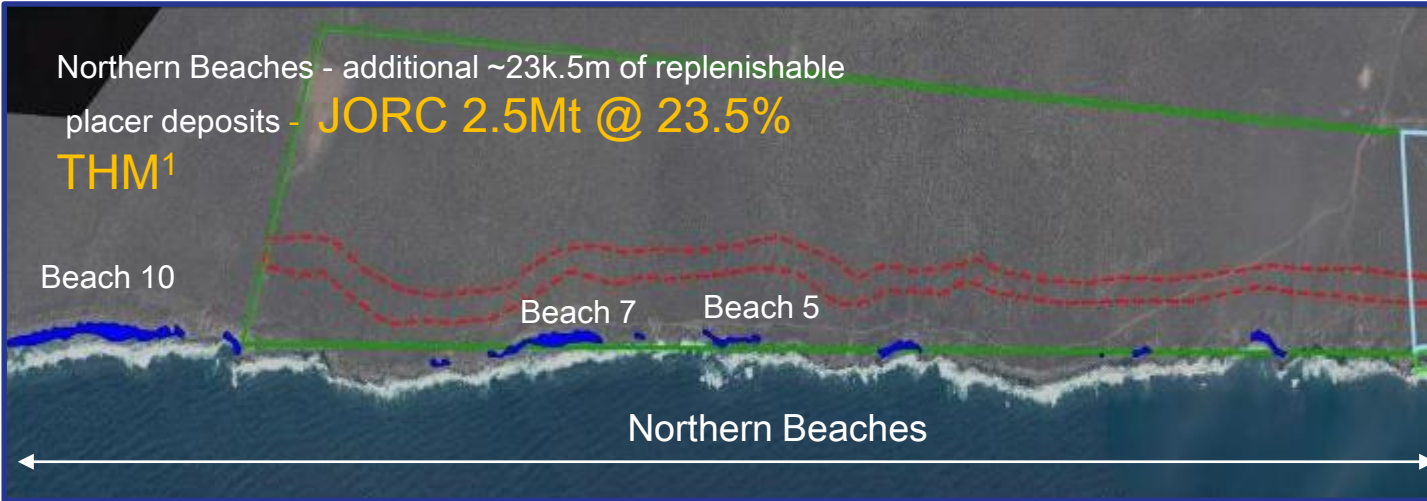


- (1) Dry Metric Tonnes  
 (2) Wet Metric Tonnes  
 (3) Includes 151,031 of garnet re-feed

FY 2019     FY 2018

# TORMIN KEY EXPANSION PERMITTING

Section 102 - Northern Beaches Extension & Inland Strand



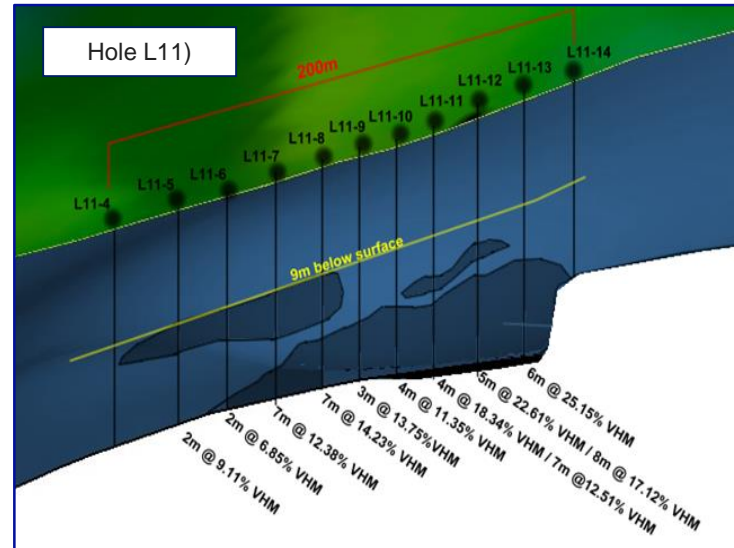


# TORMIN INLAND STRAND

High-grade Inland Strand at Tormin **JORC Resource COMING AUGUST 2020** <sup>1&2</sup>

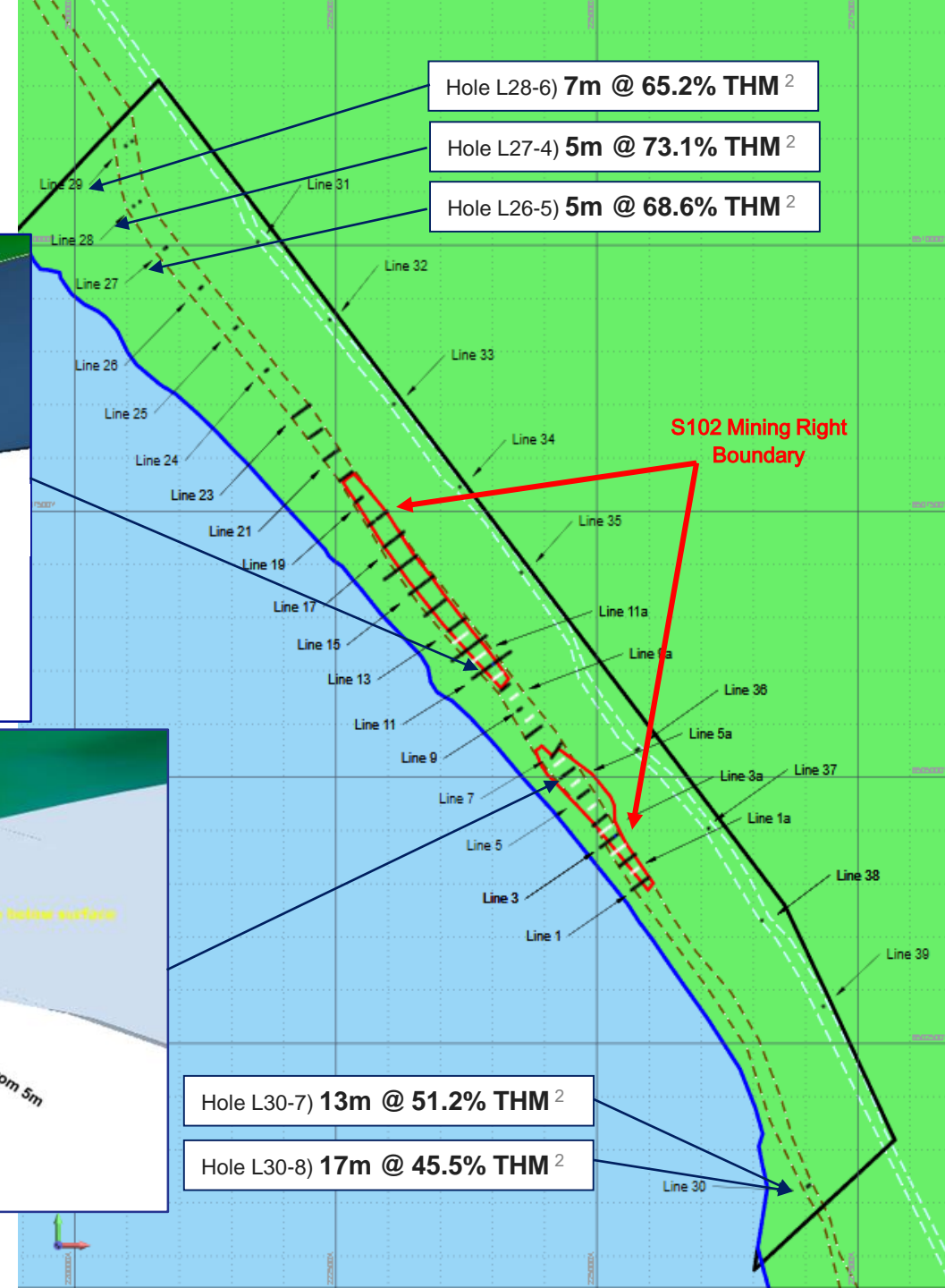
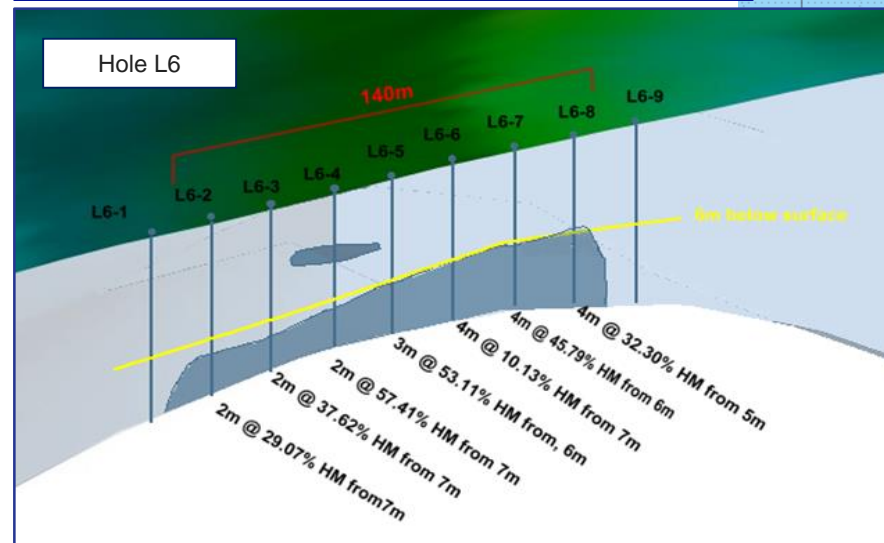
Notable drillholes from the resource definition drilling located only 200 metres north of the current Tormin Processing Plant (all from surface) include: <sup>1</sup>

- Hole L11-11 4m @ 61.3% THM and 7m @ 49.9% THM from 10m
- Hole L11-12 5m @ 62.5% THM and 8m @ 48.5% THM from 11m
- Hole L11-13 6m @ 58.8% THM from 12m
- Hole L11-8 7m @ 43.29% THM from 9m

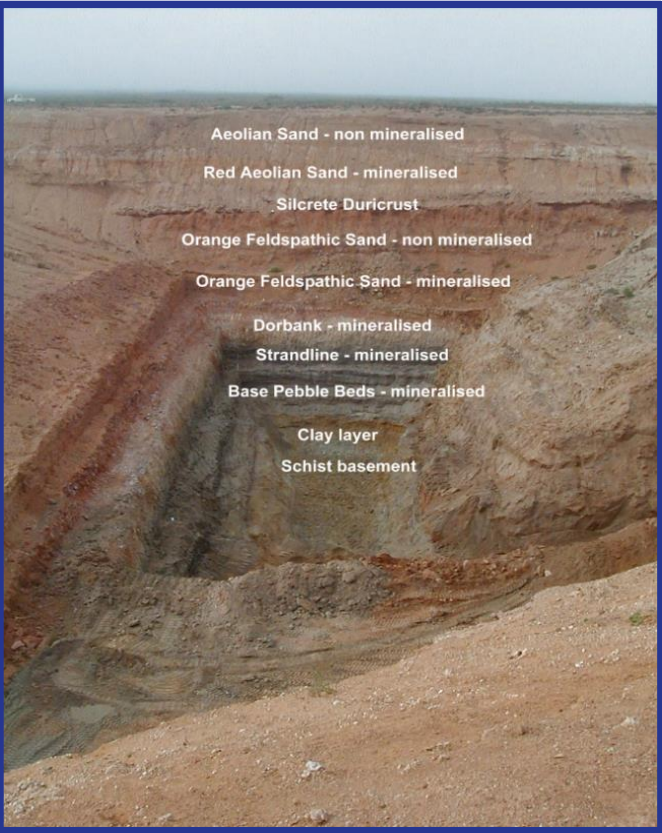


600 metres south of the current Tormin Processing Plant (all from surface) include: <sup>1</sup>

- Hole L6-4 2m @ 57.41% THM from 7m
- Hole L6-5 3m @ 53.11% THM from 6m



# OLD OLIFANTS RIVER HMS STRANDLINE





# INVESTING IN EXPANSION

Permitting underpins phased expansion at Tormin

## Phase 1 – H2 2020

- Targeting Mining and Processing of Northern Beaches/Inland Strand deposits from Q3 2020
- Targeting JORC compliant resource
  - Inland Strand - August

## Phase 2 – H1 2021

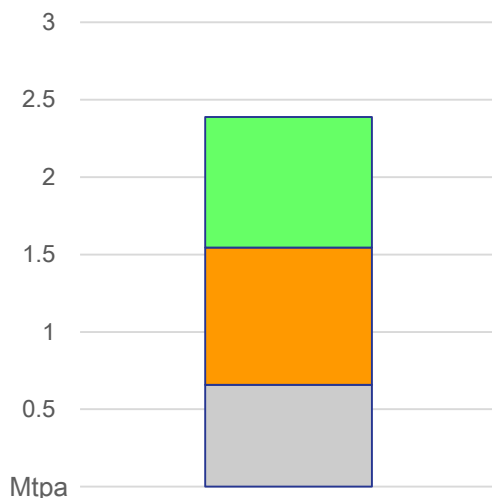
- Construction of new Primary Concentration Plant
- Front End Feed System, Crushing Circuit, Thickener

## Phase 3 – H1 2024

- Mineral Separation Plant

## Section 102 Expansion – Northern Beaches & Inland Strand Mining Areas

2020F



Mining Area	Production Mtpa	JORC Resource	THM
Tormin Beach	.660	Yes	8.7%
Northern Beaches	.890	Yes	23.5%
Inland Strand	.840	Yes	?

Section 102 approved processing expansion developments include:

- Connection to grid power via nearby Eskom renewable wind farm
- Relocation of existing Primary Beach Concentrator unit to the Northern Beaches Mining areas
- Construction of a new Primary Concentration unit with front end feed system and crushing circuit to provide capacity of 4Mtpa<sup>1</sup>
- Construction of a Magnetic Separation Plant to make finished ilmenite, garnet and rutile products to provide capacity of 350ktpa<sup>1</sup>

## Capital Costs

Modest CapEx estimate based on existing infrastructure:

- Redevelopment of existing road access (Northern Beaches)
- Relocation/construction of Beach Concentrator
- Construction of new Primary Concentration Plant

## Operating Costs

Ability to reduce OpEx by reducing power and shipping cost:

- Replace diesel power generation with Eskom Power grid connection
- Road transport via truck to port changed with rail solution to Saldanha Port



# SKALAND

Unlocking MRC's Emerging Graphite Strategy



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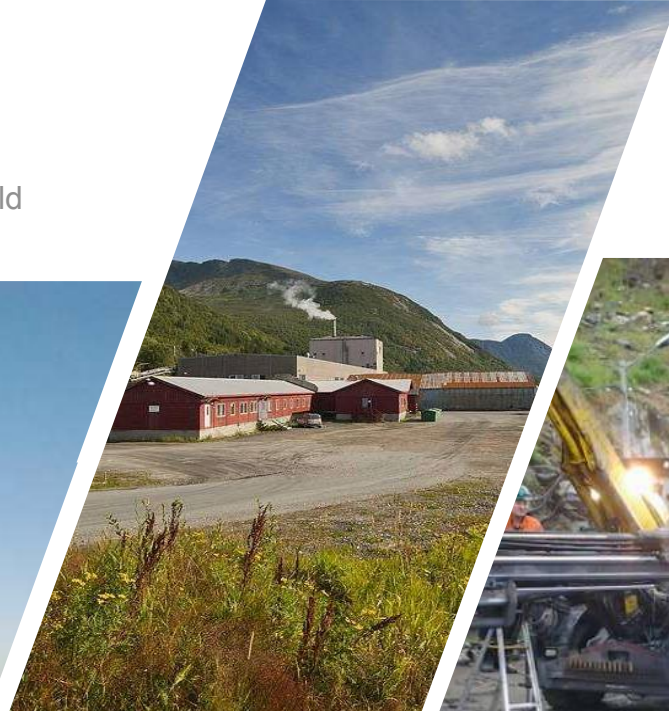
# SKALAND GRAPHITE

Largest flake graphite producer in Europe and the highest grade flake graphite mine in the world

Presently the world's highest grade operating flake graphite mine with mill feed grade averaging around 28%C

Skaland is the largest flake graphite producer in Europe and fourth largest producer globally outside China

- Current production ~**10Ktpa** of graphite concentrate accounts for ~2% of global annual natural flake graphite production
- Ore grades of 25%-33%C delivered to the plant
- Fully permitted operation allows for expansion to **16Ktpa** production
- Low-cost hydro power allows for expansion of operations and downstream processing
- Plant currently operates at 60% capacity. An increase to 85% utilisation rate will increase production to 15-16ktpa
- Opportunity to improve current flowsheet to produce high grade, high value product. Initial testwork resulted in upgrading to 96%-99% TGC with additional attritioning and flotation



# SKALAND - PRODUCTION & SALES

Production and Sales Performance FY 2019 – MRC took operational control of Skaland Graphite AS on 1 October 2019

Processing	Dec-19 Quarter		Acquisition to 31- Dec-19	
Ore Processed	10,112		37,088	
Throughput (tph)	6.9		7.8	
Ore Grade (%C)	28.4		26.1	
C Recovery (%)	93.3		91.7	
Concentrate Grade (%)	90.7		91.2	
Concentrate Produced (t)	2,945		9,780	
Product Category (wmt)	Sales	PSD %	Sales	PSD %
Flake/Medium	776	39%	2,467	34%
Fine-Medium/Powder	1,231	61%	4,808	66%
Total	2,007		7,275	
Unit Costs & Revenues				
Unit production cash costs <sup>1</sup>	US\$405.18		\$417.41	
Unit cost of goods sold <sup>2</sup>	US\$356.50		\$476.28	
Unit revenue per tonne <sup>3</sup>	US\$582.48		\$639.13	



1- US\$/dmt of net final concentrate produced  
 2- US\$/wmt of net final concentrate sold  
 3- US\$/wmt of final concentrate sold



# PROCESSING OPPORTUNITY

Concentrate Grade and Flake Size Distribution – the opportunity to add value

## Maiden JORC Resource <sup>1</sup>

Total Mineral Resources for the Trælen Graphite Deposit (10% cut-off grade)

Classification	Tonnes Kt	Total Graphitic Carbon (TGC)	Tonnes Contained Graphite Kt
Indicated	409	26%	106
Inferred	1,376	21%	291
Total <sup>1</sup>	1,785	22%	397

75% of the total contained tonnes reporting at 25% TGC at a 20% cut-off

## Testwork on Skaland Fines Concentrate Sample

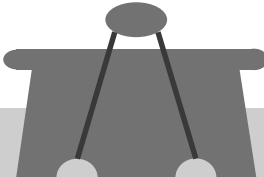
-150 micron Skaland concentrate @ 87% C production sample used


Additional milling and polishing in pilot scale testwork resulted in upgrading to

**97%-98% C**

Very high grade feed suitable for downstream value-adding

Pilot testwork finalised and equipment procurement underway



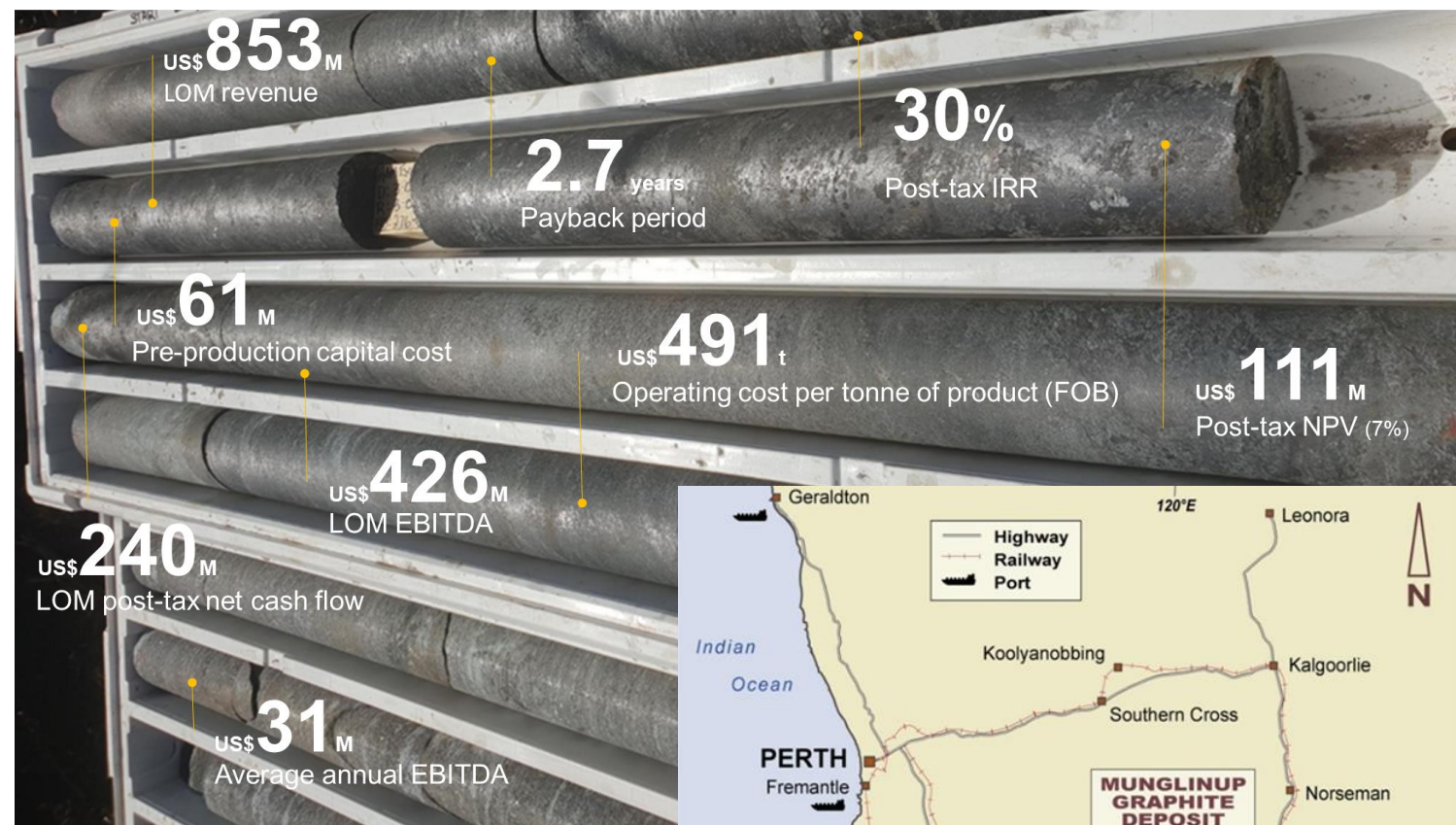
- ☒ Completed Maiden Resource
- ☒ Increased flake size distribution (**43%** Coarse/Medium from 36%)
- ☒ Concentrate Optimisation - **Addition of 4<sup>th</sup> regrind & cleaner stage, and optimisation of existing plant.**  
 Installed Q1 2021

# MUNGLINUP GRAPHITE PROJECT

2020 MUNGLINUP GRAPHITE PROJECT | DEFINITIVE FEASIBILITY STUDY OUTCOMES<sup>(2)</sup>

## High grade mineral resource

- Definitive Feasibility Study (“DFS”) completed in January 2020 outlining a robust and economically justifiable project
- Ore Reserve of 7.9Mt at 12.2% TGC (10% cut-off) with mineralisation open in all directions<sup>(1)</sup>
- Coarse flake (+150µm) distribution accounting for 43% to 48% of the concentrate
- Coarse flake concentrate grades of 95.7% - 97.7% TGC
- Fine flake (-150µm) concentrate grades of up to 98.3% TGC
- 105km west by sealed road from the Port of Esperance
- Mining Lease granted to 2031 on designated Mining Reserve
- Final Permitting expected Q3 2020





# ANODE MATERIAL

Anode (Graphite) Material per battery



Tesla Model S

71kg



Kia Niro EV

45kg



Nissan Leaf S Plus

44kg



BMW i3

30kg



Hyundai Kona Electric SEL

45kg



Chevrolet Bolt EV LT

43kg



Audi e-Tron

67kg



Volkswagen e-Golf

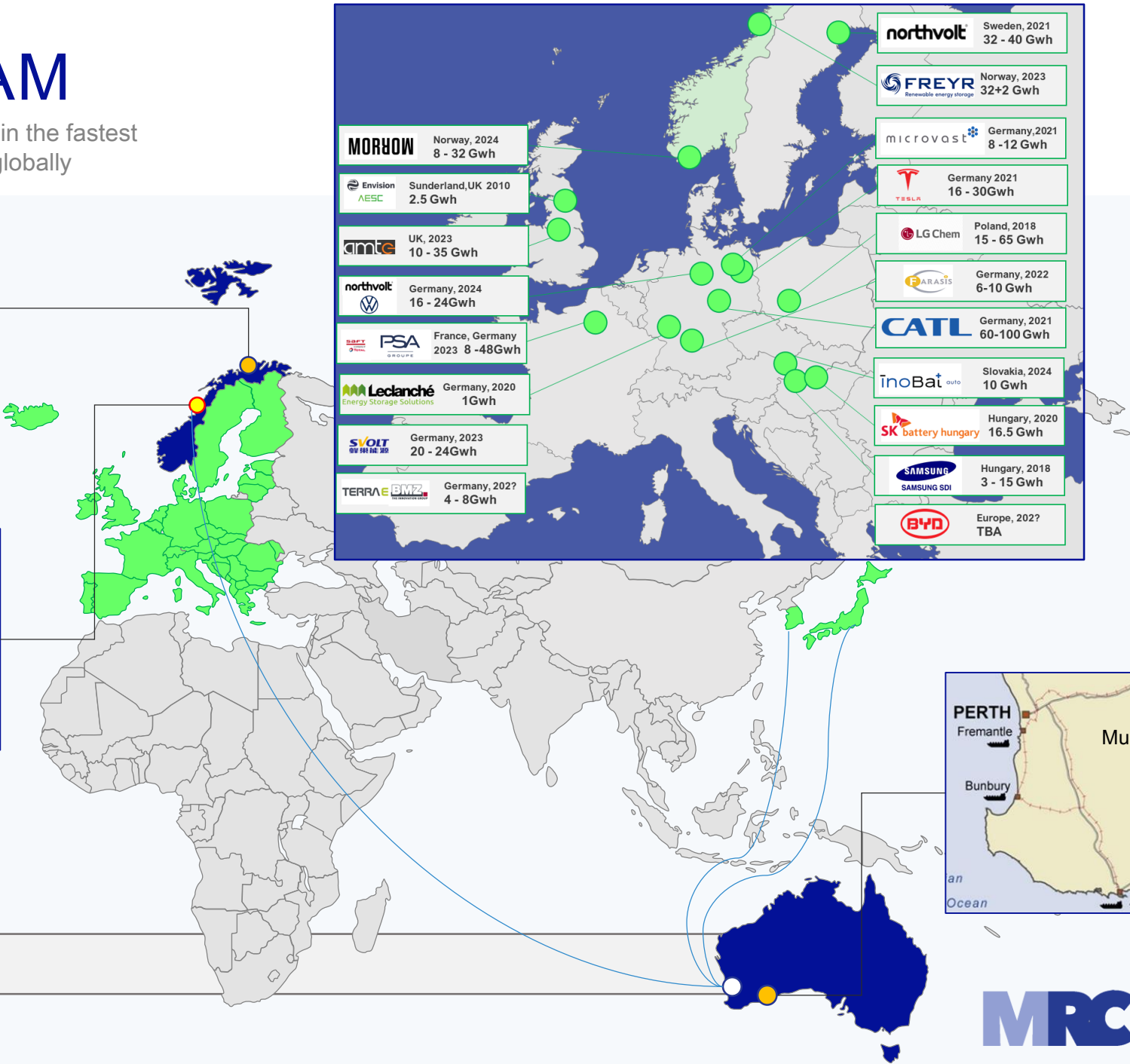
26kg

Credit – Richard Clark, Morgans Advanced Materials

Assumptions: operating voltage at 3.92V. "for optimum range" and 360 mAh/g average capacity. Actually: excess anode active material used (up to 20%); some use of 4 to 8% SiOx

# DOWNSTREAM

Vertically Integrated Anode Production in the fastest growing Battery Manufacturing region globally



**MORROW** Norway, 2024  
8 - 32 Gwh

**Envision AESC** Sunderland, UK 2010  
2.5 Gwh

**amtec** UK, 2023  
10 - 35 Gwh

**northvolt** Germany, 2024  
16 - 24Gwh

**PSA** France, Germany 2023  
8 - 48Gwh

**AAA Leclanché** Germany, 2020  
1Gwh

**SVOLT** Germany, 2023  
20 - 24Gwh

**TERRA E BMZ** Germany, 202?  
4 - 8Gwh

**northvolt** Sweden, 2021  
32 - 40 Gwh

**FREYR** Norway, 2023  
32+2 Gwh

**microvast** Germany, 2021  
8 - 12 Gwh

**TESLA** Germany 2021  
16 - 30Gwh

**LG Chem** Poland, 2018  
15 - 65 Gwh

**SARASTIS** Germany, 2022  
6-10 Gwh

**CATL** Germany, 2021  
60-100 Gwh

**inoBat** Slovakia, 2024  
10 Gwh

**SK battery hungary** Hungary, 2020  
16.5 Gwh

**SAMSUNG SAMSUNG SDI** Hungary, 2018  
3 - 15 Gwh

**BYD** Europe, 202?  
TBA





# KEY OPTIMISATION PHASES

Current flowsheet has capacity for upgrading to produce high purity, high value product. This will be the near-term focus whilst research and development is conducted on further value-adding elements

## UPGRADE CONCENTRATE

Equipment installation to increase grade of fines, to be completed in the next 6 to 8 months

## INCREASE PRODUCTION

Once new equipment is commissioned and quality of products improved, target increased production to ~16ktpa

## MICRONISATION/SPHERONISATION (SPG)

Evaluate options for micronising and spheronising the high grade (~98%-99%) concentrate into unpurified spherical graphite onsite – leveraging existing infrastructure, management and low-cost renewable energy. Potential fast-tracked approach to producing Battery Anode Material (“BAM”)

## VALUE ADD TO EXISTING CONCENTRATE

1

2

3

4

6

5

## QUALIFICATION

Evaluate electrochemical qualities of BAM produced from micronised, spheronised and coated purified fines concentrate. Production samples for customer evaluation and qualification

## COATING (CSPG)

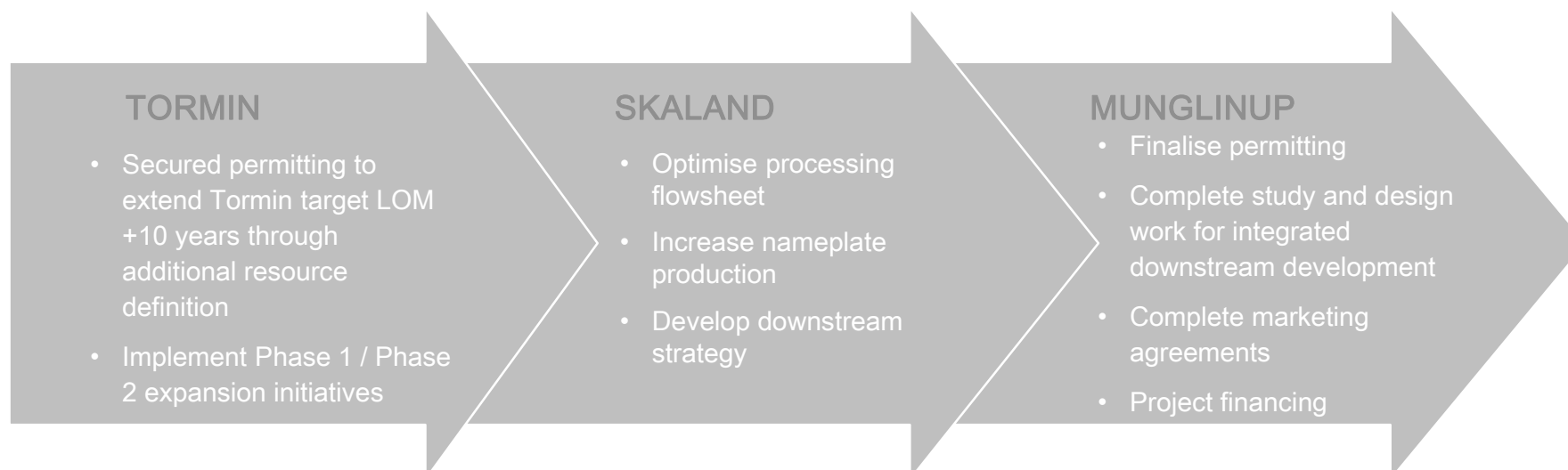
Coating with a thin layer of carbon pitch that enhances the electrochemical performance of the SPG by decreasing the surface area

## PURIFICATION (PG)

Purification of high grade fines using non-HF chemical or carbo-chlorination approach being developed within CRC-P to produce battery anode feed

# FOCUS FOR FUTURE SUCCESS

Significant positive catalysts ahead



- Implement business strategy to create multi-commodity/jurisdiction-based diversified mining company, mining high grade deposits, including vertically integrated downstream processing
- Continuation of shareholder growth and return to dividends through stringent capital management and project delivery



# QUESTIONS

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