



OAX: NOM

Q3 2017 Presentation
Oslo, 9 November 2017



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1. Introduction
2. Financial status
3. Update on projects
 - Engebø, rutile and garnet
 - Keliber, lithium
4. Q & A



Developing high-value assets in the Nordic Region



Engerbø Rutile and Garnet (100%)



High Purity Quartz



Seabed minerals



Platinum, Palladium



Keliber Lithium (22%)



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Consolidated Income Statements

Q3-2017	Q3-2016		Acc. 2017	Acc. 2016	2016
Unaudited	Unaudited	Amounts in NOK million	Unaudited	Unaudited	Audited
-	-	Sales	-	-	-
(1.8)	(1.7)	Payroll and related costs	(8.1)	(5.7)	(7.8)
-	-	Share-based payment	-	(1.4)	(1.4)
-	-	Depreciation and amortisation	(0.1)	-	-
-	-	Impairment of exploration assets	-	(1.3)	(1.3)
(6.7)	(2.8)	Other operating expences	(18.8)	(5.8)	(12.4)
(8.6)	(4.6)	Operating loss	(27.1)	(14.2)	(23.0)
(1.8)	(1.4)	Share of result of an associate	2.4	(2.8)	(4.2)
0.2	0.1	Financial items	0.1	0.1	0.1
(10.2)	(5.9)	Loss before tax	(24.6)	(16.9)	(27.1)
-	-	Income tax	-	-	-
(10.2)	(5.9)	Loss for the period	(24.6)	(16.9)	(27.1)



Consolidated Statements of Financial Position

Amounts in NOK million	30.09.2017 Unaudited	31.12.2016 Audited
ASSETS		
Evaluation and exploration assets	21.4	21.2
Property, plant and equipment	0.2	0.3
Investment in an associate	29.8	15.0
<i>Total non-current assets</i>	<i>51.5</i>	<i>36.6</i>
Cash	30.1	66.1
Trade and other receivables	4.3	1.3
<i>Total current assets</i>	<i>34.4</i>	<i>67.4</i>
Total assets	85.9	104.0
SHAREHOLDERS' EQUITY AND LIABILITIES		
<i>Total equity</i>	<i>79.7</i>	<i>97.0</i>
Non-current liabilities	1.1	1.1
Current liabilities	5.1	5.9
<i>Total liabilities</i>	<i>6.2</i>	<i>7.0</i>
Total equity and liabilities	85.9	104.0



Shareholder structure and share price development

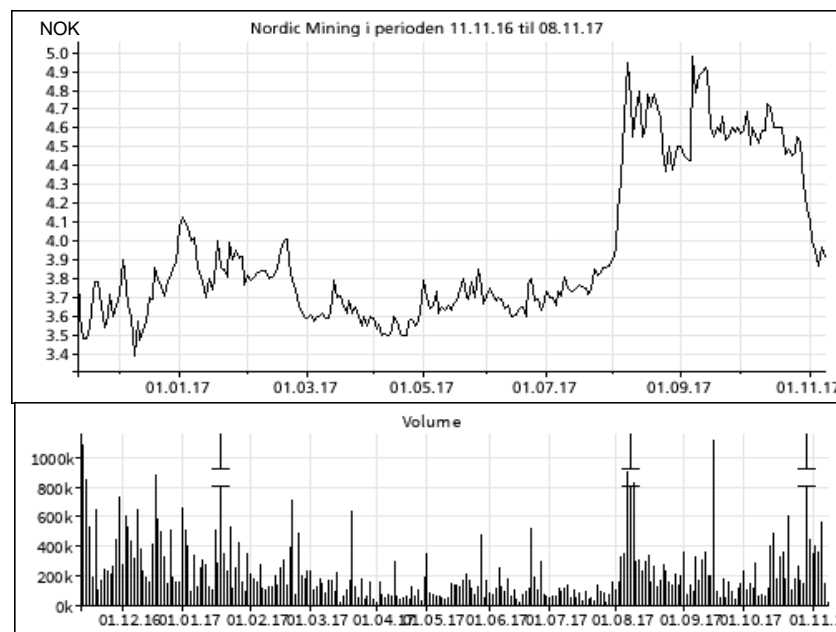
Largest shareholders*

	Name of shareholder	No. of shares	%
1	NORDNET BANK AB (NOMINEE)	9 594 914	10,1 %
2	NORDEA BANK FINLAND (NOMINEE)	4 768 454	5,0 %
3	NORDNET LIVSFORSIKRING	2 701 480	2,8 %
4	CITIBANK N.A. S/A POHJOLA BANK PLC (NOMINEE)	2 142 664	2,3 %
5	DANSKE BANK A/S (NOMINEE)	1 631 541	1,7 %
6	DYBVAD CONSULTING AS	1 560 428	1,6 %
7	SONGA TRADING INC.	1 507 176	1,6 %
8	MAGIL AS	1 300 000	1,4 %
9	INFOSAVE AS	1 235 609	1,3 %
10	ADURNA AS	1 200 000	1,3 %
11	OVE KLUNGLAND HOLDIN NIL	1 148 280	1,2 %
12	VPF NORDEA AVKASTNING C/O JP MORGAN EUROPE	1 002 963	1,1 %
13	LITHION AS	1 000 977	1,1 %
14	SNATI AS	975 000	1,0 %
15	OLAV BIRGER SLETTEN	936 000	1,0 %
16	KNUT FOSSE AS	919 752	1,0 %
17	OLE KRISTIAN G. STOKKEN	755 043	0,8 %
18	REIDAR JARL HANSEN	688 970	0,7 %
19	GODE TIDER AS	670 000	0,7 %
20	SVEND OTTO REMØE	650 000	0,7 %
	Top 20 shareholders	36 389 251	38,4 %
	Others	58 436 217	61,6 %
	Total	94 825 468	100,0 %

Share overview and share price development**

Share overview

Number of issued shares	94 825 468
Owned by management	2.2%
Options	2 630 000
- of which owned by management	2 466 667
Fully diluted number of shares	97 455 468
Current share price (NOK)	3.92
Market capitalisation (NOKm)	372
Trading range YTD (NOK)	3.45 - 5.29



* Shareholder overview as of 6 November 2017

** Share price and market capitalisation as of 8 November 2017

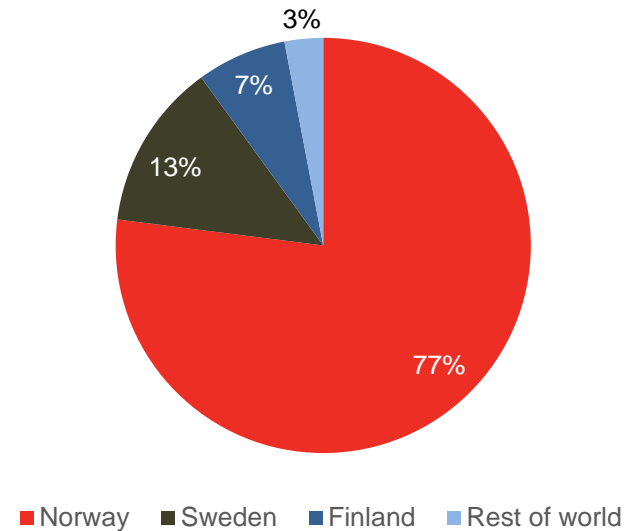


Ownership in Nordic Mining ASA

Nominee accounts mainly private shareholders

- Shareholder analysis and identification performed by Orient Capital in Q2 2017
- Nominee accounts analysed and combined with ordinary shareholdings
- Ownership structure as expected; no large shareholders behind nominee accounts – holdings spread on a large number of private and corporate stakeholders
- Half-yearly and ad hoc analysis

Geographical distribution

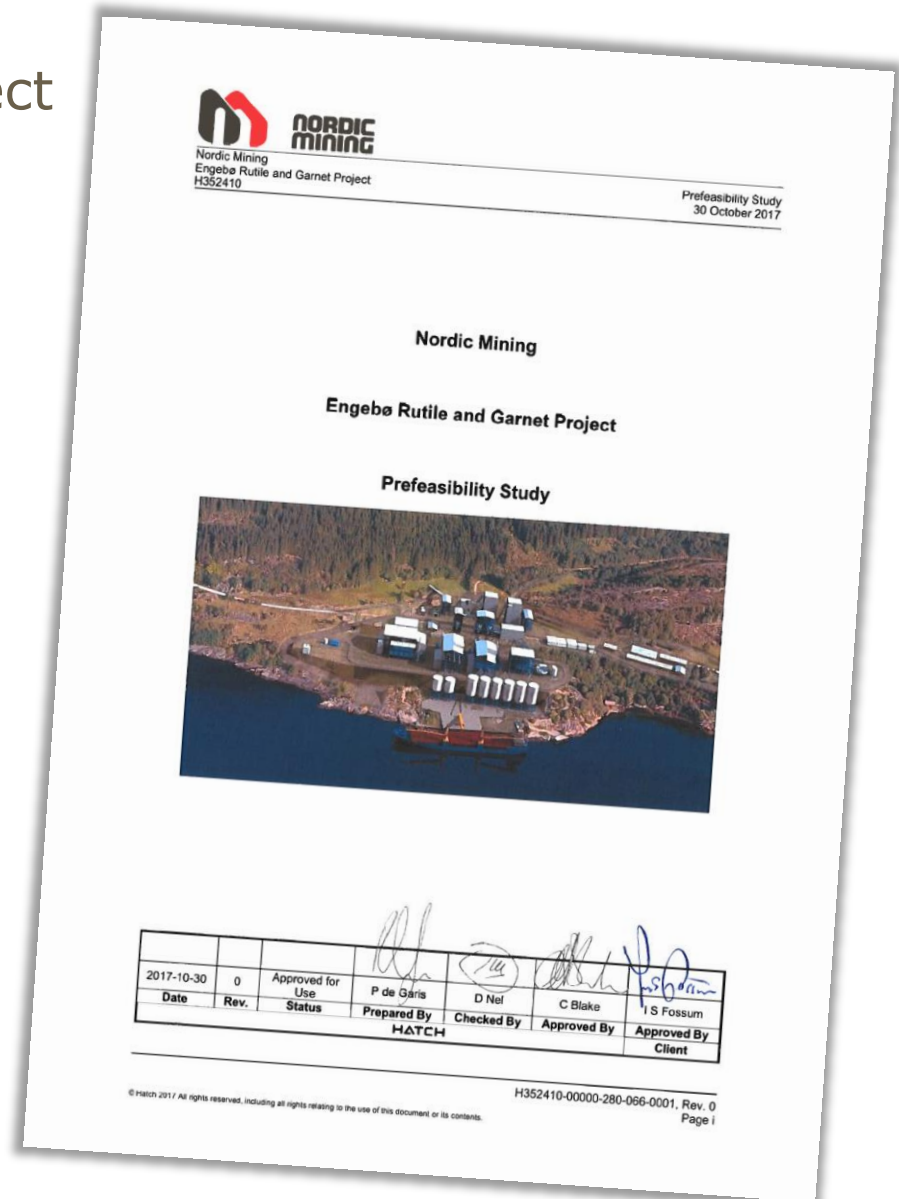


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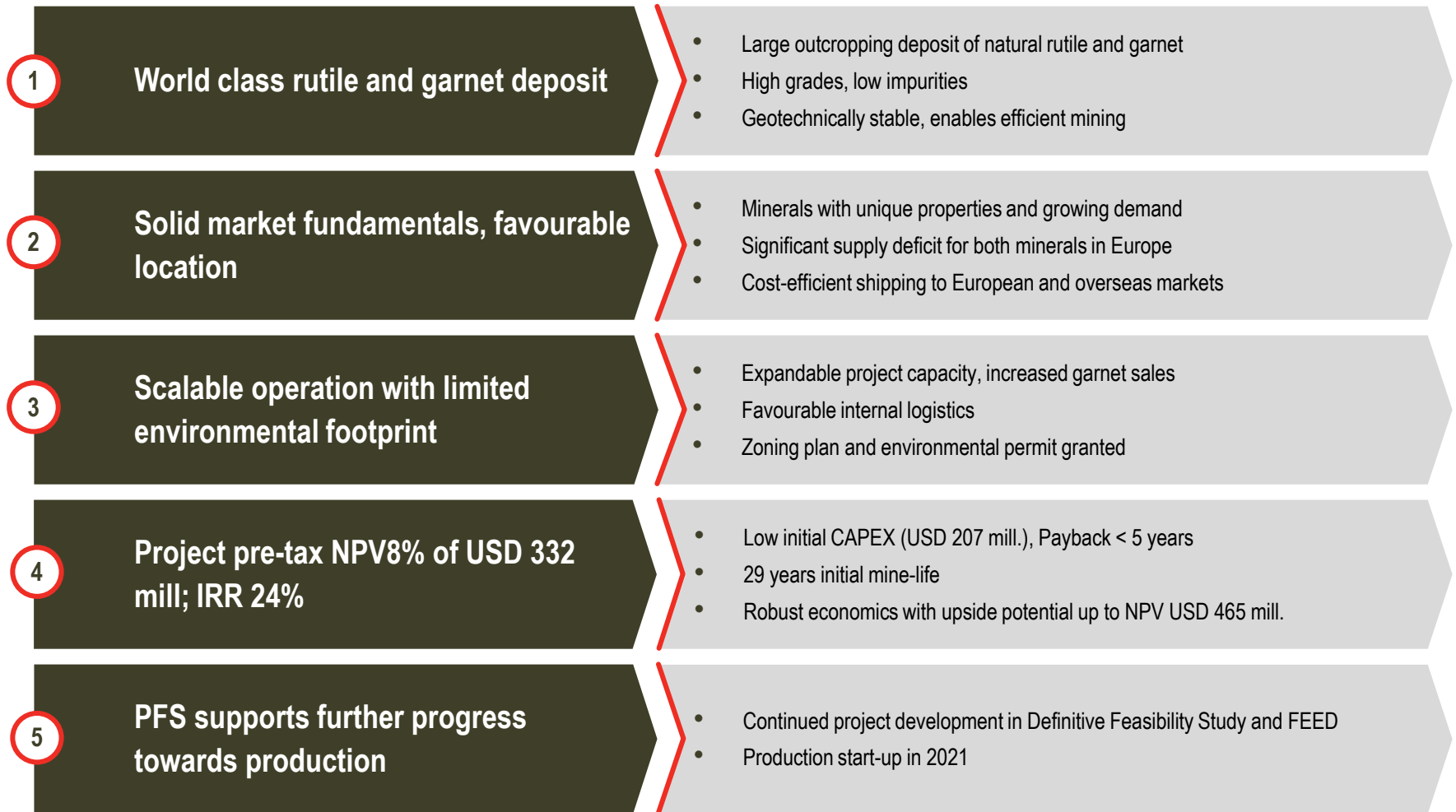


Engerbø Rutile and Garnet Project Prefeasibility Study

- ✓ Published on October 30, 2017
- ✓ Full report available on company website www.nordicmining.com



Summary of the Engebø Prefeasibility Study (PFS)



1

World class rutile and garnet deposit

2

Solid market fundamentals, favourable location

3

Scalable operation with limited environmental footprint

4

Project pre-tax NPV8% of USD 332 mill; IRR 24%

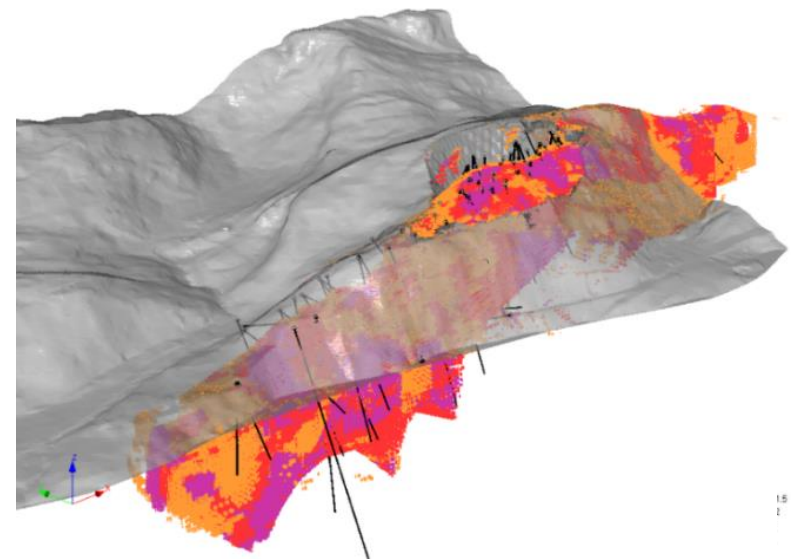
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PFS supports further progress towards production



Large eclogite deposit located at tidal waters

- ✓ Outcropping deposit with unknown extension to depth
- ✓ Geotechnically stable orebody allows for effective mining
- ✓ Low impurities, negligible content of heavy metals and radioactive elements
- ✓ Easy transition from open pit to underground mining



15



High grade rutile and garnet mineralisation

Mineral resource and reserves classification*

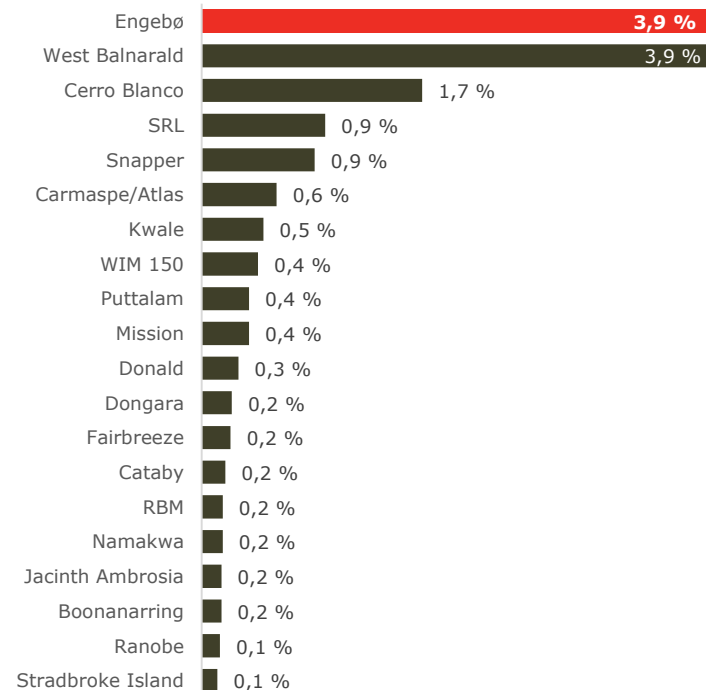
- ✓ Increased cut-off implies stronger financial performance in early mining years
- ✓ Large potential in inferred resources

	3% cut-off grade		
	Tonnage Mt	TiO ₂ %	Garnet %
Measured	15	3.97%	44.6%
Indicated	78	3.87%	43.6%
Measured & indicated	93	3.89%	43.7%
Inferred	138	3.86%	43.5%

	Ore reserves		
	Tonnage Mt	TiO ₂ %	Garnet %
Proven	10.194	3.81%	43.4%
Probable	31.702	3.35%	39.5%

Among the highest rutile grades

- ✓ Rutile grade for current producers and planned projects



* Resource estimates and reserve statement completed by Competent Person Adam Wheeler, corresponding to the guidelines of the JORC Code (2012 edition).



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Rutile and Garnet - unique mineral properties, increasing demand

Garnet

Current world production: ~ 1.4 million tonnes



WATERJET CUTTING



SAND BLASTING



ABRASIVES



Tests have demonstrated that Engebø can produce coarse and fine garnet suitable for a broad range of applications

Rutile

Current world production: ~ 0.8 million tonnes



PIGMENT



WELDING RODS



TITANIUM

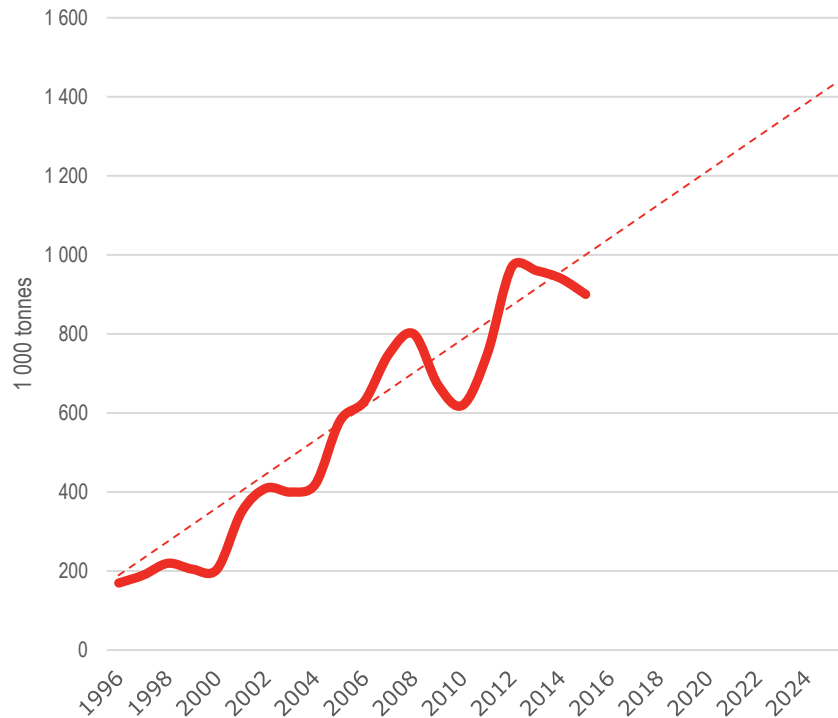


Tests have demonstrated that Engebø can produce 95% TiO₂ rutile suitable for pigment and titanium metal

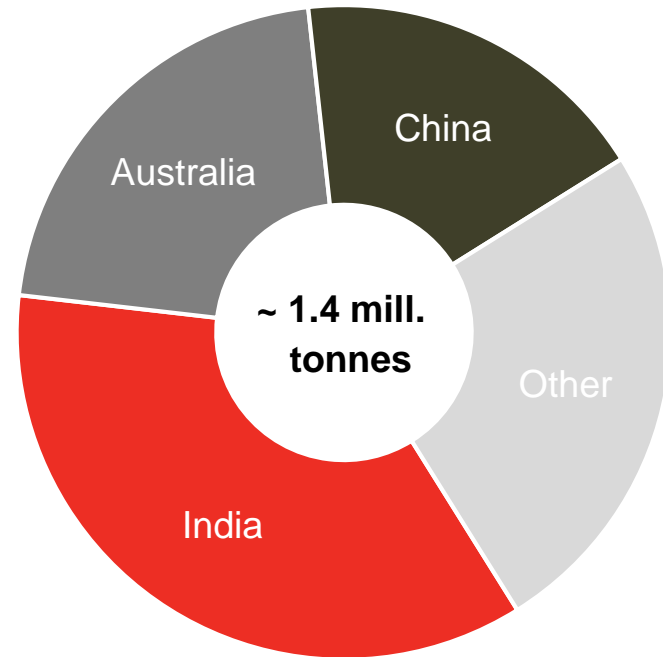


Garnet - young mineral with strong growth

Apparent consumption of garnet (excl. China)*



Current world production*

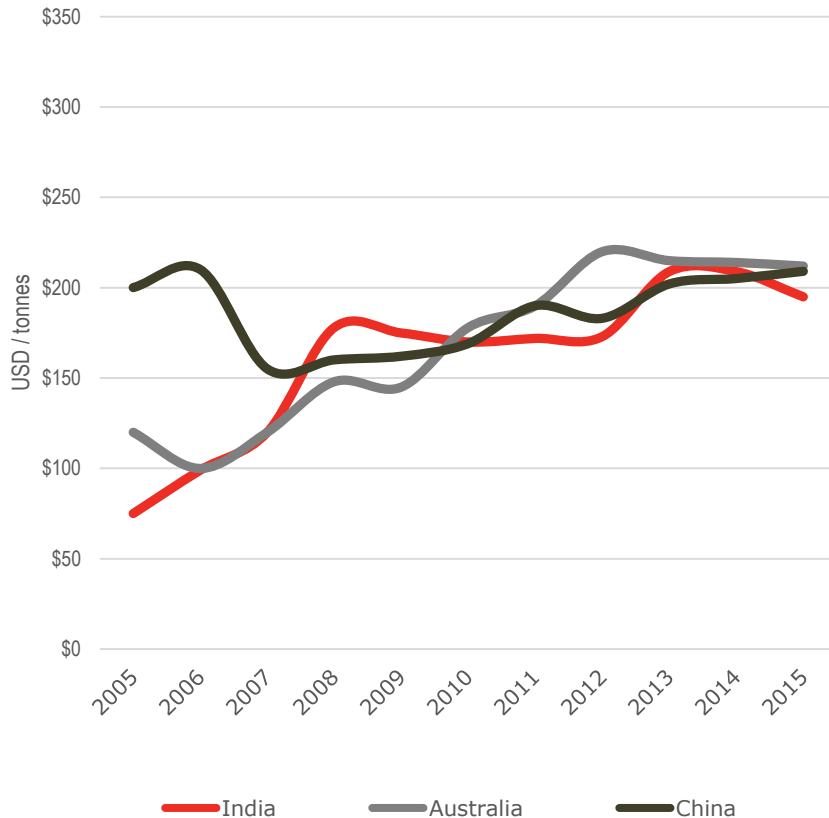


* Source: TAK Industrial Mineral Consultancy



Garnet market and price forecast

Average garnet export prices (FOB)*



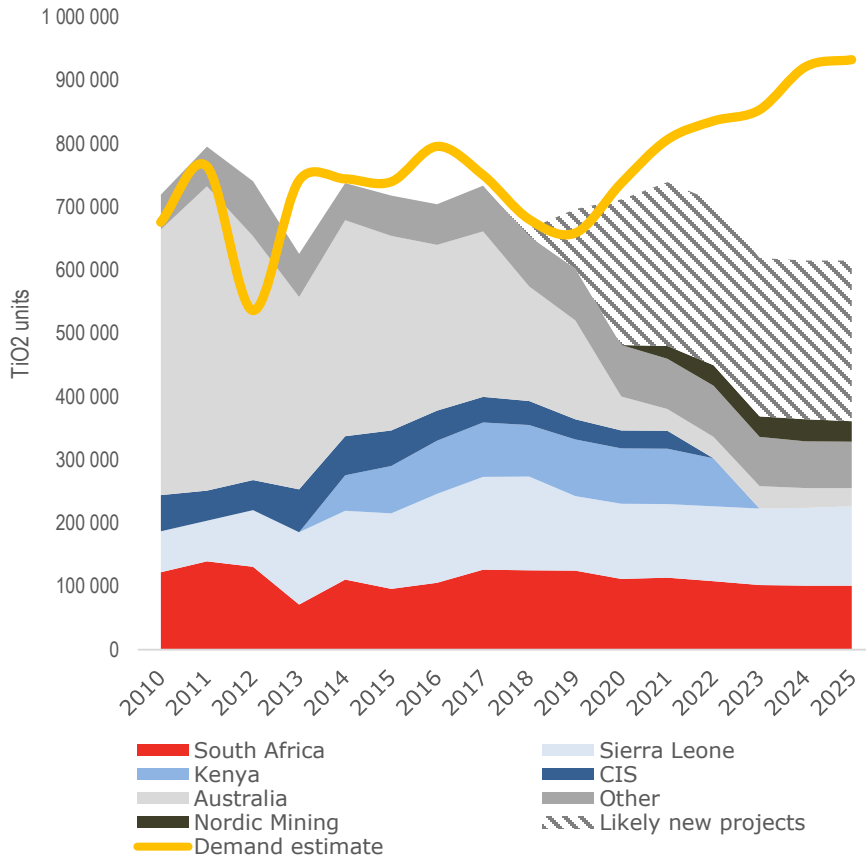
- ✓ Emerging mineral with strong growth in the waterjet cutting markets
- ✓ Currently no European production
- ✓ Engebø is one of few hard rock deposits of almandine garnet
- ✓ Engebø will produce commercial end-products:
 - 80 mesh waterjet
 - 100 mesh waterjet
 - 30/60 mesh blast market
- ✓ PFS garnet price assumption of USD 250/tonne in real terms based on a basket of the three products

* Source: TAK Industrial Mineral Consultancy

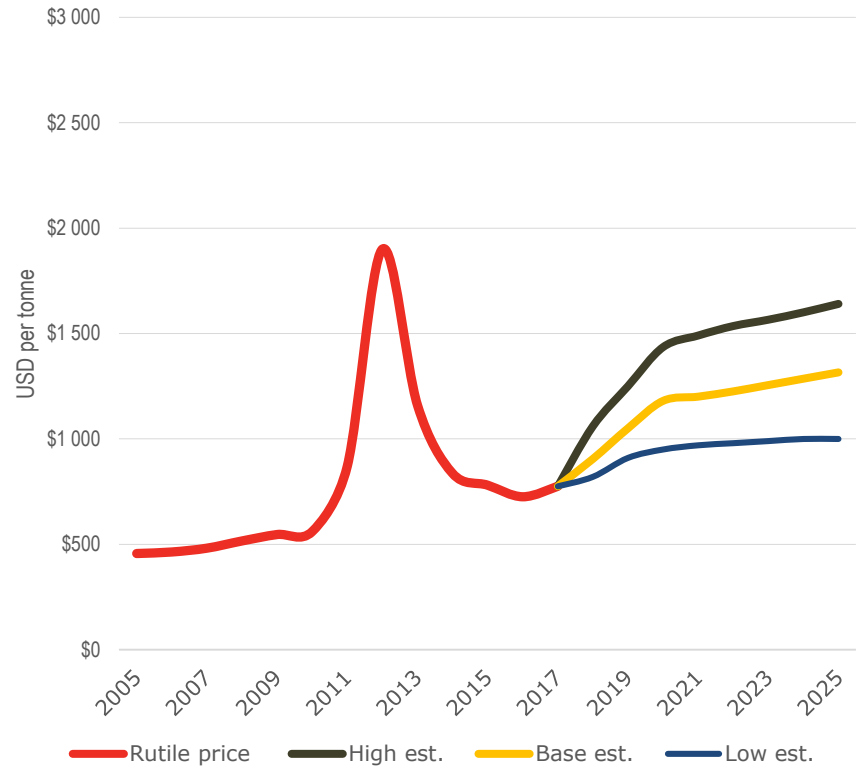


Rutile market and price forecast

Global rutile supply/demand balance*



Rutile price forecast*



PFS price assumption of USD 1 070/tonne in real terms corresponds to Base estimate in the figure

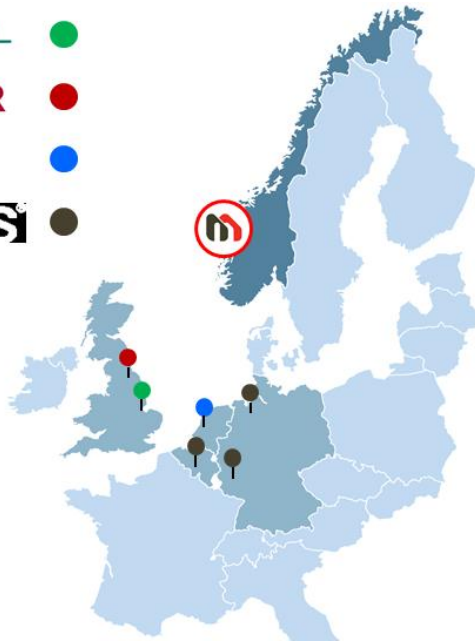
* Source: TZMI



Export sales from Engebø

Rutile off-take

- ✓ The largest pigment manufacturers in Europe have chloride technology that benefits from high grade feedstock
- ✓ Several can consume Engebø's annual volume
- ✓ Plant-to-plant shipment
- ✓ Logistical and freight cost advantages



Garnet off-take

- ✓ Nordic Mining has signed a MoU with a leading, international producer of industrial minerals
- ✓ The parties intend to establish long-term cooperation within development, production, sales, marketing and distribution of garnet products from Engebø



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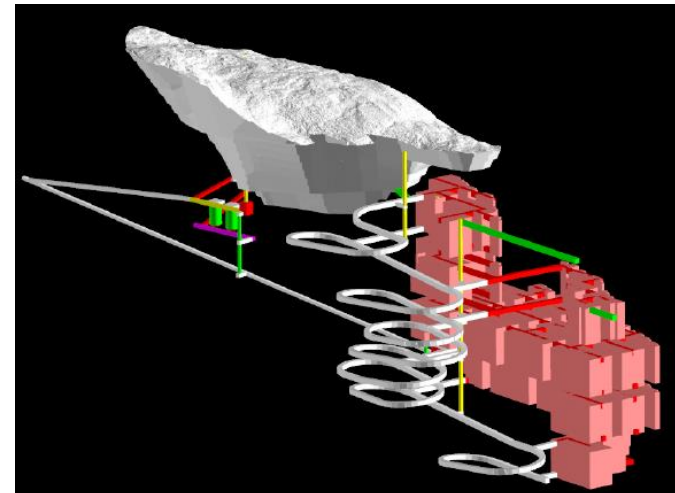
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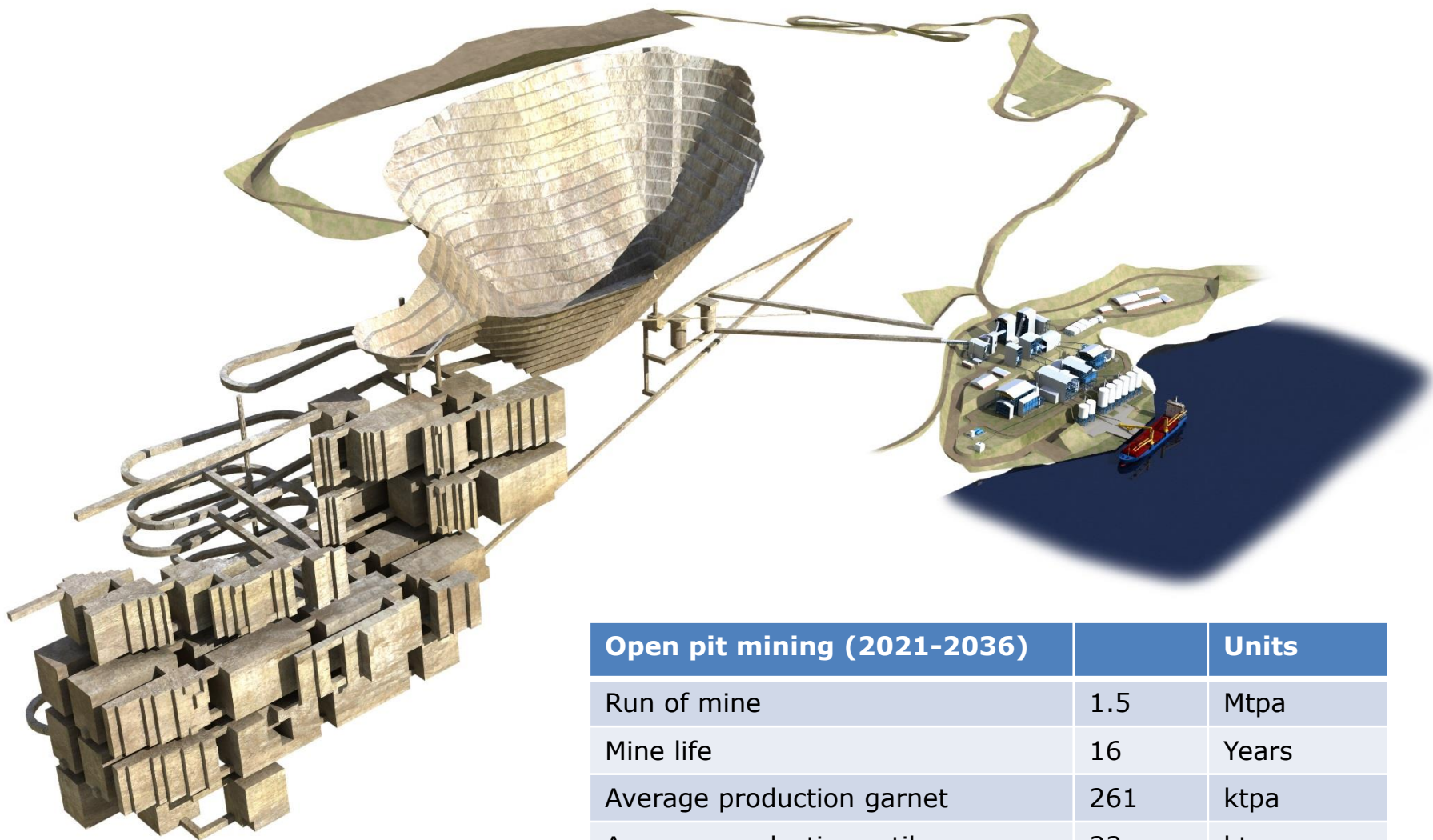
PFS supports further progress towards production



Favourable internal logistics

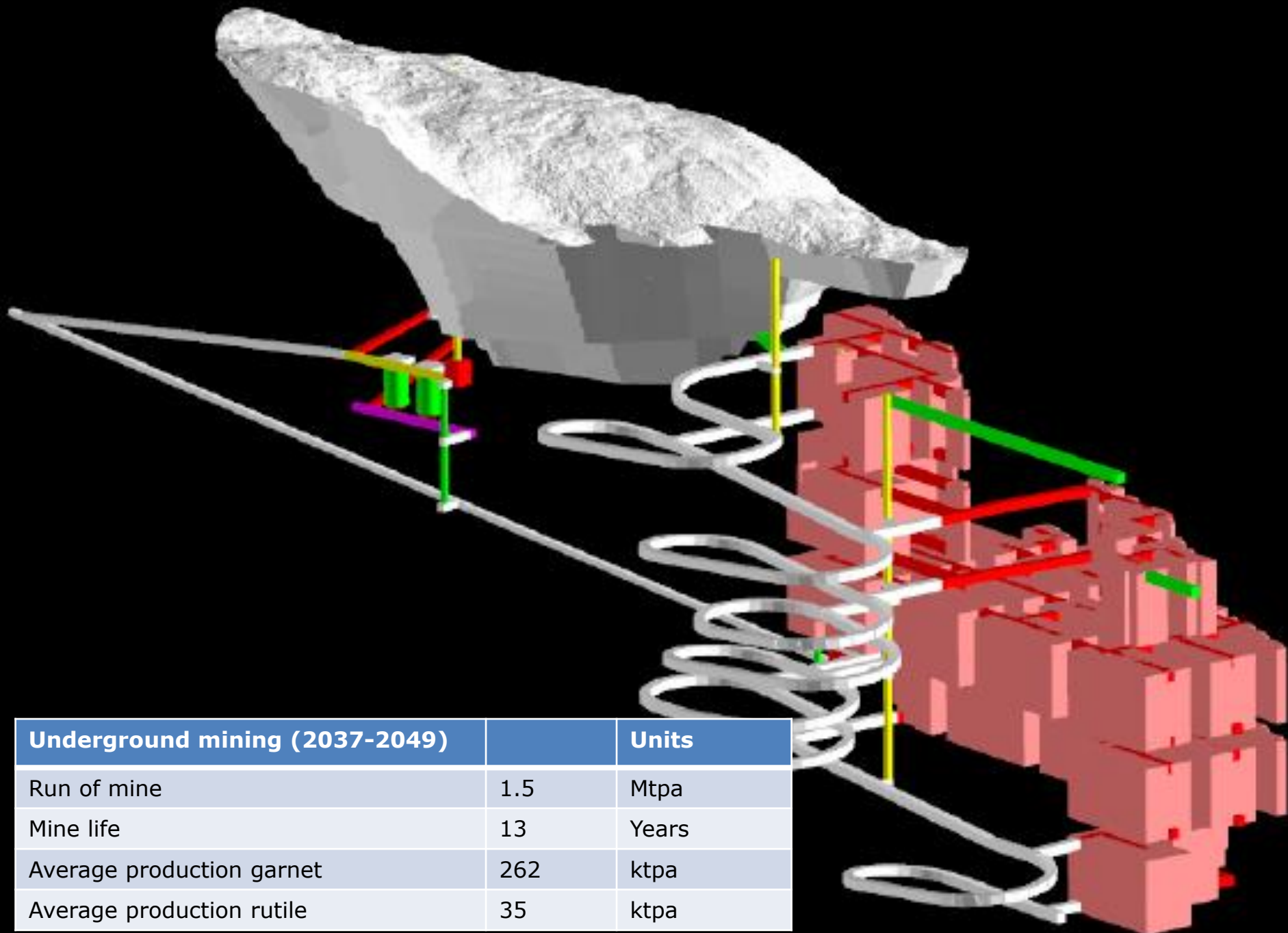
- ✓ 16 years open pit mining
- ✓ Rich ore in the early years
- ✓ Low stripping ratio
- ✓ Glory hole concept with underground crushing facility
- ✓ Underground silos enables storage and operational flexibility
- ✓ Minimum haulage distance
- ✓ Limited visual impact
- ✓ Open pit gives easy access to underground ore





Open pit mining (2021-2036)		Units
Run of mine	1.5	Mtpa
Mine life	16	Years
Average production garnet	261	ktpa
Average production rutile	33	ktpa
Strip ratio	1.34	Waste/ore





Underground mining (2037-2049)		Units
Run of mine	1.5	Mtpa
Mine life	13	Years
Average production garnet	262	ktpa
Average production rutile	35	ktpa

PFS process testwork; industrial scale equipment

- ✓ Comprehensive testwork has documented commercial products from rutile and garnet according to market specifications
- ✓ Testwork has demonstrated rutile recovery of approximately 60%



HATCH

ihc ROBBINS

JKtech
SMI
Technology Transfer

SGS


MINTEK

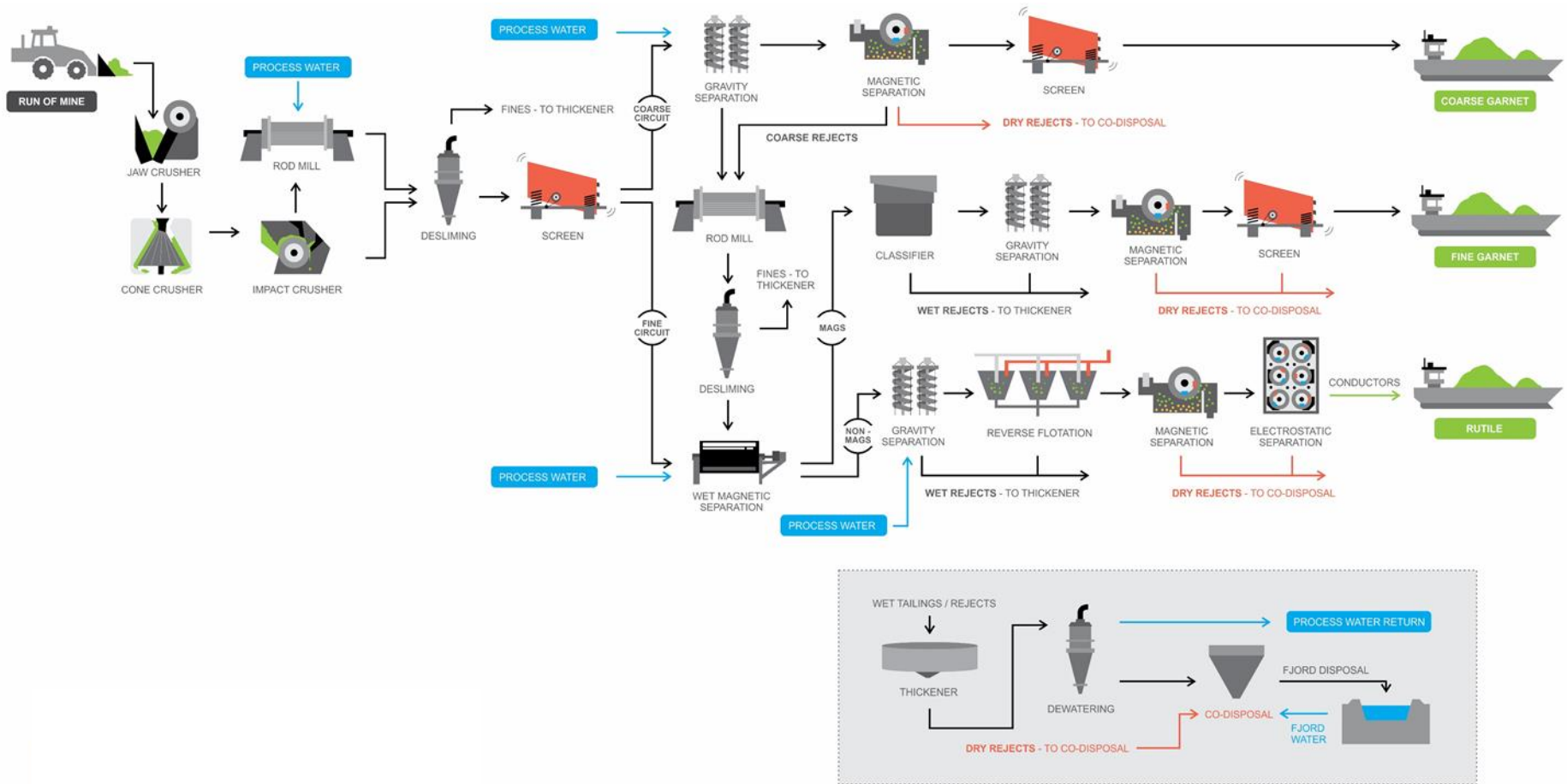
IMSV
ENGINEERING

CORE 

 **Mineral
Technologies**
A Downer Company

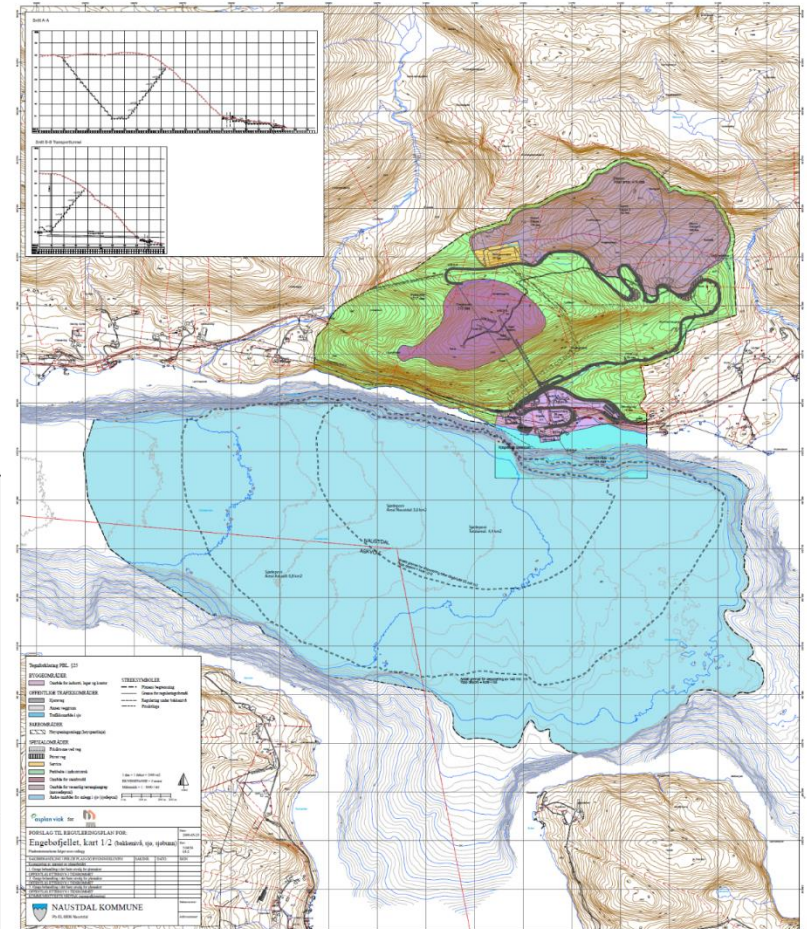
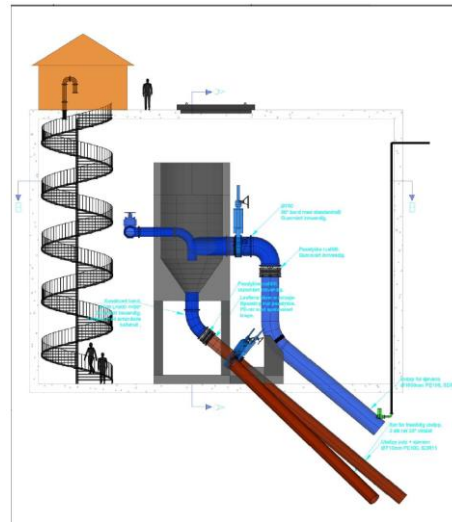
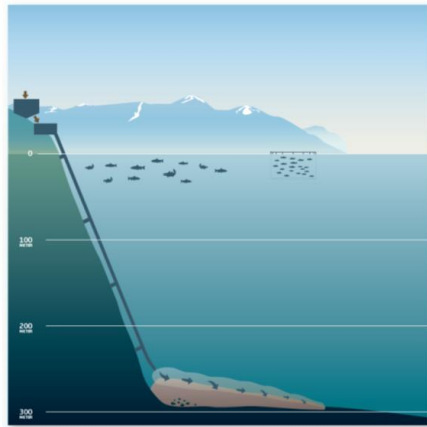


Flowsheet of rutile and garnet process



Zoning plan and environmental permits fully granted

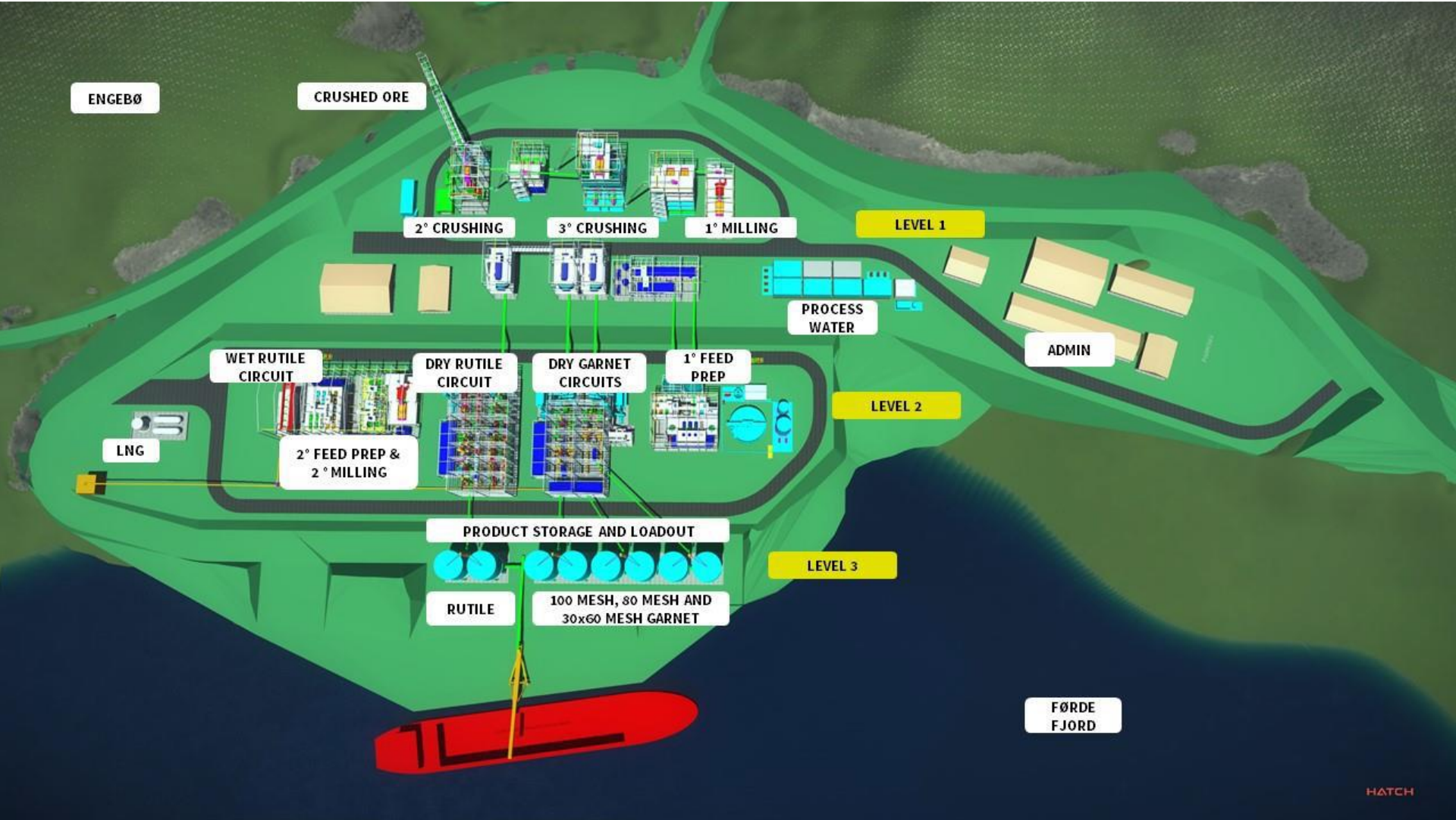
- ✓ Deep-sea disposal offers safe and sustainable tailings solution
- ✓ The tailings will mainly sediment within the regulated area
- ✓ The currents in the tailings area are moderate and there is limited risk for erosion currents
- ✓ Continuous monitoring of the sea disposal will be implemented



Permits allows for future capacity expansions



Compact process plant, including ship-loading facilities



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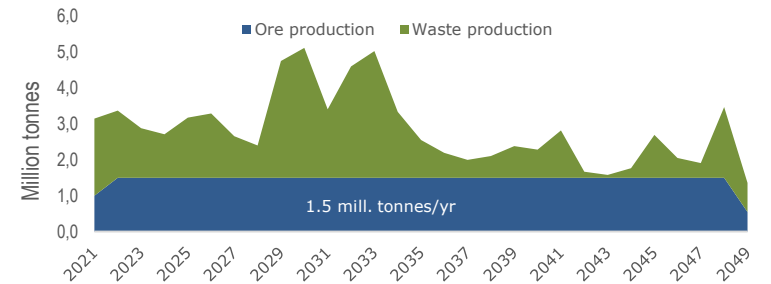
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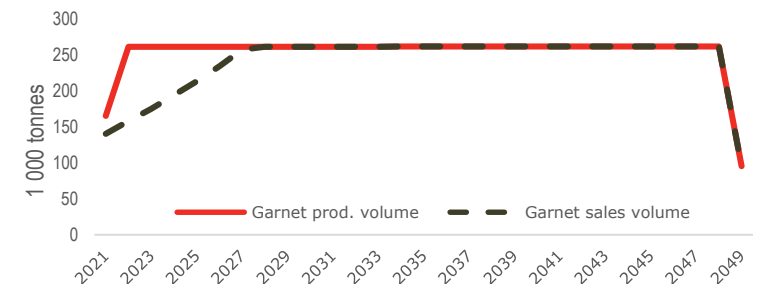
Key project assumptions

Assumptions	Value
Garnet price	USD 250/tonne
Rutile price	USD 1 070/tonne
Garnet sales (from ~2027)	261 000 tpa
Rutile sales (average)	32 500 tpa
Opex per sales tonne ¹⁾	USD 87 per tonne
Capex 2019-2021	USD 207 mill.
Open pit mining and comminution	26.8
Mineral processing and tailings handling	68.6
Infrastructure, storage and loadout	35.7
Indirects	41.8
20% contingency	34.2
Deferred capex 2033	USD 17 mill.
Underground mining and comminution	10.8
Indirects	2.7
25% contingency	3.4

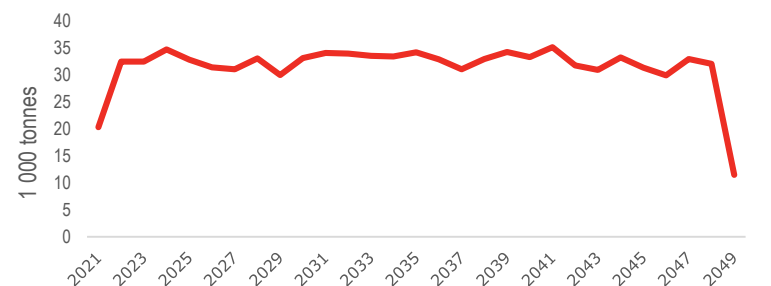
Mining production



Garnet sales and production volume



Rutile sales and production volume

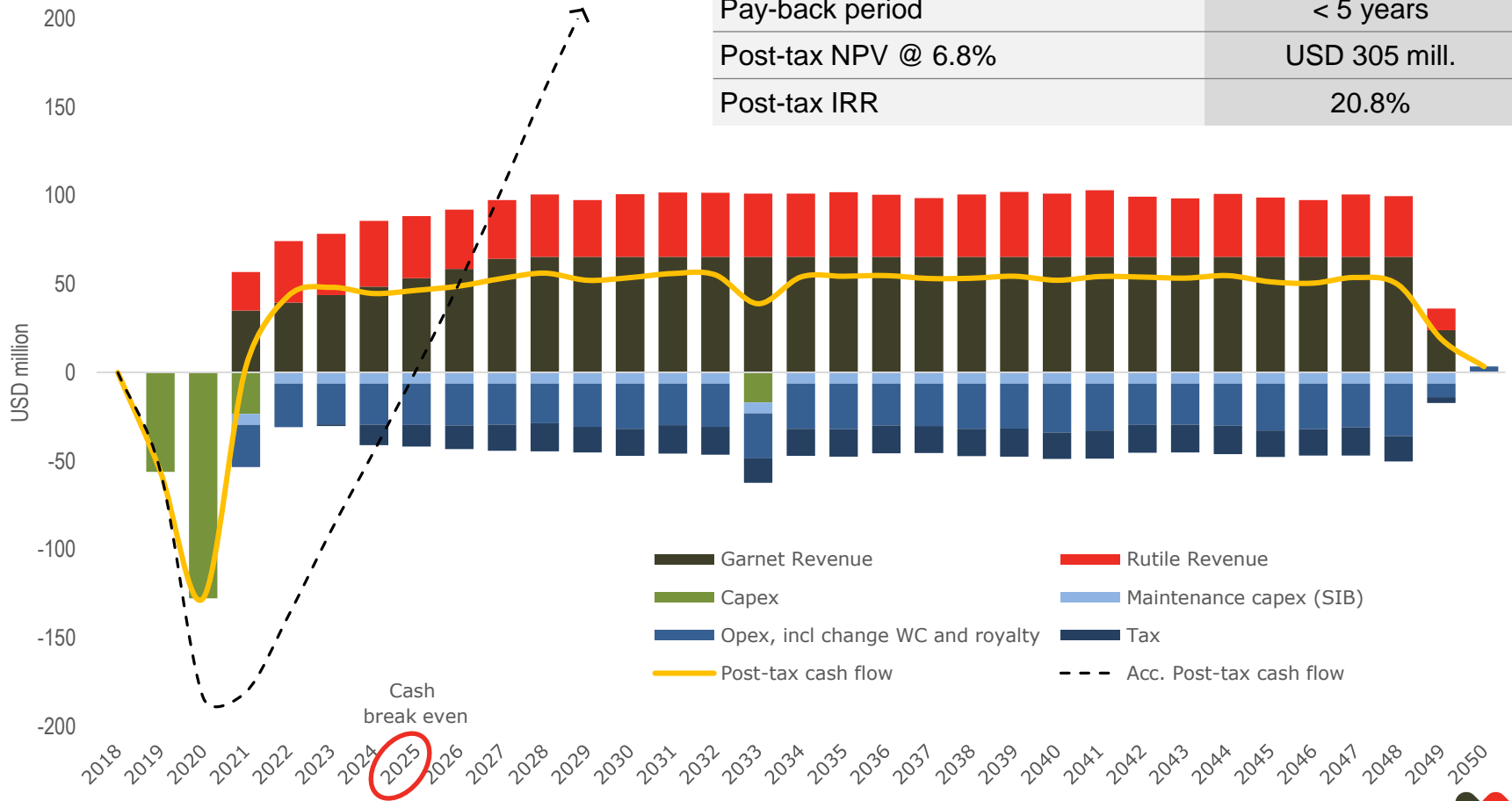


1) Based on total sales volume for rutile and garnet



Attractive project economics

Metric	Value
Pre-tax NPV @ 8%	USD 332 mill.
Pre-tax IRR	23.8%
Life of mine	29 years
Pay-back period	< 5 years
Post-tax NPV @ 6.8%	USD 305 mill.
Post-tax IRR	20.8%

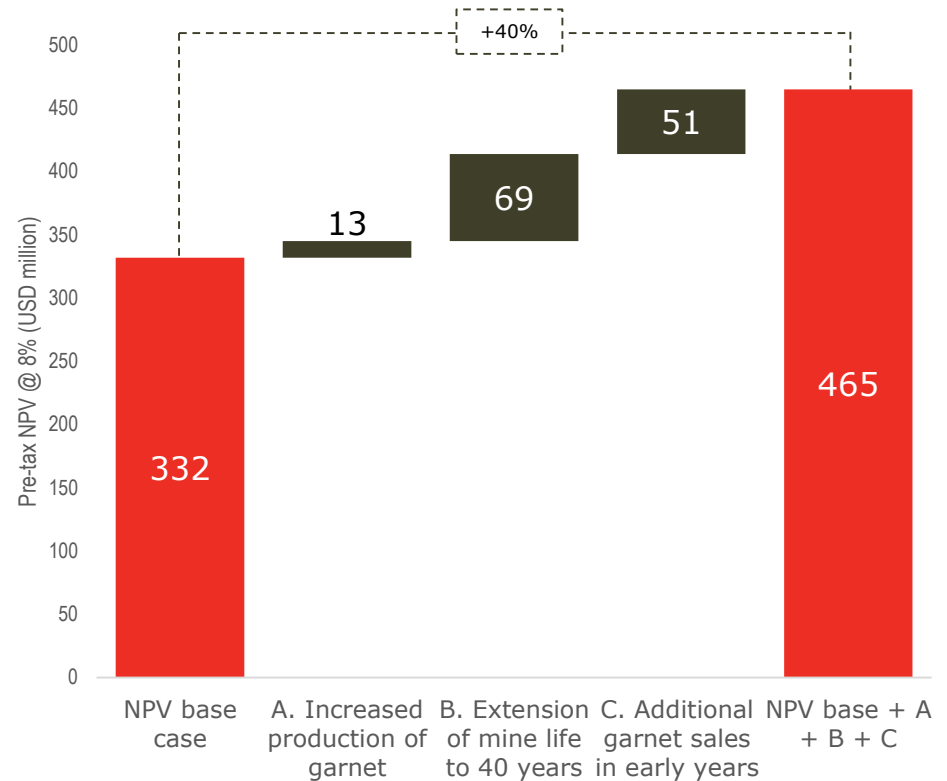


Post-tax cash margin of 55%



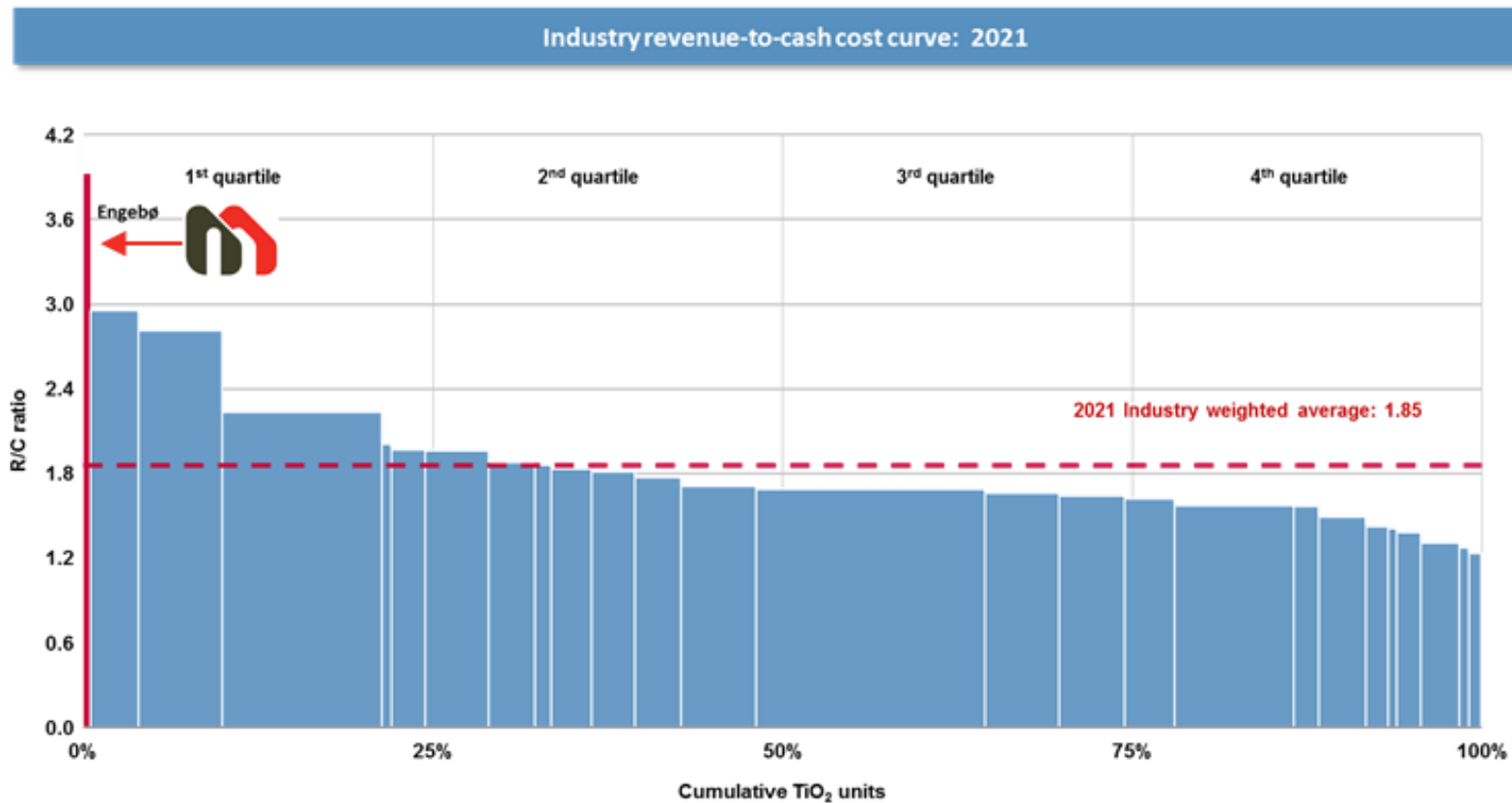
Large upside potential

- A.** Increased production of garnet to 300 000 tonnes/year
- B.** Extension of mine life to 40 years by including Inferred Resources
- C.** Additional garnet sales in early years



Competitive rutile revenue-to-cash cost position

- ✓ The revenue-to-cash cost ratio is based on the first ten years of operations
- ✓ Engebø benefits from producing two high value products with low mining and processing costs



Source: TZMI



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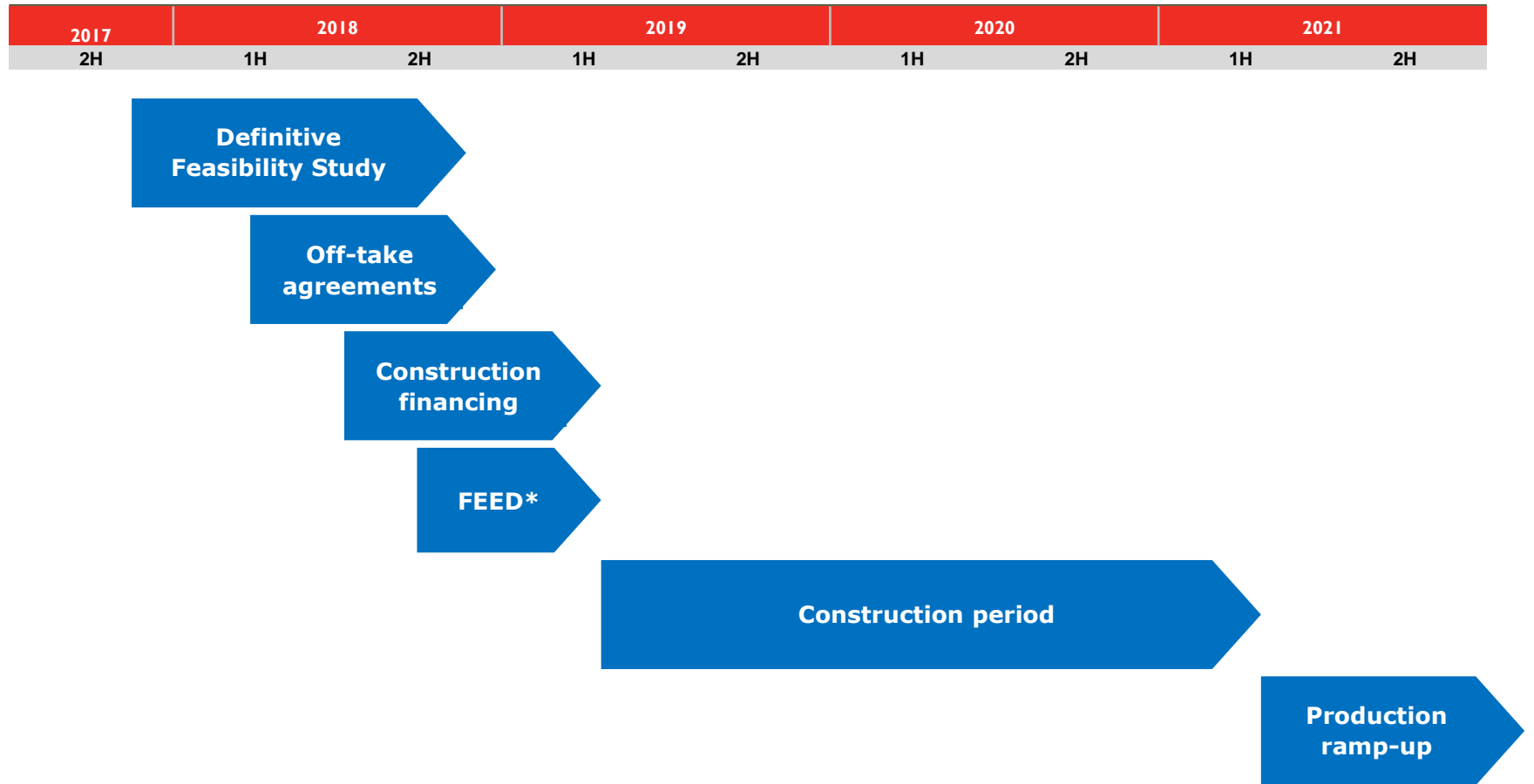
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PFS supports further progress towards production



The way forward



* FEED: Front End Engineering & Design




Definitive Feasibility Study (DFS) targets project bankability

- ✓ Mining trade-off studies, mine design and schedule
- ✓ Processing testwork, ore variability and flowsheet optimisation
- ✓ Modularisation and logistical studies
- ✓ Procurement strategy and procurement operating plan
- ✓ Multi-disciplinary design and engineering work
- ✓ Project Execution Plan (PEP) and Construction Schedule
- ✓ Risk assessment
- ✓ Building "Owners team" including local project team
- ✓ Cooperation and anchoring with local society



Promising results from the Prefeasibility study

- 
- ✓ Robust dual-mineral operation with high-quality garnet and rutile
 - ✓ Low investments
 - ✓ Attractive project economics

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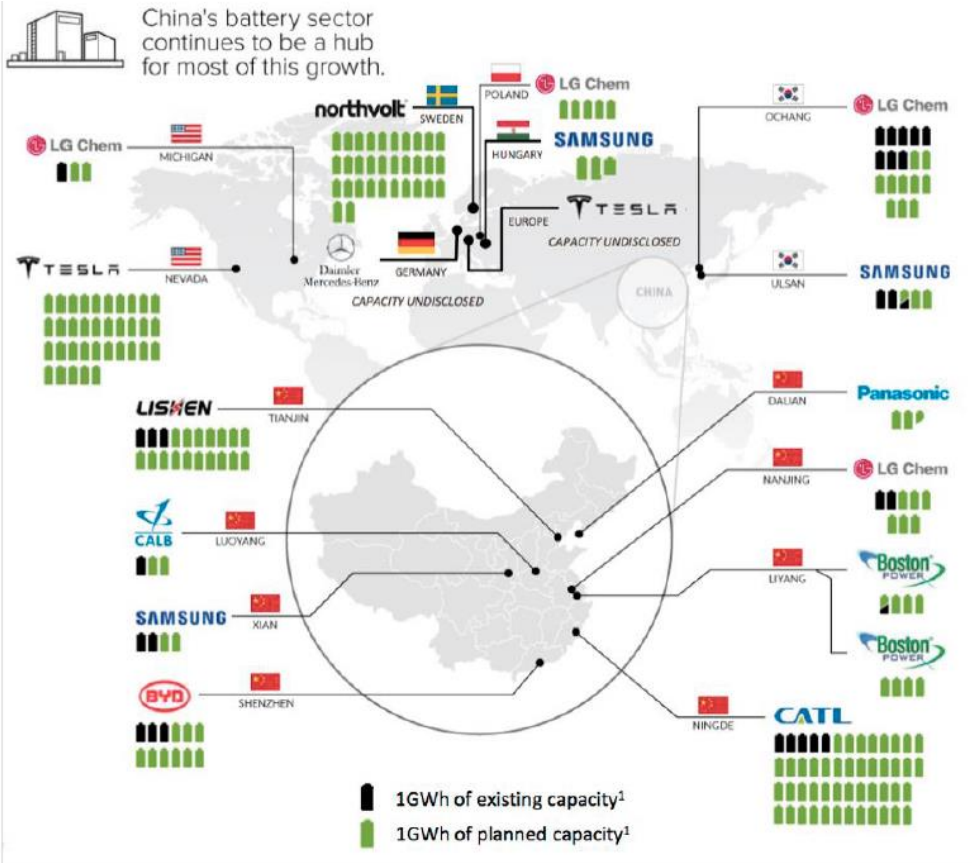


KELIBER - Lithium Mining for Rapidly Growing Markets

High-Purity Lithium Carbonate for Sustainable Energy



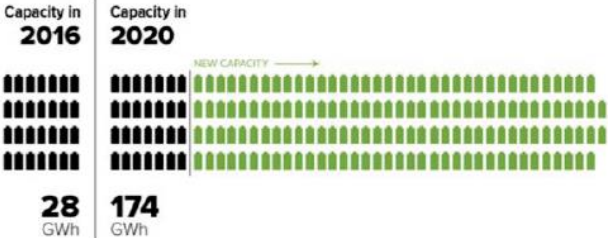
Lithium-ion battery megafactories under way



New lithium battery projects have been announced in Europe by SDI Samsung (Hungary), Daimler (Germany), Nissan (UK), Northvolt (Sweden), LG (Poland) and Tesla (location TBD)

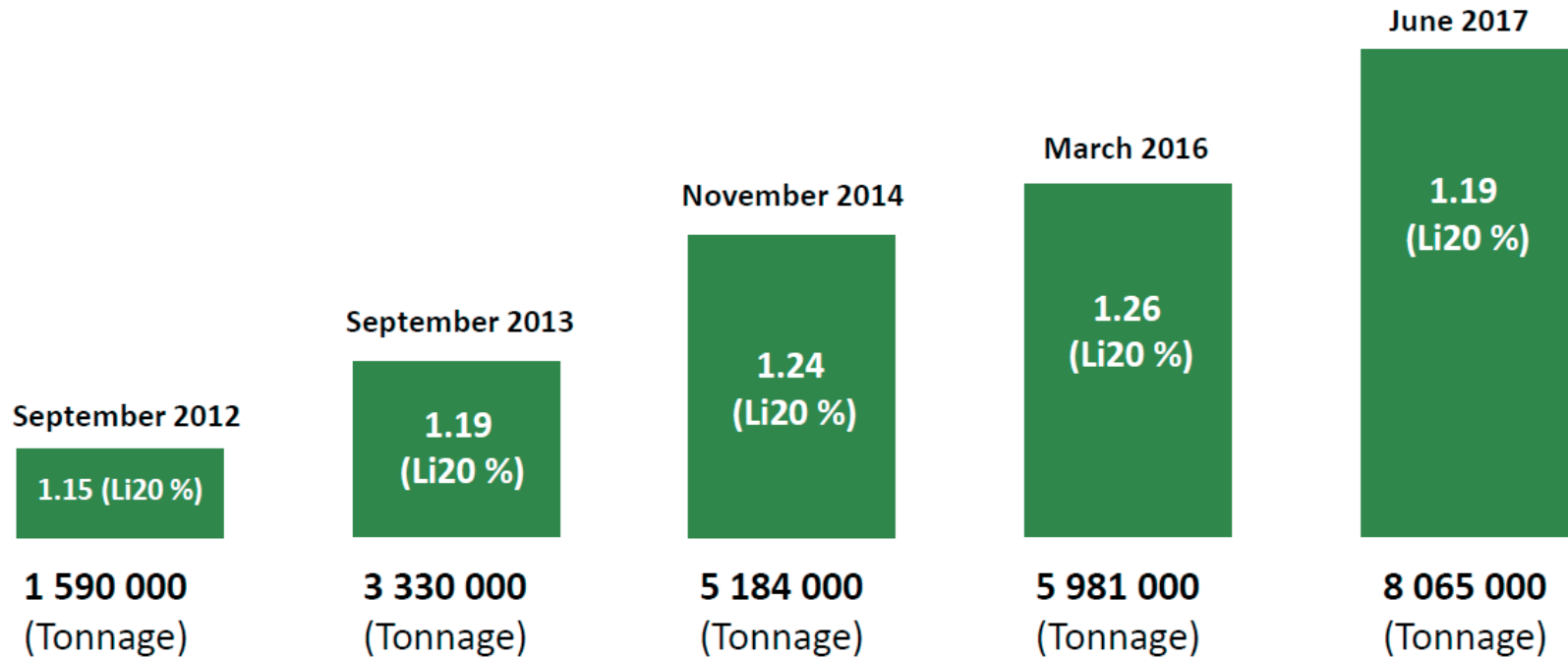


Global lithium-ion battery production capacity will increase by **521%** between 2016 and 2020.



Active resource exploration during recent years

Mineral Resources (0.5 % Li₂O cut-off)



Estimates prepared by Competent Persons in accordance with 2012 JORC code



Keliber is progressing towards production

Tentative timeline for the next stages	2017	2018	2019	2020
Permitting (environmental, mining and other)		■	October 2017 – April 2018	
Basic Engineering		■	October 2017 – April 2018	
Detailed Engineering			■	May 2018 – March 2019
Main equipment purchases			■	June 2018 – September 2018
Start of Earth works			■	September 2018
Civil construction		September 2018 – 2019	■	
Main Equipment Installation		May 2019 – January 2018	■	
Commissioning and testing			January 2020 – May 2020	■

Production estimated to start early 2020



Industrial and institutional owners on top in Keliber

	Total number of shares	Percentage
Nordic Mining ASA	239,044	22.1
Tesi Industrial Management Oy	190,662	17.6
Ab Mine Invest Oy	97,527	9.0
Keskinäinen Eläkevakuutusyhtiö Ilmarinen	70,929	6.6
Thominvest Oy	68,683	6.4
Jorma Takanen	63,123	5.8
Osuuskunta PPO	60,000	5.6
Case Invest Oy	59,547	5.5
Jussi Capital Oy	35,010	3.2
Eero Halonen	20,000	1.9



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Safety – Environment - Innovation



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MINING**

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