



GREEN MINERALS

Enabling the green shift

JUNE 2021

Forward-looking statements

Green Minerals

- All statements contained in this presentation that are not statements of historical facts, including statements on projected operating results, financial position, business strategy and other plans and objectives for future results, constitute forward-looking statements and are prediction of, or indicate, future events and future trends which do not relate to historical matters. No person should rely on these forward-looking statements because they involve known and unknown risks, uncertainties and other factors which are, in many cases, beyond the company's control and may cause its actual results, performance or achievements to differ materially from anticipated future results, performance or achievements expressed or implied by the forward-looking statements and from past results, performance or achievements. These forward-looking statements are made as of the date of this presentation and are not intended to give any assurance as to future results. None of the company, its employees and representatives assumes any obligation to update these statements.

Our mission



GREEN MINERALS

Enabling the green shift

***Deliver minerals for the Green Shift
in a responsible and sustainable manner***

Creating an industry bellwether

1

One out of two listed pure-play marine minerals companies globally

- First capital raise in November 2020
- Listing on Euronext Growth Oslo on 23 March 2021
 - 5000 shareholders
 - Market cap estimated around NOK 350,000,000
 - First mover: only DSM globally with a Stock Exchange listing as of March 2021
- Parent company to remain a large shareholder
 - Significant initial-phase synergies in exploration campaign, geophysics, finance and administration

2

Flexible and asset-light partnering strategy

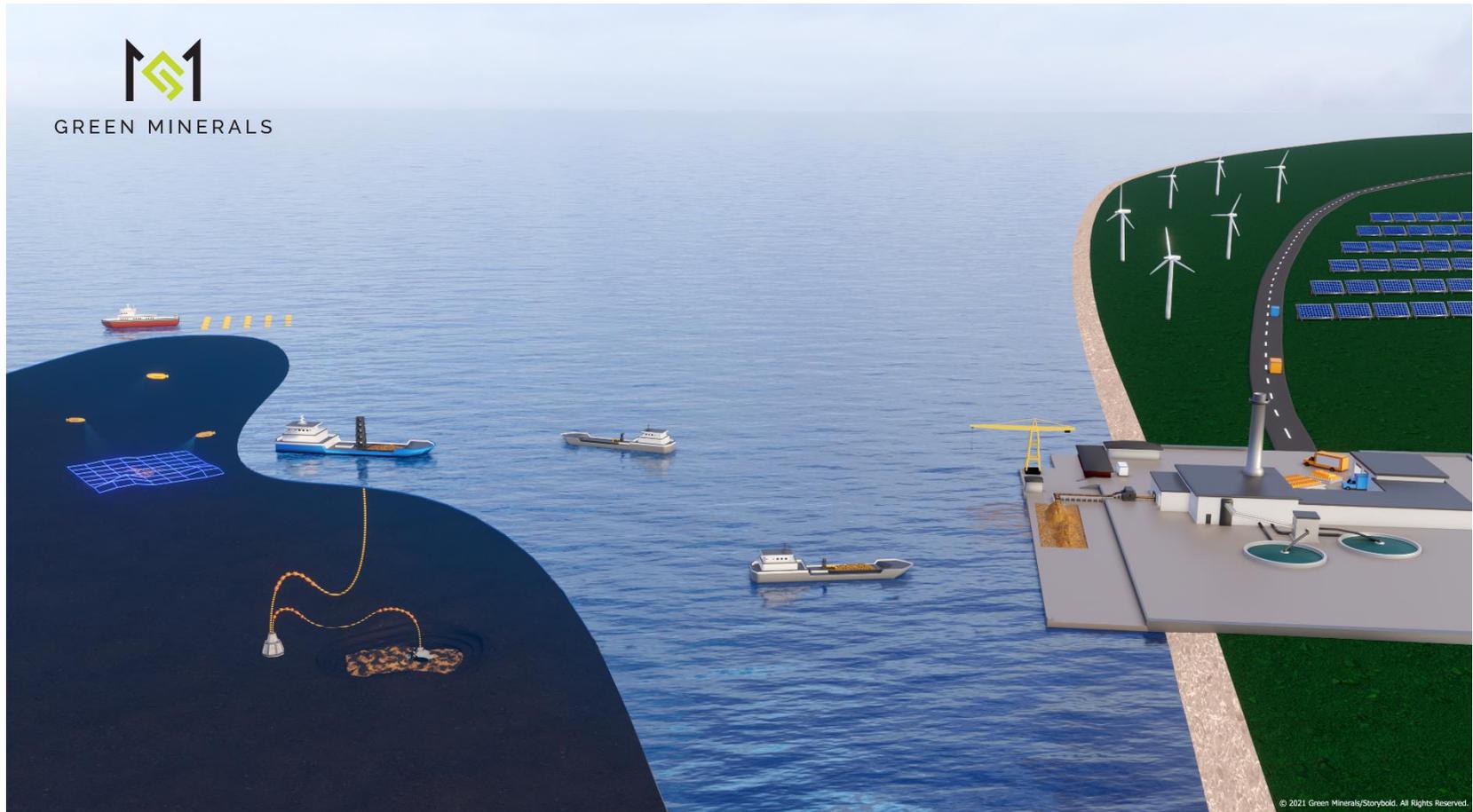
- Asset-light partnering approach creating superior shareholder return
 - The Green Minerals approach: moving CAPEX to OPEX
- Hiring top talent with marine minerals specialization to innovate with partners on existing technologies – leveraging our organization
 - Study e.g: Engineer leverage ratio 10:1

3

Well-defined roadmap and string of newsflow

- Near term updates:
 - Partner/cooperation agreements; LOI with Oil States Industries (UK) Ltd signed on March 23rd
 - Additional key hires, targeting 4 PhD`s giving impetus to our industry leading position
 - Cooperation with academia; agreement involving the Project ULTRA signed on April 14th
 - Funding programs; 1st grant from the Norwegian Govt`s Forskningsrådet signed on April 13th

Our vision: Creating the marine minerals value chain



Massive global demand for new metals sources

Commentary

- Massive need for new source of metals as the world electrifies and digital technology becomes available to more consumers
- Demand of base metals for production of EV batteries could increase 11x by 2050 (World Bank)
- \$240bn CAPEX investment needed for the next 5 years only in base metals and gold (Wood Mackenzie)
- Will take decades to build the primary stock of metals that will make recycling of EV metals possible and being able to fulfil all the demand

>\$1trn in key metals capex needed by 2035

Cumulative capex: current commitments and AET-2 scenario requirements, USDbn



Source: Wood Mackenzie

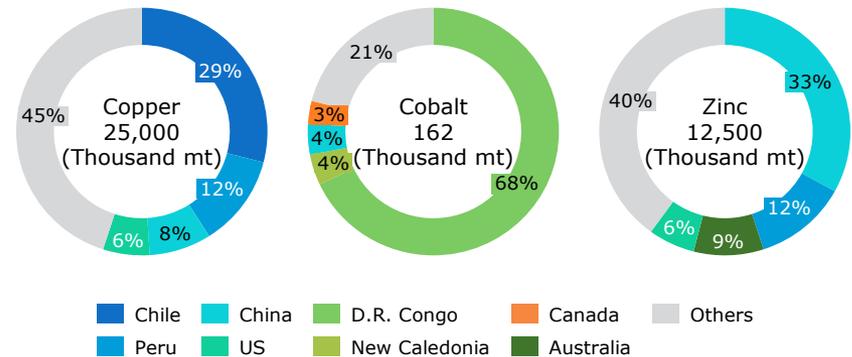
USD 1.7 trillion in capex needed to meet expected 2035 demand

However, supply is limited

Commentary

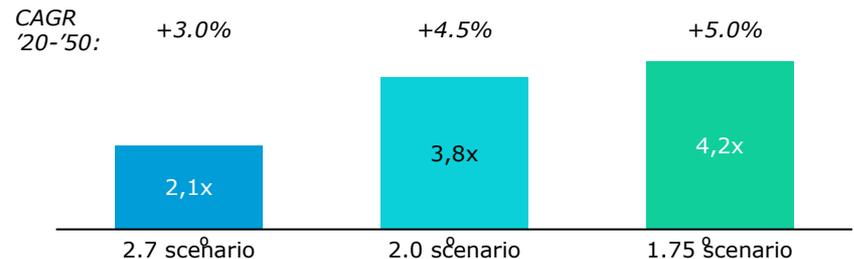
- Several environmental and social challenges with traditional metal production
 - 70 % of the world's cobalt is mined in the D.R. of Congo, significant amounts from unregulated artisanal mines and child labor
 - Metal production generates 350bn tons of waste and accounts for 11% of global energy use
 - Land ore grade declines, becomes less accessible and contains toxic levels of heavy elements
- Producing metals for the green transition this way is not sustainable as it simply shifts the burden from fossil fuels to metals
- In May 2018, the US Department of the Interior published list of 35 minerals considered critical to the US economy and national security, where supply might become limited in near future
- The Blue Mining initiative by the EU sees risk of increasing supply shortage of metals critical to EU's high tech sector and is thus supporting search for alternative resources

Global Production selected minerals (2018)



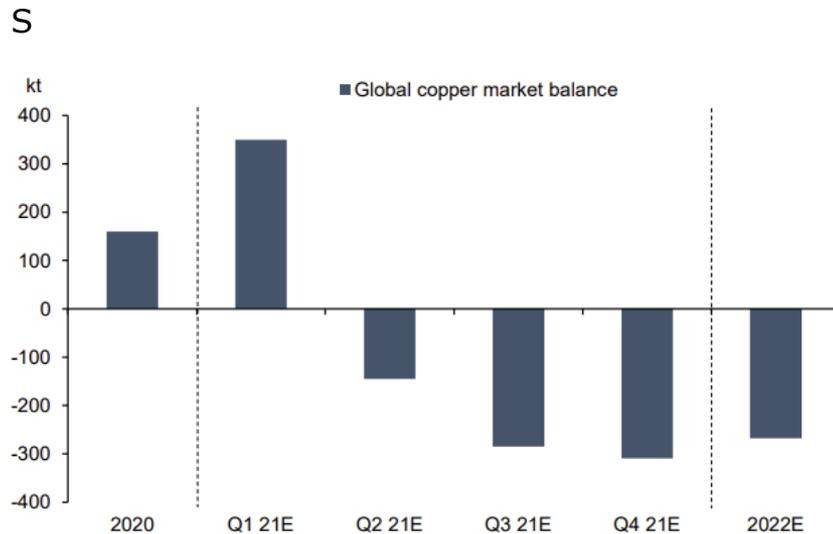
2050 metals demand index

Indicative 2020 to 2050 metals demand growth by climate change scenarios

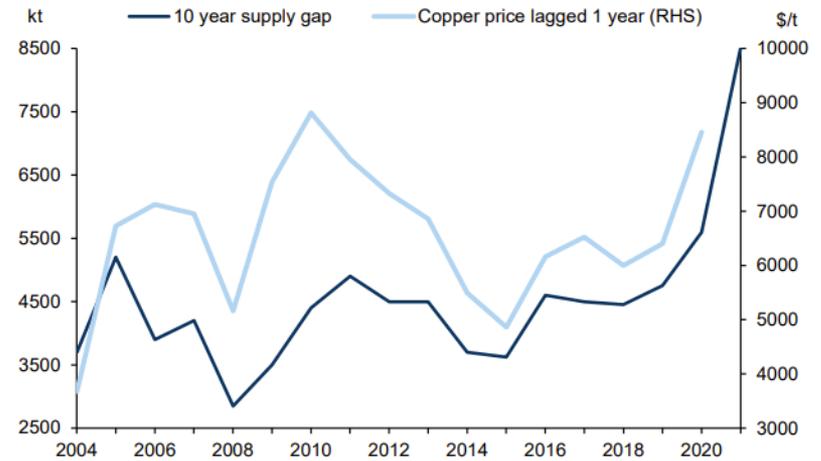


EMERGING COPPER SUPPLY GAP

Global copper market balance



Copper supply gap vs price



Source: Goldman Sachs Investment Research

Traditional mining vs deep sea mining

		Onshore mining	Deep sea mining	Change
Impact of minerals to 1bn electric cars	CO ₂ equivalent emissions (Gt.)	1.5	0.4	-70%
	Ore use (Gt.)	25	6	-75%
	Deforestation (Sqm)	66,000	5,200	-92%
	Solid waste (Gt.)	64	0	-100%
	Freshwater ecotoxicity (1.4 DCB equivalent Gt)	21	0.1	-99%
	Megafauna wildlife at risk (trillion organisms)	47	3	-93%
]		

Source: Paulikas et al. 2020

NCS – the most attractive area in the world to kickstart the industry from

Commentary

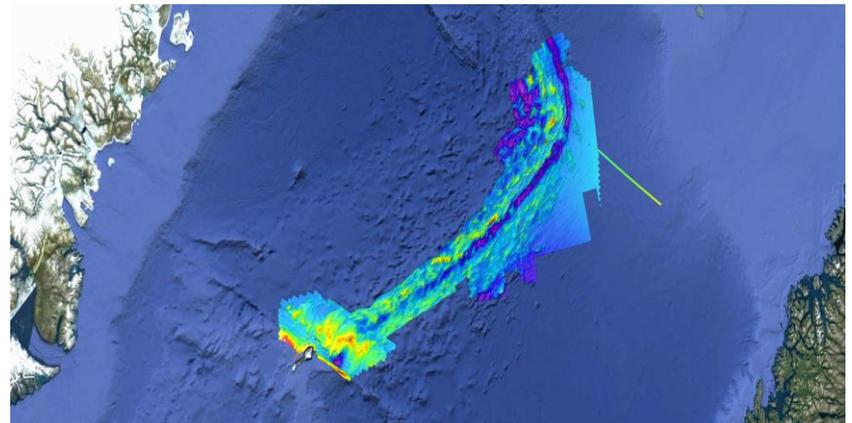
- Mineral exploration on the Norwegian continental shelf (“NCS”) is attractive for several reasons:
 - Size and richness of reserves
 - One nation state, one regulatory authority
 - 60 years of successful O&G regulation
- Norway has the second largest reserves estimate in the world with the Mohns & Knipovich Ridges (1030 km) located on NCS
- SMS (Seafloor Massive Sulfides) and Crusts found in several locations in the Norwegian Sea

Mean Resource estimate for key Metals¹ in SMS deposits in Mohns & Knipovich ridges



Estimated value > 1000+ billion NOK

The Mohns & Knipovich ridges



Findings from SMS samples

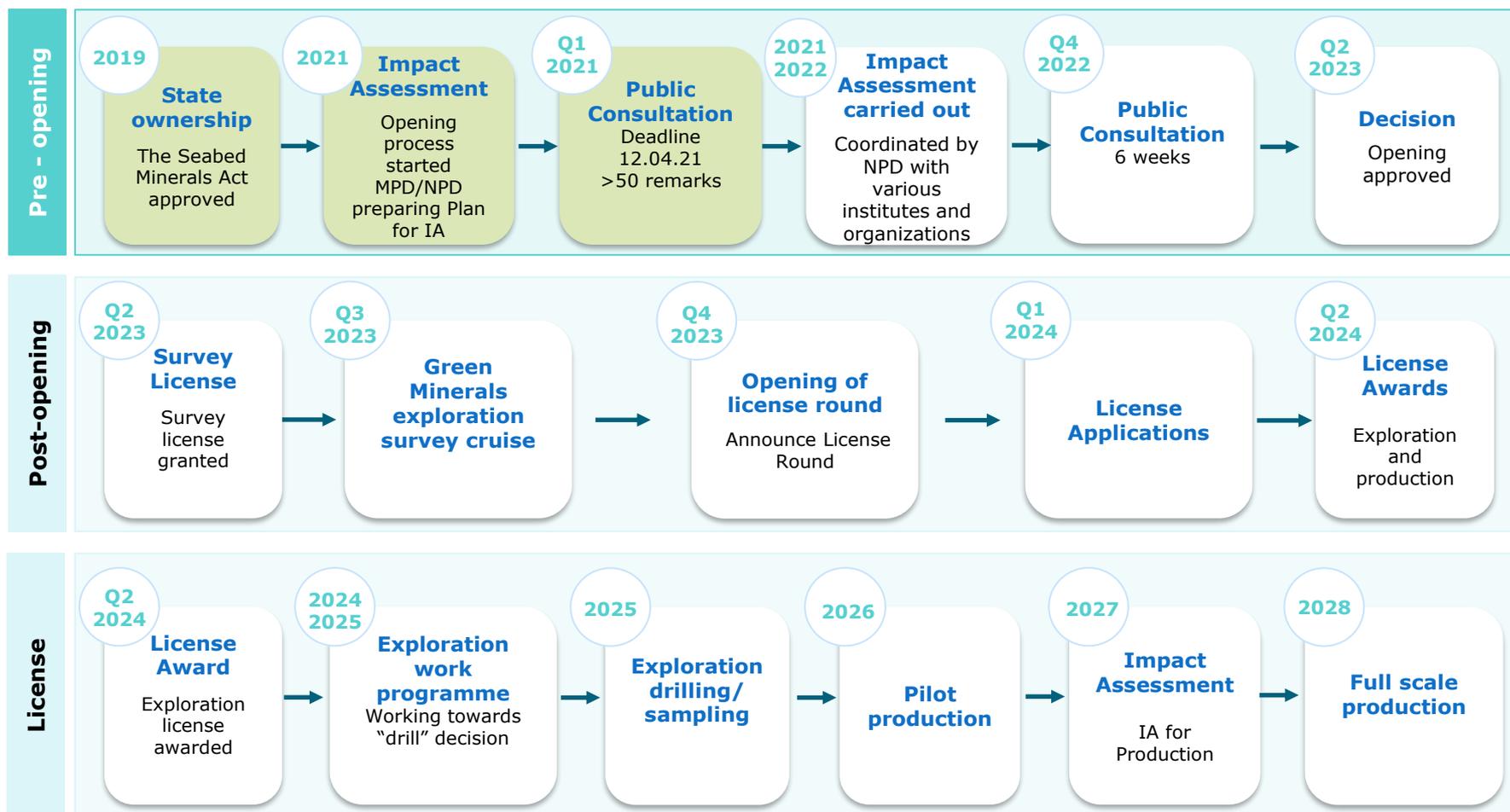
- Copper:** up to 14 % (vs ~0.6 % for onshore mining)
- Zinc:** up to 10 %
- Cobalt:** up to 1 % (vs ~0.2 % for onshore mining)

Findings from crust samples

- Lithium:** 20-80x Pacific Ocean
- Scandium:** 4-7x Pacific Ocean
- REE:** Up to 2x Pacific Ocean

Notes: 1) Other metals and REEs not included in estimate; 2) 2019 metal prices used by Ellefmo et al and 9,25 nok/usd, Quantifying the Unknown

Key events towards exploration license awards in 2024 and production in 2028



Our team



**Ståle
Rodahl**

**Executive
Chairman**

- 30 years in the financial industry
- 10+ years in senior executive positions in banks in New York, London and Oslo – Alfred Berg, ABN Amro and ABG
- Founder and 4+ years as CIO of a global long/short equity hedge fund
- Chairman of Seabird
- MSc from Norwegian School of Business



**Maxime
Lesage**

Chief Engineer

- 10+ years experience from oil and gas marine and subsea operations
- PhD in Geoscience and Petroleum from NTNU Trondheim
- PhD thesis on deep-sea mining system on the NCS
- Design of full-cycle analysis frameworks for decision-making support



**Ståle
Monstad**

**Chief Geoscientist &
Head of Exploration**

- 25+ years experience from exploration and geological management
- Chief Geologist and Director subsurface in DNO for 10+ years
- Chief Geologist Aker BP and SVP Exploration Aker Energy



**Espen
Simonstad**

**Senior Advisor
Geoscience**

- 10+ years experience from oil and gas exploration and license management
- MSc Geology from University of Bergen
- Former NPD Geologist
- Expertise in License acquisition and management



**Øivind Dahl-
Stamnes**

Board member

- Geologist from NTH
- 36 years in Oil and Gas at
- Equinor and Exxon
- 15+ years in executive positions in exploration, development and production
- Vice President Troll Field, North Area Initiative and Partner Operated Assets
- Board member Seabird



**Gunnar
Jansen**

CEO

- 20 years in shipping, offshore, and seismic industry
- 7 years in executive commercial and operational positions
- Lawyer from the University of Bergen

Supporting global sustainability



Providing minerals for the green transition



Fighting child labor while creating sustainable jobs and economic growth



Creating sustainable Rare Earth Elements (REE) and base metals to used in new form of transportation



Reducing waste generation and enabling companies' green transition

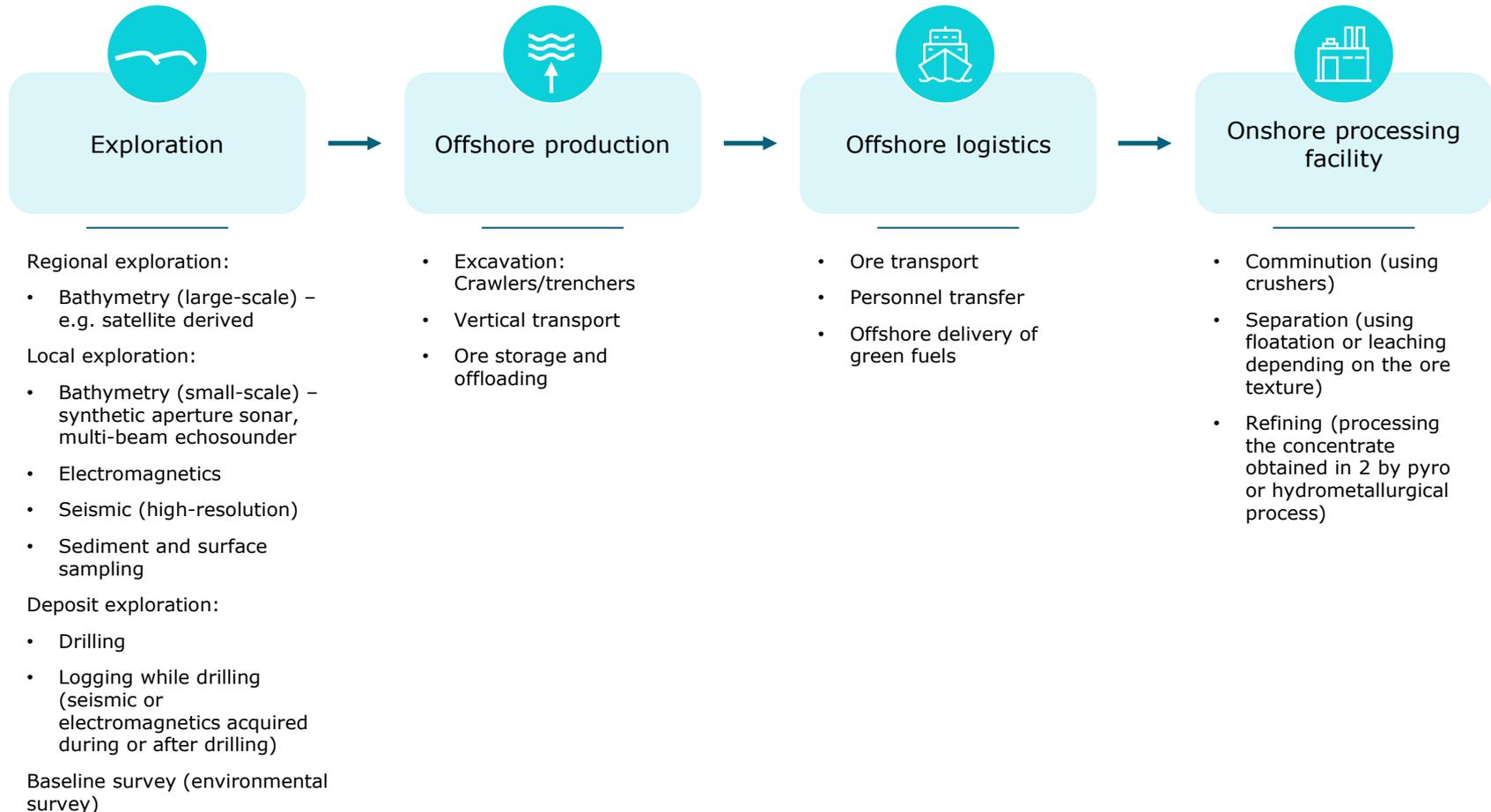


Enabling CO2 reduction being key elements in new technology

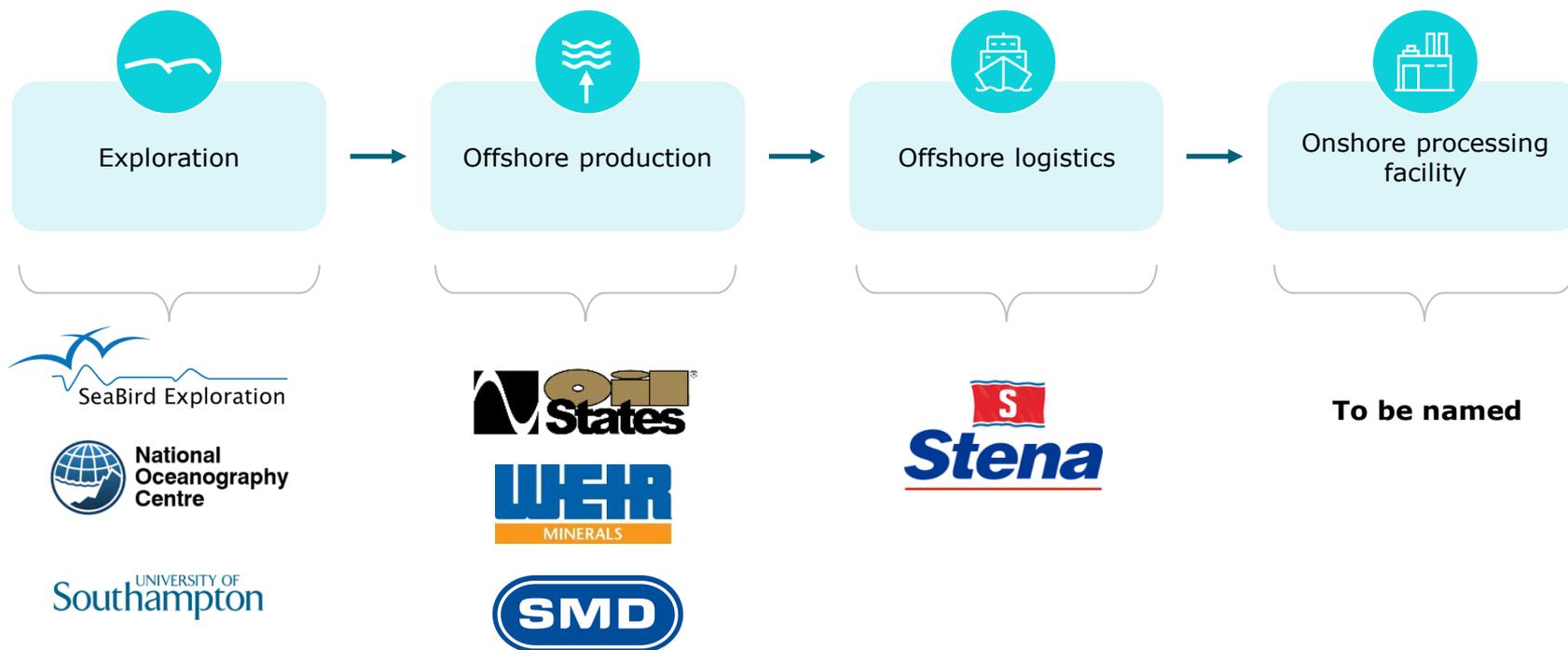


Reducing deforestation

Overview of the value chain



Partners and affiliations



Potential universal partners



Academia

Battery producers

Copper end-users

Secured partnerships with Seabird Exploration and Oil State Industries

Partnership with Seabird Exploration



© Mark van Fenema
MarineTraffic.com



- 24 years of experience in offshore exploration through parent company
- geophysical, project, maritime competencies
- relevant vessel capacity
- significant initial-phase synergies in exploration
- finance
- administration

LOI signed with consortium led by Oil States



- In March 2021, Green Minerals signed a LOI with a consortium led by Oil States Industry to collaborate on a FEED study for a turnkey Harsh Environment Deep Sea Mining System (HEDSMS) against a long-term contract for exclusive use within Norwegian jurisdiction
- The consortium:
 - **Oil State:** responsible for the EPCI and operations of the production vessel and offshore logistics including a smart riser system which has already been delivered to a Japanese consortium for marine minerals in Japan.
 - **Weir Minerals:** a recognized company for slurry systems and other minerals processing equipment will deliver the pumping system of the offshore production system
 - **Soil Machine Dynamics:** a company specialized company for excavation equipment - SMD delivered the first commercial SMS crawlers to Nautilus Minerals.
 - **Stena Drilling:** delivery and operation of the production vessel and the offshore logistics

Our strategy

Short term

To be recognized as a pioneer and leader of the Marine Minerals industry

Medium term

Win exploration and production licenses to capitalize on >NOK 1000bn of resource potential on the Norwegian Continental Shelf

Long term

Expand our portfolio to international licenses and become a global marine minerals company

Ultimately

Transform into a truly circular economy business model by recycling metals as the primary stock of metals reaches plateau

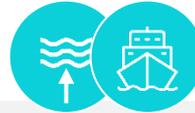


Aspirational targets (I)



Exploration

- Expect first Research cruise in 2021, incl ecosystem impact evaluation
- To be granted Survey license within 3 months after opening
- To be awarded 3 Production Licenses by early 2024
- Minimum one discovery of SMS with +5m tonnes of ore by YE 2024/25
- +5% average grade Cu (+ others Zn, Au, Ag, trace elements)
- or alternatively +8% Zn + 1% Cu (+ others Au, Ag, trace elements)



Development/Production

- First system ready to operate in 2026 (pilot):
- Full scale production in 2028:
 - 5-8000 tonnes/day ore to surface
 - 200+ day/year operations
 - 1,5MT ore/year
- Processing performed in Norway/Scandinavia
- Immense focus on subsea ecosystem and biodiversity



Finished product/processing

- Annual gross value of ore from start production of (based on current metal prices and "ore to metal factor"):
- \$550M for Copper only (+ additional value for other metals) or
- \$400M for Zinc/Copper only (+ additional value for other metals)
- \$75-100m est in other metals (Nickel, REE, Lithium++)
- Introducing >\$800M with 0.25% Cobalt

Aspirational targets (II)

Commentary

- **One Green Minerals full scale production system:**
 - Flow rate: min 5-8000 tonnes/day
 - Utilisation: min 200+ days/year
 - Annual ore production: min 1,5mt
- **Gross revenues: >\$550m/yr on copper only**
- **Gross revenues >\$800m/yr if adding 0.25% cobalt**
 - Revenue/tonne ore: 10-20x higher than similar onshore
 - EBITDA margins > 50%
- **Environmental footprint:**
 - 90% lower than similar onshore

Key metrics - 30MT deposit example

Metric	Unit	
Mineral resources	Million tons	30
Enrichment (CuEq)	%	5.3
Sum revenue	USDm	7,360
Sum Expex	USDm	40
Sum Capex	USDm	780
Sum Opex	USDm	2,250
Sum Abex	USDm	100
Unit cost (CuEq)	USD/kg	2.0
Lifting cost (CuEq)	USD/kg	1.4
Pre-tax NPV0	USDm	4,260
Pre-tax NPV10	USDm	746
Pre-tax IRR	%	29

Source: Rystad

Investment highlights

Green Minerals

A pioneer in offshore mining and the leader in Marine Minerals on the Norwegian Continental Shelf

1

Marine Minerals needed for the Green Shift

2

>NOK 1000bn opportunity on NCS

3

GEM with capital-light partnership strategy across the entire value chain

4

Well-defined roadmap and triggers towards first licenses in 2023 and pilot production in 2026

5

A real option with very low downpayment against a >\$350m annual EBITDA opportunity, i.e inherent flexibility and highly attractive risk-reward



GREEN MINERALS

Enabling the green shift