



Lighter aircrafts



Clean air



# Minerals for a sustainable future



Renewable energy



Electric cars





**OAX: NOM**

Q1 2016 Presentation

Oslo, 13 May 2016



*Exploration and production of high-end minerals and metals*

## *Disclaimer*

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1. Introduction
2. Financial status
3. Update on projects
  - Nordic Rutile
  - Keliber
  - Nordic Ocean Resources
4. Questions



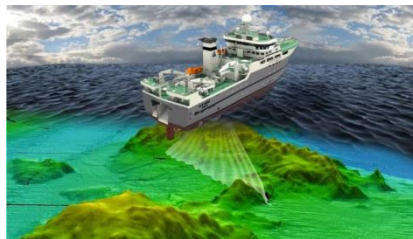
# Minerals for a sustainable future



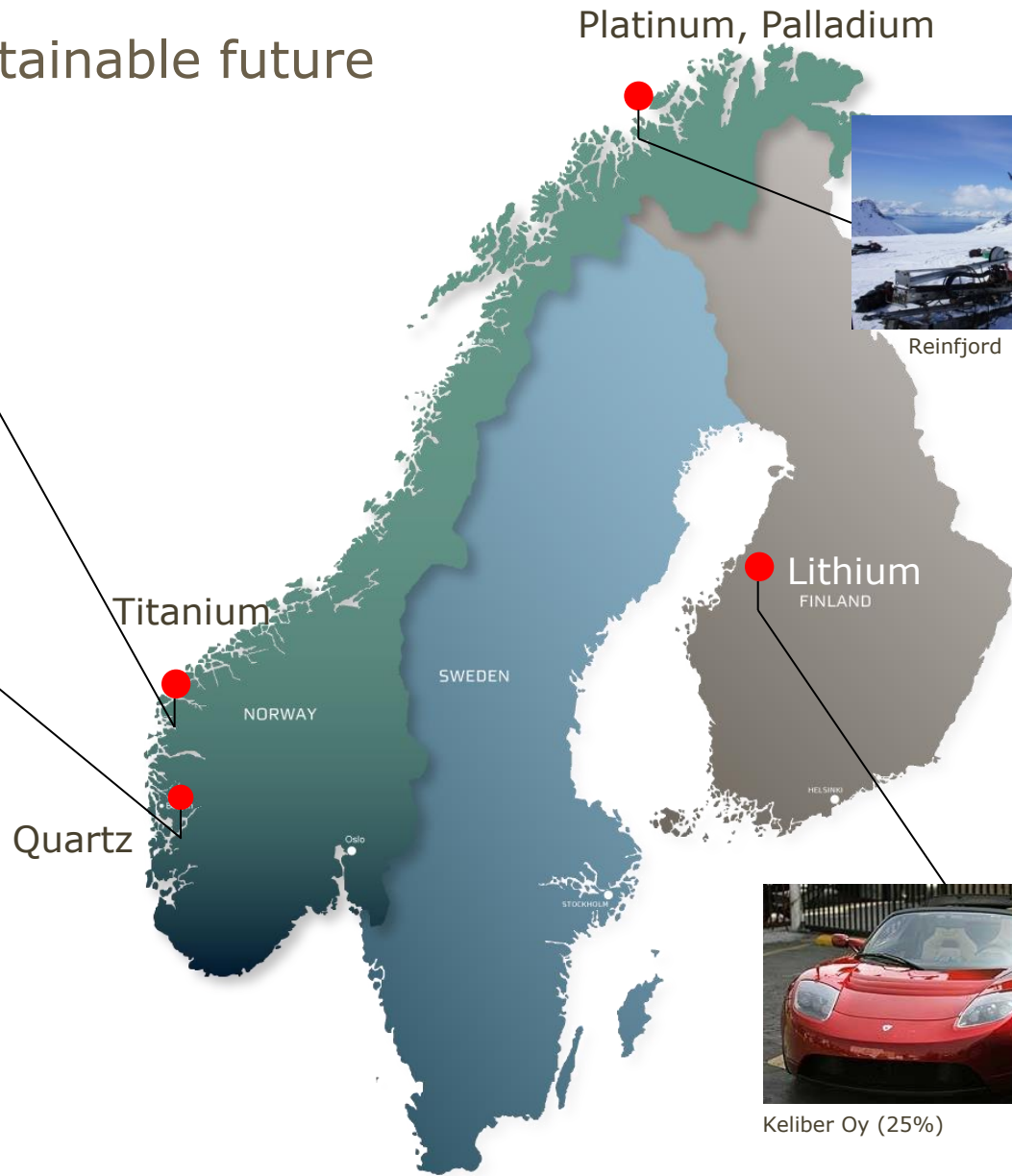
Nordic Rutile AS



Nordic Quartz AS



Nordic Ocean Resources AS (80%)



Reinfjord



Keliber Oy (25%)



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# Consolidated Income Statements

Q1-2016	Q1-2015		Acc. 2016	Acc. 2015	2015
Unaudited	Unaudited	Amounts in NOK million	Unaudited	Unaudited	Audited
-	-	Sales	-	-	-
(1.6)	(1.7)	Payroll and related costs	(1.6)	(1.7)	(6.6)
(1.6)	(1.5)	Other operating expences	(1.6)	(1.5)	(6.1)
<b>(3.2)</b>	<b>(3.2)</b>	<b>Operating loss</b>	<b>(3.2)</b>	<b>(3.2)</b>	<b>(12.7)</b>
(0.5)	(2.1)	Share of result of an associate	(0.5)	(2.1)	(6.6)
-	-	Financial items	-	-	0.1
(3.7)	(5.2)	Loss before tax	(3.7)	(5.2)	(19.2)
-	-	Income tax	-	-	-
<b>(3.7)</b>	<b>(5.2)</b>	<b>Loss for the period</b>	<b>(3.7)</b>	<b>(5.2)</b>	<b>(19.2)</b>

*Capitalised exploration and evaluation expenses in Q1 2016, mainly related to drilling at Engebø and resource estimations related to the Kvinnherad quartz deposit, amounted to NOK 7.7 million (Q1 2015: NOK 0.1 million)*



# Consolidated Statements of Financial Position

Amounts in NOK million	31.03.2016 Unaudited	31.12.2015 Audited
<b>ASSETS</b>		
Evaluation and exploration assets	17.5	9.8
Property, plant and equipment	0.4	0.1
Investment in an associate	12.4	6.2
<i>Total non-current assets</i>	<i>30.3</i>	<i>16.1</i>
Cash	15.7	29.8
Other current assets	3.2	1.0
<i>Total current assets</i>	<i>18.9</i>	<i>30.8</i>
<b>Total assets</b>	<b>49.2</b>	<b>46.9</b>
<b>SHAREHOLDERS' EQUITY AND LIABILITIES</b>		
<i>Total equity</i>	<i>39.3</i>	<i>43.2</i>
Non-current liabilities	1.9	1.9
Current liabilities	8.0*	1.9
<i>Total liabilities</i>	<i>9.9</i>	<i>3.8</i>
<b>Total equity and liabilities</b>	<b>49.2</b>	<b>46.9</b>

\* Of this, NOK 5.8 million is related to the capitalised evaluation and exploration assets and settled subsequent to 31 March 2016





# Shareholder structure and share price development

## Largest shareholders\*

	Name of shareholder	No. of shares	%
1	NORDNET BANK AB (NOMINEE)	30 299 980	7,9 %
2	SKAGEN VEKST	15 819 516	4,1 %
3	NORDEA BANK PLC FINL. CLIENTS ACC. (NOMINEE)	14 482 524	3,8 %
4	NORDNET LIVSFORSIKRING	12 140 846	3,1 %
5	DYBVAD CONSULTING AS	9 384 366	2,4 %
6	OVE KLUNGLAND HOLDIN NIL	7 023 696	1,8 %
7	DANSKE BANK A/S (NOMINEE)	6 889 104	1,8 %
8	MAGIL AS	6 500 000	1,7 %
9	SNATI AS	6 000 000	1,6 %
10	CITIBANK N.A. S/A POHJOLA BANK PLC (NOMINEE)	5 885 697	1,5 %
11	INFOSAVE AS	5 144 863	1,3 %
12	LITHION AS	4 167 898	1,1 %
13	OLE KRISTIAN G. STOKKEN	3 736 721	1,0 %
14	AUDSTEIN DYBVAD	3 156 000	0,8 %
15	FEMCON AS	3 080 316	0,8 %
16	ADURNA INVEST AS	3 079 993	0,8 %
17	OLAV BIRGER SLETTEN	3 040 000	0,8 %
18	REIDAR JARL HANSEN	2 810 124	0,7 %
19	JON HOVDEN	2 700 000	0,7 %
20	FRANK MOLANDER	2 600 000	0,7 %
	<b>Top 20 shareholders</b>	<b>147 941 644</b>	<b>38,4 %</b>
	Others	237 563 161	61,6 %
	<b>Total</b>	<b>385 504 805</b>	<b>100,0 %</b>

## Share overview and share price development\*

### Share overview

Stock symbol	NOM
Stock exchange	Oslo Axess
Number of issued shares	385 504 805
Owned by Norwegian shareholders	82%
Owned by international shareholders	18%
Owned by management	2.6%
Options (valid to 18 May 2016)	12 750 000
- of which owned by management	11 500 000
Fully diluted number of shares	398 254 805
Current share price (NOK)	0,71
Market capitalisation (NOKm)	274
Trading range YTD (NOK)	0.53 - 0.82



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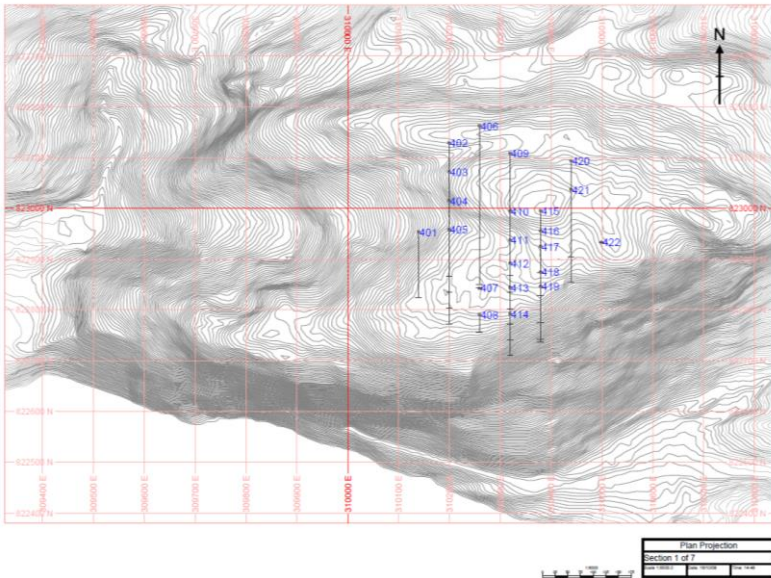




## Engebø

- ✓ One of the world's largest deposits of natural rutile
- ✓ Has the highest grade among current producers and projects
- ✓ Impurities at background levels
- ✓ Located next to tidal waters and European markets
- ✓ Permitted for 50 years of operation

# Core and geo-stat drilling program completed in April 2016



- 38 drill holes of approximately 6,400 meters, primarily in the open pit area
- Geotechnical assessments are carried out by Wardell Armstrong, UK
- Resource modeling and estimations by Competent Person Adam Wheeler, UK



Resource estimations and reclassification will be completed in Q3 2016



# Ongoing activities towards PFS

- Core logging, inspections, splitting and analysis
- Geo-technical logging and ore model analysis
- Garnet inspections and analysis
- Resource analysis and modeling
- Technical advisor, screening and evaluations
- Mining plans, scenario reviews and lay-out
- Infrastructure and planning of industrial area
- Sample preparations for various process tests
- Planning of process optimisation tests
- Preparations for power and water supply



## Positive long-term price outlook for rutile

<b>Selected research reports from Q1 2016 (Price forecasts in USD per tonne rutile)</b>	<b>2016</b>	<b>2017</b>	<b>Long-term</b>
Royal Bank of Canada (RBC)	813	900	1,100
UBS	800	875	1,300
J.P. Morgan	698	677	1,000
Credit Suisse	750	800	1,250
Investec	763	838	1,020
Maquarie	700	680	810
Goldman Sachs	700	700	750
Numis	777	906	1100

- The average long-term price estimate is around USD 1,050 per tonne
- NM's price assumption of USD 1,000 per tonne for preliminary financial calculations related to the Engøbø project compares well with current forecasts



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# Positive Pre-Feasibility Study financials

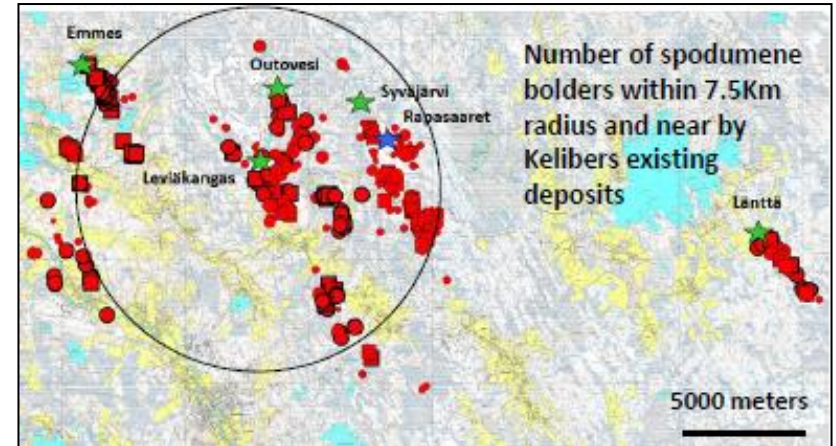
Preliminary Keliber key figures	
Production capacity, Lithium Carbonate (Li <sub>2</sub> CO <sub>3</sub> )	9,000 tpy
Ore processing capacity	400,000 tpy
Operative time (current open pit deposits)	11 years
CAPEX	EUR 164 million
NPV after tax @ 8% WACC	EUR 97 million
IRR after tax	21%
Payback time from start-up	4 years

- Market analysis and assumptions for the Pre-Feasibility Study provided by the consultancy company signumBOX in November 2015
- The price development in the last part of 2015 and 2016 YTD has significantly outperformed the price assumptions in the PFS
- According to market information, technical grade Lithium Carbonate (99%) is currently trading at a price level of USD 13,000 – 14,000 per tonne; battery-grade qualities (>99.5%) trade higher
- Bankable Feasibility Study targeted for completion mid-2017



# Prosperous lithium province provides exploration opportunities

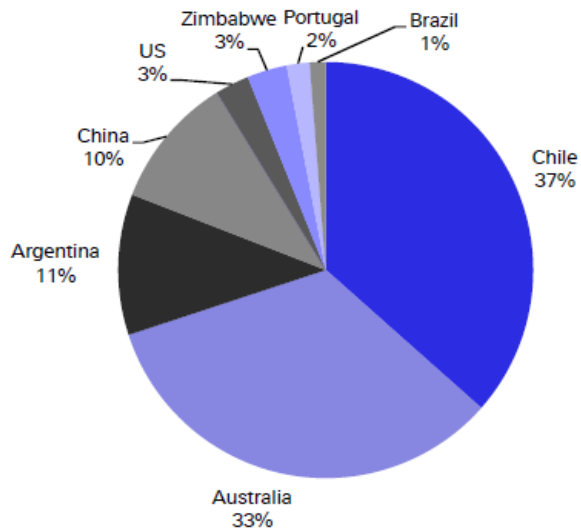
Ore Reserves				
Category	Deposit	kt	Li2O%	JORC
Proven	Länttä	470	0,95	2012
Probable	Länttä	540	0,93	2012
	Syväjärvi	1 480	1,19	2012
	Rapasaari	1 750	1,09	2012
	Outovesi	250	1,20	
<b>Proven and Probable</b>		<b>4 490</b>	<b>1,10</b>	



- Keliber's exploration drilling programs have tripled the JORC compliant Mineral Resource tonnage during 2013–2015
- All deposits will be mined as open pits
- All deposits are located within a 10–20 km distance from the processing plant
- The Central Ostrobothnia lithium province covers over 500 km<sup>2</sup> and is one of the most significant lithium areas in Europe
- The province provides excellent opportunities for exploration
- Keliber has secured several Exploration Rights and targets to increase the operative time for the project through successful exploration

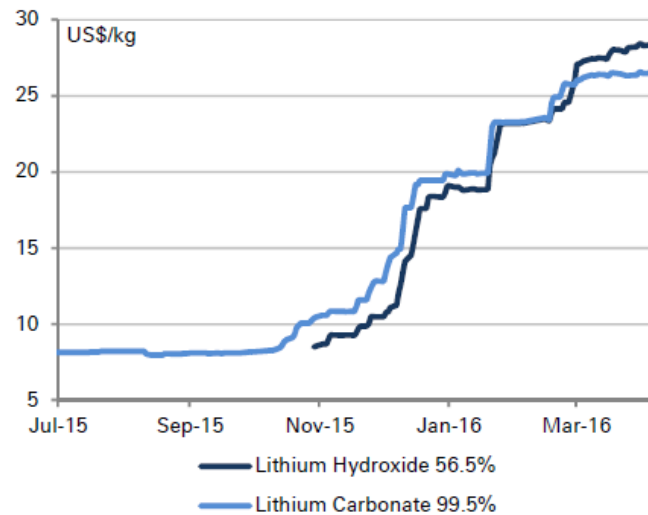
# Deutsche Bank has new report on Lithium

Figure 8: 2015 supply - by country



Source: Deutsche Bank, company data

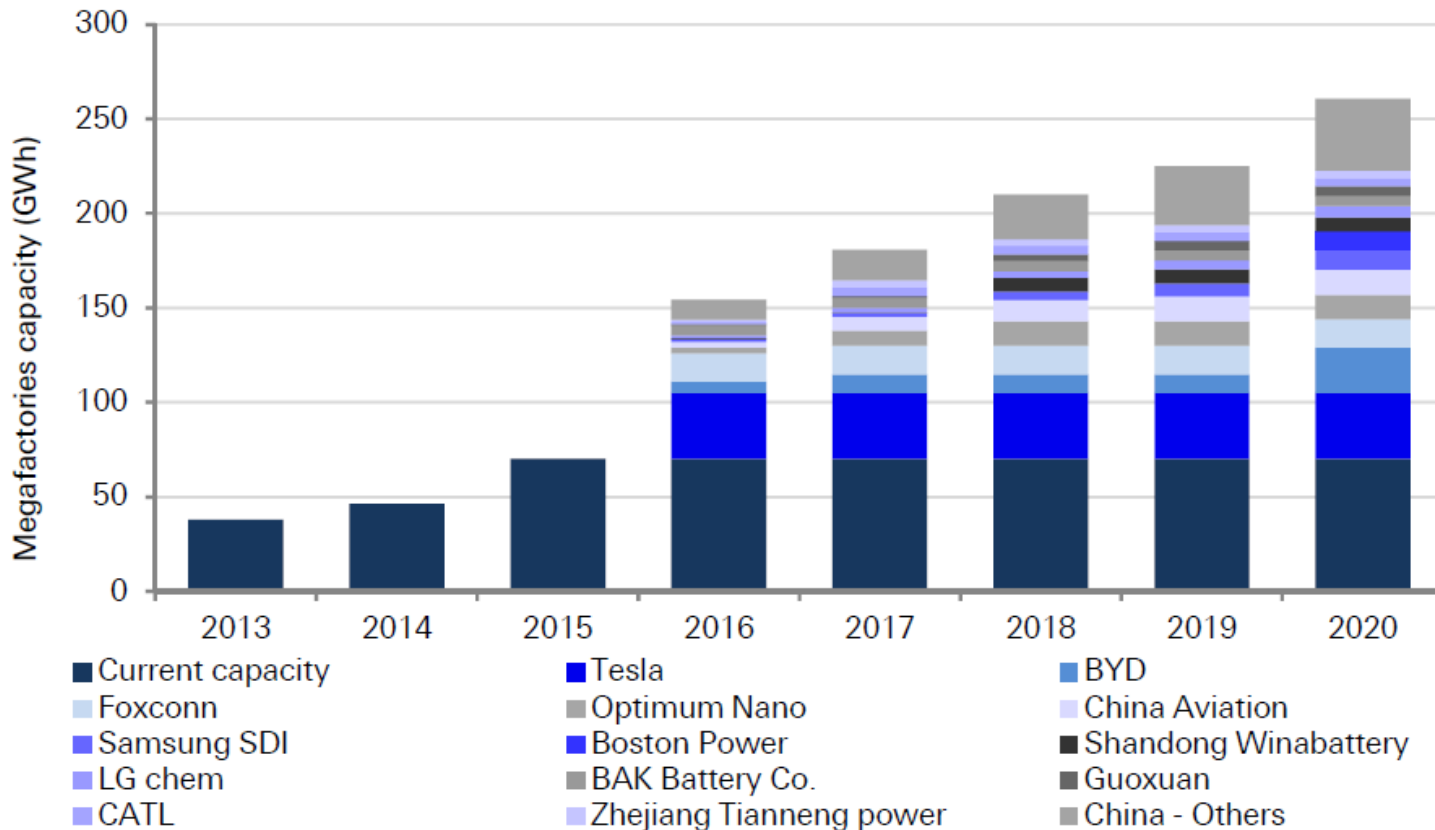
Figure 9: Chinese domestic battery-grade lithium prices (2015-present)



Source: Asianmetal

# Strong growth forecasted

Figure 21: Significant investment is underway on the battery supply chain

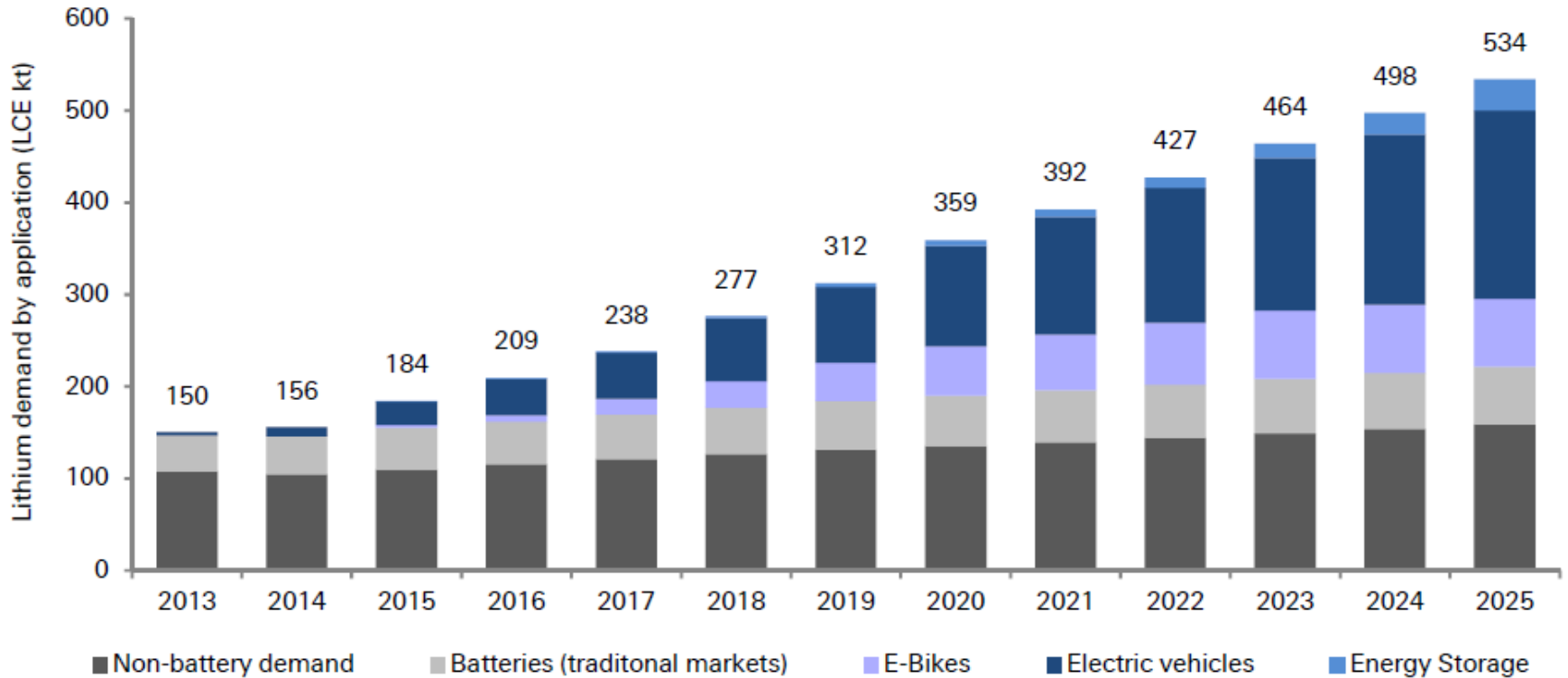


Source: Deutsche Bank; BMI



# Driven by the EV market

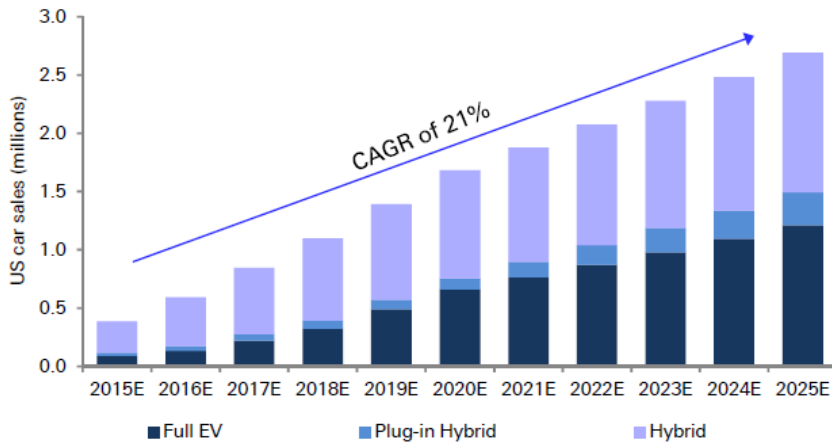
Figure 29: Lithium demand by end applications (2013-25)



Source: Deutsche Bank; Industry data

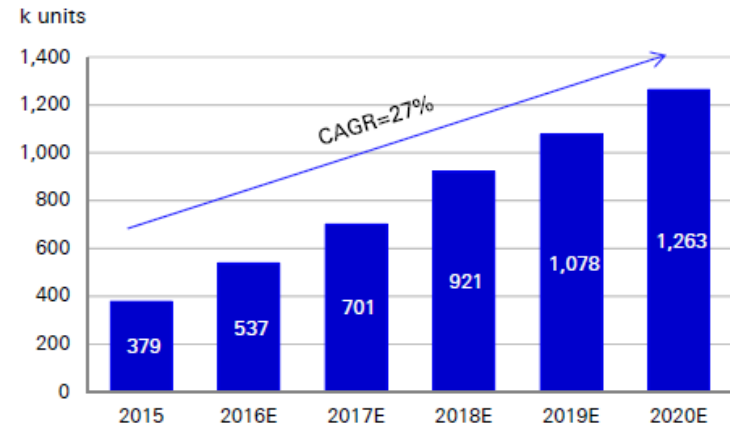
# Strong EV outlook in USA and China

Figure 36: US EV outlook from 2015-2025E



Source: Deutsche Bank, HIS, InsideEV

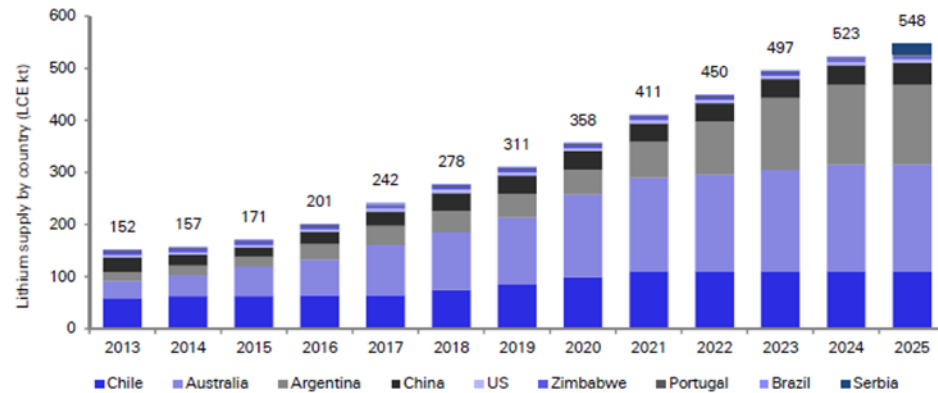
Figure 42: China EV sales estimates



Source: Deutsche Bank estimates, MIIT

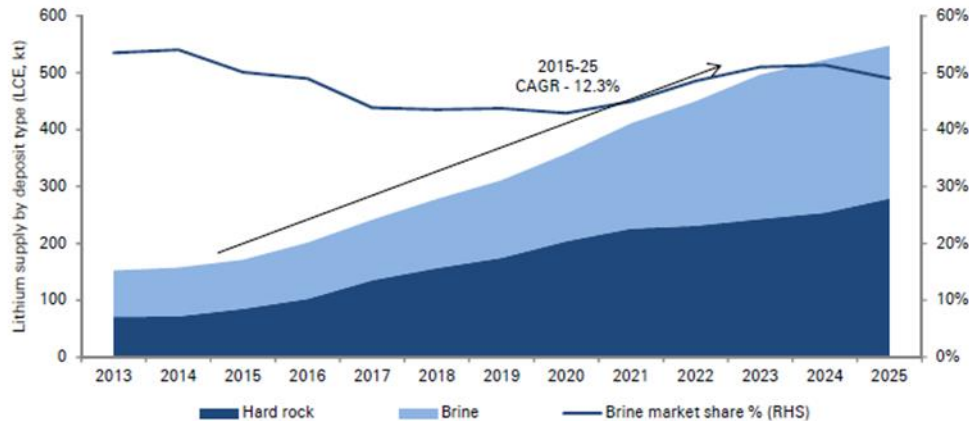
# Production window for Lithium remains open in Europe

Figure 148: Lithium supply by country (2013-25)



Source: Deutsche Bank; USGS; Company data

Figure 151: Global lithium output (2013-25) – presented on a lithium carbonate equivalent basis



Source: Deutsche Bank estimates

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# Nordic Ocean Resources – Increased interest and momentum



## OCEAN WEEK

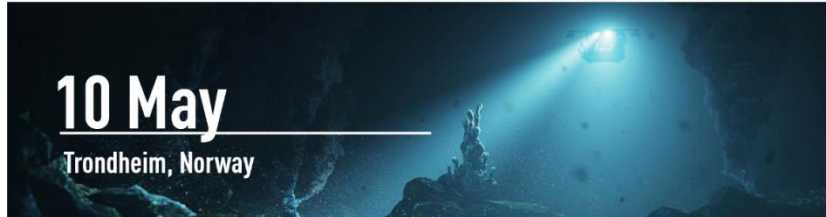
9-12th May 2016  
Trondheim - Norway



Search

Ocean Week ▾

> Ocean Week / Marine Minerals



SEABED OPPORTUNITIES

### Marine minerals and Ocean innovation

Blue growth depends on a continued stimulation of innovation. Interdisciplinary research and development and a strong collaboration between science, society and business are corner stones for successful innovation. The session on Ocean Innovation will look into opportunities on a national and international level to turn research ideas into applications of high societal value.

The session will set focus on the large, but yet unquantified, number of mineral resources at great ocean depths. If these are to be extracted in a sustainable way, highly efficient exploration technologies need to be developed. A broader understanding of marine minerals will be provided by approaching the challenges from a geological, technological, environmental and socio-ethical perspective.

### Tuesday 10 May

08.30 Registration

09.00 Plenary session (ELS)

- Opening by Ingvald Strømmen, Dean at NTNU
- *Deep Sea Mining - a cross-disciplinary pilot study at NTNU* (Steinar Ellefmo, NTNU)
- PhD candidates pitching their latest findings on Deep Sea Mining - part I
- *The Deep Sea Mining R&D program at Technip* (Johann Rongau, Technip)
- *Exploration of deep sea mineral resources: how to push forward* (Pedro Madureira, EMEPC)
- *Seabed mining - an opportunity for growth and innovation* (Ivar Fossum, Nordic Ocean Resources)

10.30 Coffee break

- *Blue Growth* (Lars Jacob Hiim, State Secretary at the Norwegian Ministry of Trade)
- *Coordination of national programmes and joint actions through JPI Oceans* (Kathrine Angell-Hansen, JPI Oceans)
- *Innovation through international cooperation - an example from Portugal* (Maria João Ramos, University of Porto)

12.00 Lunch

### Key Speakers



**Ingvald Strømmen**  
Dean at NTNU



**Steinar Ellefmo**  
Assistant Professor in Resource Geology NTNU



**Johann Rongau**  
Study Manager at Technip



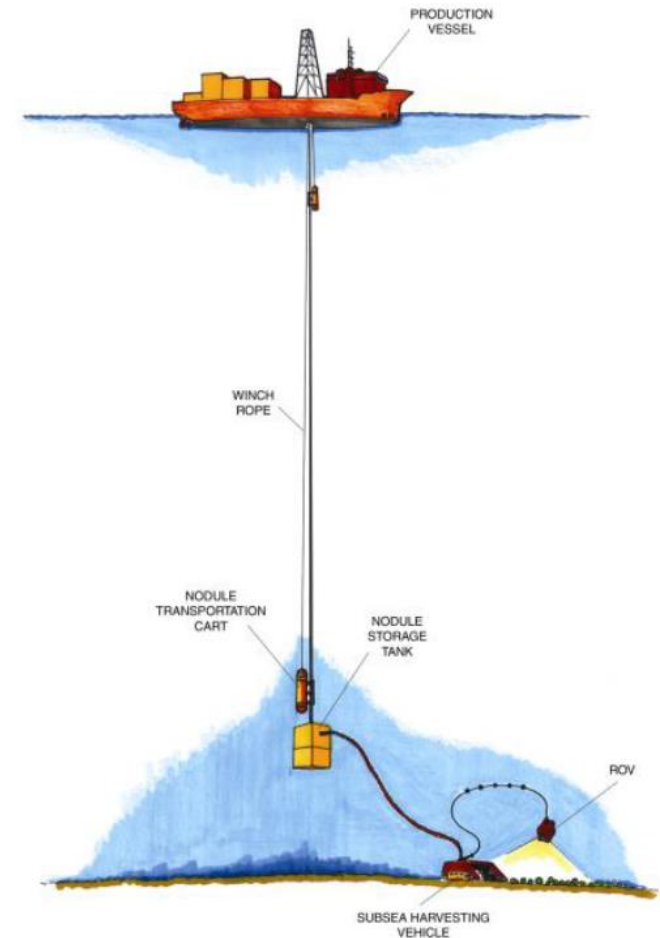
**Pedro Madureira**  
Deputy Head at EMEPC



**Ivar Fossum**  
CEO at Nordic Ocean Resources



**Lars Jacob Hiim**  
State Secretary at Ministry of Trade





# Nordic Ocean Resources – MarMine ready for survey in August 2016 – vessel contracted

[RESEARCH EXPEDITION WITH NTNU](#)

[TAKING ACTIONS TO REMAIN COMPETITIVE](#)

[CONTRACT EXTENSIONS WITH EIDESVIK OFFSHORE](#)

[CONTRACT NEWS FOR STRIL EXPLORER AND EDDA FONN](#)

[CONTRACT FOR VIKING NEPTUN](#)

[CONTRACTS FOR EDDA FONN](#)

[Annual Report 2014](#)

[Gassco Press Release](#)

[CONTRACT AWARD](#)

[Presentation 4Q2014](#)

## RESEARCH EXPEDITION WITH NTNU

Published: May 9, 2016

Reach Subsea has entered into a firm contract with NTNU for the MarMine Project to complete a scientific research expedition on the mid-Atlantic ridge north of Jan Mayen, financed by the Research Council of Norway (RCN).

The project will deploy ROV, AUV and grabs for seabed mapping and sampling for geological and biological research related to marine mining.



Reach will execute the contract using Rieber's Polar King.

Total contract duration is approximately three weeks.

CEO Jostein Alendal says:

"We are pleased to be part of a very exciting project together with NTNU and the other MarMine partners, and to utilize our know-how in a new market segment, the subsea mining segment."

Expedition lead on the MarMine-project Martin Ludvigsen says: «A modern and well equipped offshore vessel gives the project the best possible premises to succeed»

Project manager on MarMine-project Kurt Aasly says: "The project appreciate that we are able to utilize equipment and competence from the oil and gas industry for use in the subsea mining segment".

**MAR**MINE



# Investment highlights

**OAX: NOM**

## Titanium - Natural Rutile

- World class rutile deposit; 50 years mine life and highest global TiO<sub>2</sub> grade
- Favourable location and logistics; competitive Capex/Opex
- Internal NPV estimate (8%) of USD 466 million
- Environmental permit for 50 years operation (zoning plan and discharge permit)



Titanium – Natural Rutile

## Lithium

- JORC classified Ore Reserves in the Proven and Probable categories; 4.5 million tonnes at an average grade of 1.10% Li<sub>2</sub>O
- Pre-Feasibility Study finalised in March 2016; Estimated NPV (8%) of EUR 97 million



Lithium

## High Purity Quartz

- JORC compliant resource in green-tech mineral
- Estimated NPV (8%) of USD 60 million in 2012 Scoping Study



High Purity Quartz

- ***With a sum of the projects' NPVs in excess of USD 550 million compared to current market capitalisation of c. USD 35 million, NOM has a significant value potential***
- ***High equity ratio (92% as per 31.12.2015) and no interest-bearing debt***
- ***Well positioned to exploit its full potential through, amongst other, taking more advantage of international industrial and financial relations***





8.31 AM CET / 26-Apr-2016 / Nordic Mining ASA (OAX:NOM)

## **Summons to the ordinary general meeting 18 May 2016**

The ordinary general meeting of the shareholders in Nordic Mining ASA will be held at 16:00 on Wednesday 18 May 2016 at the Company's premises, Vika Atrium, Munkedamsveien 45 (Entrance A, 5th floor), 0250 Oslo, Norway.

The summons to the general meeting with the agenda and information related to the items on the agenda, including the annual report for 2015 and the recommendation from the Nomination Committee (in Norwegian), are enclosed with this notice.

The documents will also be available on the company's webpage [www.nordicmining.com](http://www.nordicmining.com).

For questions please contact CFO Lars K. Grøndahl on telephone +47 901 60 941.

Oslo, 26 April 2016  
Nordic Mining ASA



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*SAFETY – ENVIRONMENT - INNOVATION*



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