TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 INTRODUCTION

The Cinovec Project in the Czech Republic is a strategically important, vertically integrated battery metals project that contains Europe's largest hard-rock lithium resource. A joint venture between European Metals Holdings (EMH) and the Czech 70% state-owned energy company ČEZ, the Project aims to establish a secure, low-carbon lithium supply chain, predominantly for the European electric vehicle (EV) market.

2 PROJECT HIGHLIGHTS

2.1 Summary

- Location: The Cinovec deposit is located near the Czech-German border, 100 kilometers northwest of Prague.
- Project scope and strategy: The Project's strategy involves a fully vertically integrated supply chain, from underground mining of the lithium ore to the production of battery-grade lithium carbonate, within the Czech Republic. The processing plant will be located on the site of the former Prunéřov (EPR1) coal-fired power station, which offers excellent infrastructure for road and rail transport, power, gas and water connections. This location also supports the Czech government's strategy to develop former coal industry sites.
- Resources: Cinovec is the largest hard-rock lithium resource in Europe and the eighth largest non-brine deposit globally. As of November 2025, the total mineral resource was estimated at 748 million tonnes at an average grade of 0.40% Li_2O. The lithium is contained in the mineral zinnwaldite.
- Production: When operating at steady state, the Cínovec Project will process approximately 3.2 Mtpa of ore, with an average annual production (full production years) of 37.5kt of battery grade lithium carbonate.
- European importance: Cinovec's strategic importance has been recognised by the European Union under the Critical Raw Materials Act (CRMA), one of the benefits of which is to streamline the permitting process.
- Partnership and funding: The Project is operated by Geomet s.r.o., a joint venture with 51% held by ČEZ and 49% by EMH.
- Secured European supply chain: As the largest hard-rock lithium resource in Europe, Cinovec will provide a reliable, local source of battery-grade lithium chemicals. This reduces Europe's reliance on overseas imports and strengthens the regional EV industry.
- Proximity to end-users: Its central location in the Czech Republic, near Czech and German automakers and European cathode and battery manufacturers, significantly shortens transport distances for materials, improving logistics and reducing supply chain carbon emissions.

2.2 Key Project Metrics

Table 2.1: Key Project Metrics

Physicals					
Measured, Indicated and Inferred Resources (Mt)		747.54			
Proved and Probable Ore Reserves (Mt)		54.40			
Mine Life (Years)		27.5			
Production Life (Years)		25.17			
Annual Crusher Feed (tonnes)		3.18 M			
FECAB Li Units Recovered (tonnes)		180,440			
Total Ore - Li Grade		0.27%			
Li2CO3 – Life of Mine Tonnes		869,941			
First 5 Full Production Years	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Ore Mined (million tonnes)	2.54	2.86	3.20	3.20	3.21
Ore Grade (% Li_2O)	0.57%	0.59%	0.59%	0.59%	0.62%
Ore Grade (%Li)	0.265%	0.272%	0.273%	0.276%	0.287%
$Li2CO_3$ Tonnes per annum	28,824	33,583	37,580	38,010	39,747
Project Economics (Real)					
Costs (USD)		**LOM (000's)**	**Li2CO3/t**		
Total C1 Costs		10,863,328	12,492		
All-in-Sustaining Cost		11,810,306	13,581		
Initial Capex		2.164.880	2,489		
Sustaining Capex		498,710	461		
Cashflow (USD)			**Ex Grant**		**Incl. Grant**
Price for Li2CO3 (Tonne)			***26,000***		***26,000***
LOM Net Revenue (000's)			22,610,448		22,610,448
LOM EBITDA (000's)			11,219,043		11,219,043
Returns					
Pre Tax NPV (8% Disc. Rate)			1,348,315		1,715,785
Pre Tax IRR (8% Disc. Rate)			13.1%		15.2%
Post Tax NPV (8% Disc. Rate)			802,496		1,135,356
Post Tax IRR (8% Disc. Rate)			11.2%		13.2%

3 PROJECT OVERVIEW

3.1 Overview

The Cínovec Project is located in the Ústí nad Labem region of the Czech Republic (Czechia), approximately 100 km northwest of Prague, the capital. The Cinovec deposit itself is located within the historical Cínovec-Zinnwald mining district of the Krusne hory (Ore Mountains), on the border between Czechia and Germany.

The primary objective of the Cínovec Project is to produce a battery-grade lithium carbonate product.

There are six distinct elements to the project:

- An underground mining area accessed via a twin decline system and associated surface mining infrastructure and mining waste disposal facilities, located at a mine portal area in the vicinity of Cínovec village.
- An ore/backfill transport system employing an aerial conveyor between the mine portal and a bulk materials handling station located at Dukla, near the regional town of Teplice and adjacent to the national rail network.
- At the Dukla bulk materials handling hub there are ore and tailings storage and handling facilities, for managing the transfer of ore onto the rail network for transport to the main processing plant site and the transfer of process tailings for use in backfill paste at the mine.
- An existing rail link running ~65 km between the Dukla hub and the site of the main processing plant.
- A processing plant located at the Prunéřov site, which was previously the site of a coal fired power plant, now demolished, known as EPR1. This site is also adjacent to the existing national rail network.
- A tailings storage facility located within the part-backfilled Doly Nástup Tušimice open pit coal mine (DNT), approximately 3 km by aerial conveyor / 8.5 km by road to the east of the processing plant site.

The combined operation is further summarised below.

- The overall production process consists of two processing plants: the Front-End Comminution and Beneficiation (FECAB) plant and the Lithium Chemical Plant (LCP).
- The front-end comminution infrastructure is located partly underground in the mine (primary and secondary crushing) and partly at the Prunéřov processing site (tertiary crushing, comminution and beneficiation).
- The run of mine (ROM) and mine backfill material (residue plus tailings from the processing plants) is transported approximately 7.3km between the mine portal and the Dukla transfer hub by means of a ROM / tailings bi-directional transfer system. An aerial conveyor system is specified for this duty.
- The ROM is transferred to rail wagons and transported to the processing plant at Prunéřov.
- The Prunéřov site includes all the bulk materials handling systems for ore receipt and tailings dispatch as well as a terminal for the receipt and storage of process reagents.
- The FECAB plant located at the Prunéřov site will deliver lithium-bearing concentrate, referred to as mica concentrate, to the LCP.
- The LCP takes the mica concentrate produced in the FECAB and refines it to produce battery grade lithium carbonate.

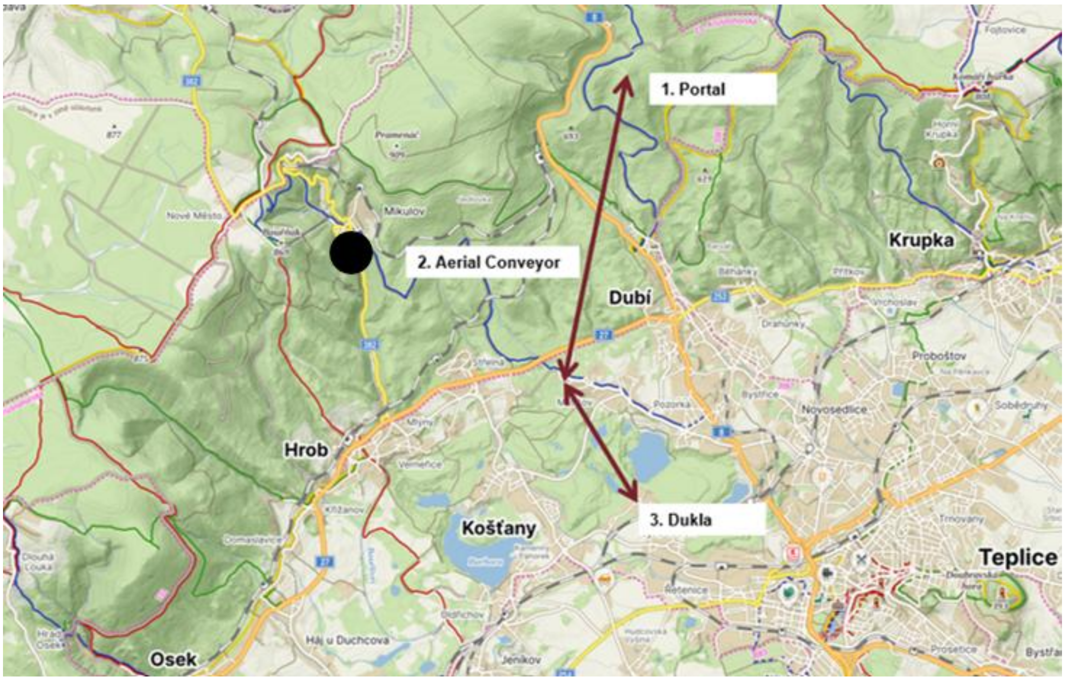


Figure 3-1: Aerial Conveyor - Portal to Dukla

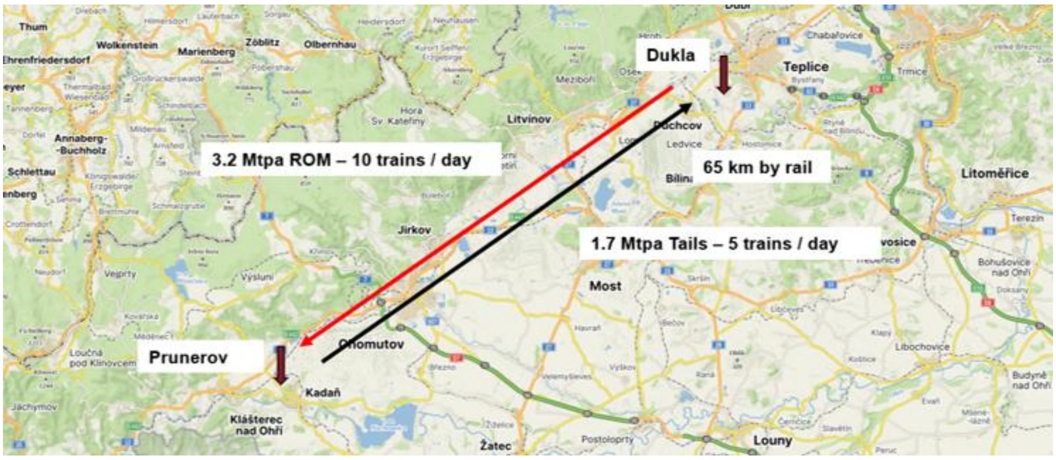


Figure 3-2: Dukla to Prunéřov rail operations

3.2 Consultants

The table below lists the key contributors to the DFS:

Table 3.1: Key Contributors to the DFS

Area	Lead Responsibility
Geology and Resource	Widenbar and Associates
Mining and Reserves	Bara Consulting
Process	DRA
Bulk materials Handling	DRA
On Site Infrastructure	DRA
Tailings	Knight Piesold
Aerial Conveyor	Specialist Vendor
Hydrology	ERM
Backfill	Patterson and Cooke
General Designer for Czech regulatory compliance	Afry
Rail	Afry
Noise Modelling	AkustProjekt
Mine Geotech	Middindi
Geotech	IGEO
Capital & Operating Costs	DRA / Bara Consulting
Financial Modelling	Model Answer

4 SOCIAL ENVIRONMENT AND PERMITTING

4.1 Stakeholder Engagement

The extent of the various elements of the project, from mining in the forested mountain area through to the aerial conveyance of the tailings for disposal at DNT, means that the Project will impact a wide variety of stakeholders with differing interests and opinions. As such, the importance of effective stakeholder engagement cannot be underestimated.

A stakeholder engagement plan, including a grievance process developed for the current stage of the project, has been compiled and has been implemented. The plan takes guidance from the Equator Principles, the IFC performance standards, the European Bank for Reconstruction and Development (ERBD) environmental and social policy and the Initiative for Responsible Mining Assurance (IRMA) principles. The plan is a working document which will be updated as the Project matures. The plan has identified the following external stakeholders;

- Residents of the towns and municipalities in or near which the Project will be developed, including Dubí (which includes the village of Cínovec), Košt'any, Újezdeček, Teplice, Kadaň and Málkov.
- Municipalities affected by the increased rail traffic on existing rail lines used for both light (passenger) services and heavy (coal) transport (17 different towns and municipalities have been identified).

- Landowners (both public and private).
- Relevant government departments (local, regional and national).

Indirect stakeholders include;

- Towns and municipalities within the labour catchment area for the Project, which is estimated as a driving distance of around 30 minutes from the various elements of the Project.
- Local entrepreneurs.

Ongoing stakeholder engagement has already influenced the design of the Project. Up until early 2024, the plan was to construct the processing plant for the Project at Dukla. Geomet conducted extensive stakeholder consultations with local residents, mayors and representatives of the Ústí Region and in April 2024 reached an agreement with representatives of the municipalities to relocate the processing plant to the Prunerov site, which is remote from any inhabited area.

Recent public engagement concerning the Project has been undertaken as part of the Rezoning and Environmental Impact Assessment (EIA) permitting applications, which are both ongoing.

The public concerns regarding the social and environmental impact of the Project will be fully addressed within the final EIA report, which is in the process of being prepared for the Project and is expected to be submitted to the Czech Ministry of Environment before the end of December 2025.

4.2 Environmental Impact Assessment (EIA)

The EIA is regulated by the Environmental Impact Assessment Act (No. 100/2001 Coll.) in the Czech Republic.

The EIA process is based on a systematic examination and assessment of the potential impact of a project on the environment. The aim of the process is to identify, describe, and comprehensively evaluate the anticipated impacts of the planned projects on the environment and public health in all relevant contexts and to mitigate the adverse environmental effects of implementation.

The current status of the EIA is as follows:

- The screening and scoping procedure conclusion for the mining part of the Project, including the mine portal area, was issued in August 2021, with the result that the Project will be assessed in the full EIA process. The requirements for the content of the EIA report were also established during this stage.
- The screening and scoping procedure conclusion for the processing part of the Project, including related infrastructure such as utilities connections, rail requirements; the Dukla bulk materials handling hub and the tailings storage facility was issued in June 2025, also with the result that the Project will be assessed in the full EIA process.
- A single, unified EIA report is currently being prepared for the entire Project and is expected to be submitted to the competent authority (Ministry of the Environment) by the end of 2025.

4.3 Permitting

The main Project permitting requirements include a rezoning (change of permitted land use) process, the EIA processes to obtain an environmental approval and two building permits, namely;

- A mining permit which includes determining the mining area and permission for mining and tailings disposal at DNT.
- A building permit which covers the construction of all surface infrastructure and is divided into the main construction areas (mine portal, Dukla and Prunéřov plant site) and specific construction activities such as roads, buildings, rail, pipelines etc).

Both the EIA processes and rezoning applications have commenced and are ongoing. The mining permit and building permits can only start once a decision is made on the rezoning and the EIA.

5 GEOLOGY, EXPLORATION AND RESOURCE

5.1 Geological Setting

The Cínovec deposit lies in the Krušné hory–Erzgebirge region at the northern border of the Bohemian Massif. In a regional sense, the Cínovec deposit is related to a composite partly hidden granite pluton approximately 6,000 km³ in size.

The deposit is hosted in the upper part of the Cínovec granite cupola. The Cínovec granite is a strongly fractionated, slightly peraluminous A-type granite. The upper part of the granite intrusion is characterised by increased content of zinnwaldite – a lithium-bearing mica. The base of the zinnwaldite granite sits on less fractionated biotite granite.

A longitudinal section across the Cínovec deposit is in Figure 5-1.

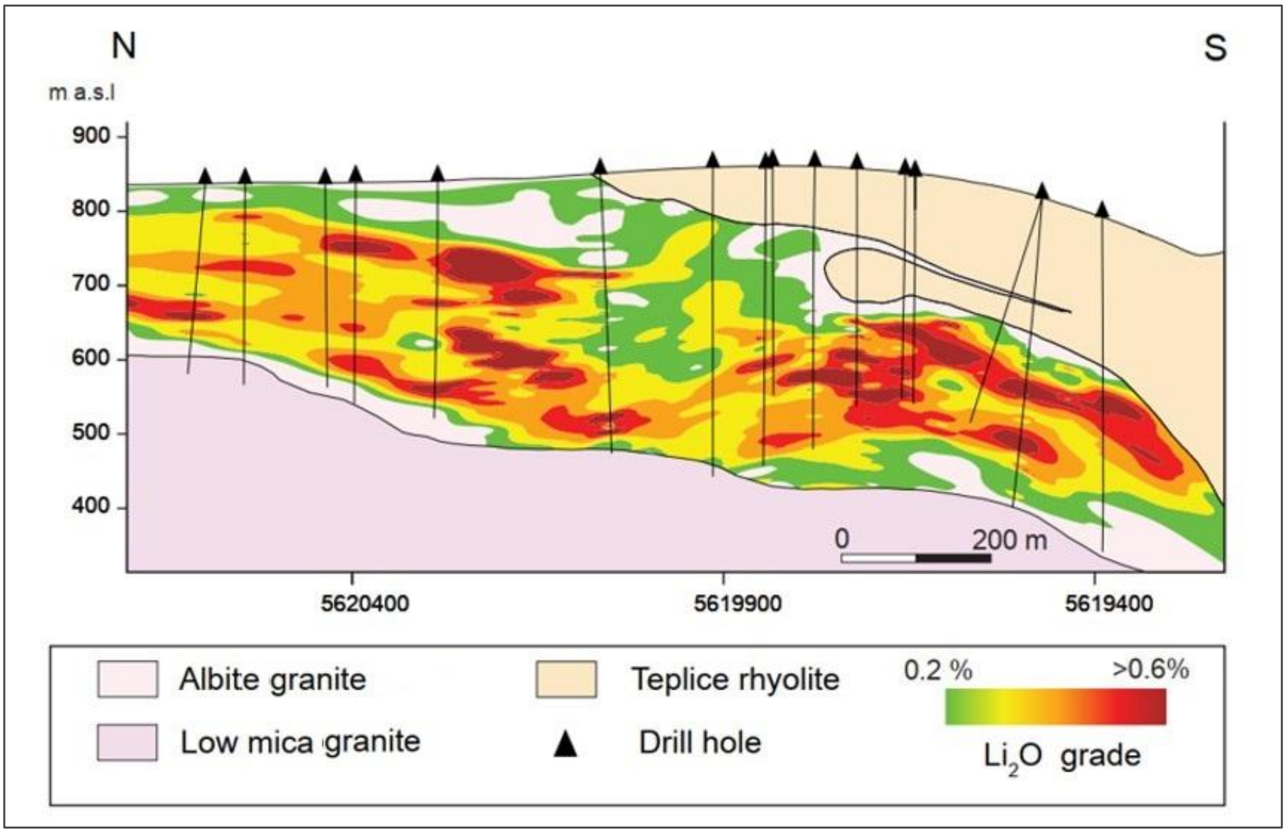


Figure 5-1: Longitudinal Section through the Cínovec deposit

5.2 Mineralisation and Deposit Type

Cínovec ore mineralisation can be divided into Sn-W quartz vein and Li-greisen associations. High-grade tin and tungsten veins that occur in the uppermost part of the Cínovec cupola were subject to historical mining. The grades of veins in places reached high percentages by weight of Sn and W, but their content was very heterogenous often consisting of barren quartz only.

The highest-grade lithium mineralisation is associated with the greisen – a secondary rock replacing granite, composed of zinnwaldite and quartz, with subordinate feldspar, fluorite and topaz.

Zinnwaldite ($KLiFeAl(AlSi_3)O_{10}(OH,F)_2$) is the dominant lithium-bearing phase. The lithium content in the greisen bodies is 0.3 wt.% to 1.0 wt.%, categorising the greisen bodies as a world-class lithium resource.

5.3 Exploration

The exploration history of Cínovec, particularly in its southern part, is very extensive. It comprises of both surface and underground drill holes as well as an exploration shaft with two levels of underground development at Cínovec South.

In 2010, Geomet was granted the first exploration licence at Cínovec for Sn, W and Li ores. This licence was followed in subsequent years by three more licences covering the deposit itself up to the German border and the deposit's surroundings, including the hidden granite intrusion towards the east and the area of the planned opening of the twin access declines.

5.4 Historical Drilling

During eight historical exploration stages, 1,119 diamond drill holes were drilled for a total of 95,882m including 1,009 underground drill holes with a total of 55,895m and 110 surface drill holes with a total of 39,987m.

The first exploration stage targeting Li took place in the early 1960s and comprised of the surface drill holes with a maximum depth of 720m, though one structural hole was drilled to 1,596m. Based on the results of this surface drilling programme covering a large area to the south of the old mine in a grid of approximately 250 x 250m, an underground exploration programme followed, targeting Sn-W-Li ore at the then newly-raised CII shaft.

An exploration programme in the central and southern zone of the deposit was concluded by a manual resource estimate. The JORC non-compliant resource of 52.9Mt at 0.194% Sn, 0.041% W, and 0.208% Li was added to the Czech State Balance Register in 1990.

5.5 Geomet's Drilling

Geomet completed eight drilling campaigns between 2014 and 2022 at its Cínovec, Cínovec II, Cínovec III and Cínovec IV exploration licences, comprising six exploration and resource drilling campaigns and two geotechnical drilling campaigns. A total of 77 exploration and geotechnical drill holes with an aggregate length of 21,312.5m were completed, with 10,086 samples analysed. Additionally, the ninth drilling campaign in 2023-2023 comprised 10 hydrogeological drill holes (1,221.5m totally).

The drilling programmes are summarised in Table 5.1 and Figure 5-2, which shows the locations of the drilling (historical and Geomet's) in the Project area across Geomet's concessions.

Table 5.1: Geomet's Drilling Programme Summary

Year	Area	No. of Drill holes	Total Length (m)	Purpose
2014	Cínovec South	3	940.1	Exploration, Resource Definition
2015–2016	Cínovec South	6	2,455.8	Exploration, Resource Definition
2016	Cínovec North	17	6,080.9	Exploration, Resource Definition
2017	Cínovec South	6	2,697.1	Exploration, Resource Definition
2018	Cínovec South	5	1,640.3	Exploration, Resource Definition
2018	Box Cut	5	191.3	Geotechnical
2020–2021	Cínovec South	23	6,941.5	Exploration, Resource Definition
2022	Decline	2	365.3	Geotechnical
2023-2024	Cinovec	10	1,221.5	Exploration, Hydrogeological
TOTAL		**77**	**22,534**	

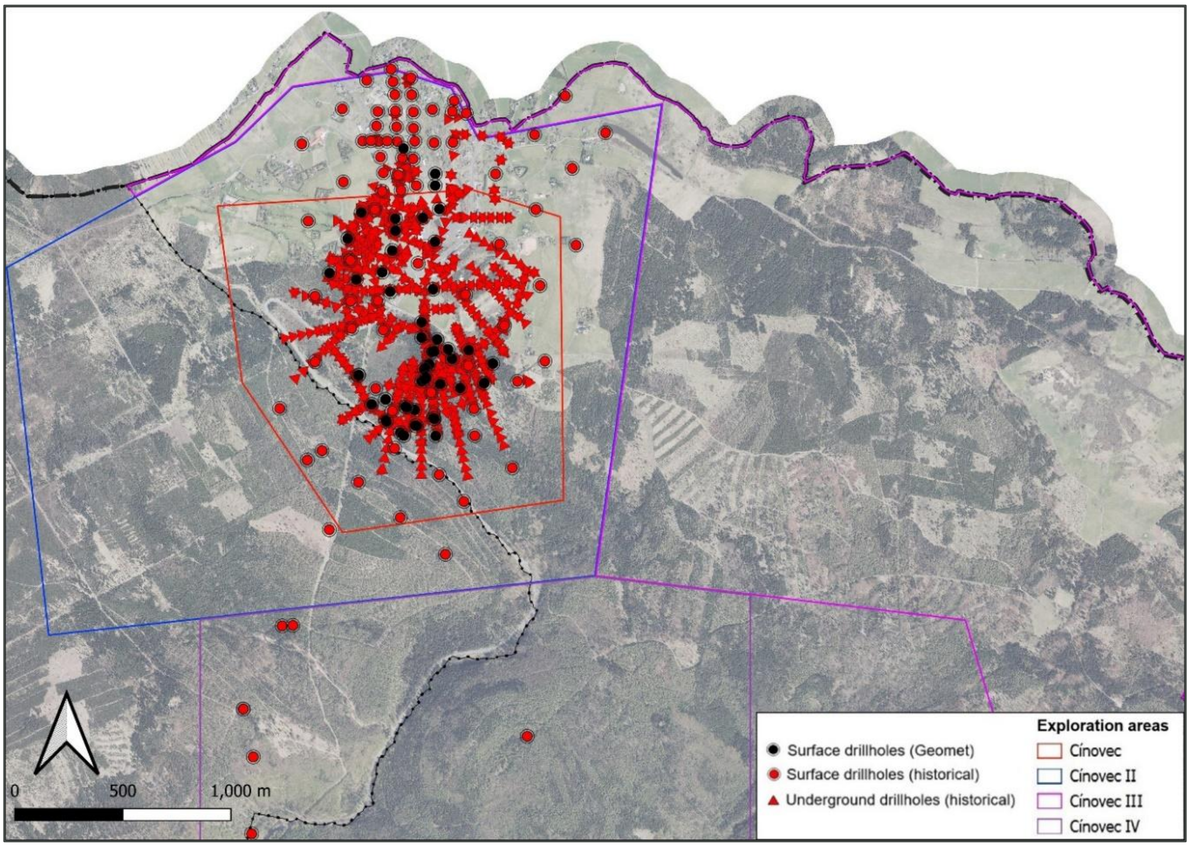


Figure 5-2: Locations of the Drilling at Cínovec on Aerial Map

The 2018 and subsequent extensive 2020–2021 drilling campaigns, planned as an infill drilling in the Cínovec South area, successfully targeted areas of low drilling density with the objective of upgrading the resource categories for the DFS. Based on the results of new drill holes, a sufficient portion of the existing Indicated Mineral Resource was converted to the Measured Resource category to cover the first five years of the scheduled mining plan. The two drilling campaigns comprised of 28 diamond drill holes (10 holes in HQ, the rest of the holes in PQ) for 8,581.6 metres; and the collection of 8.5 tonnes of core for pilot metallurgical testing. Geotechnical data for incorporation into the DFS was also collected.

The best intercepts received for 2018 and 2020-2021 drilling programs included:

- Hole CIS-11 returned 129.3m averaging 0.51% Li_2O, incl. 2m @ 0.93% Li_2O,
- Hole CIS-23 returned 98.6m averaging 0.51% Li_2O, incl. 9.7m @ 0.92% Li_2O, 1m @ 1.49% Li_2O, and 2.9m @ 1.31% Li_2O.
- Hole CIS-25 returned 88.2m averaging 0.52% Li_2O, incl. 21.4m @ 0.73% Li_2O
- Hole CIS-16 returned 101.7m averaging 0.59% Li_2O, incl. 11.35m @ 0.85% Li_2O
- Hole CIS-32 returned 61m averaging 0.66% Li_2O, incl. 6.4m @ 1.01% Li_2O
- Hole CIS-33 returned 113.3m averaging 0.54% Li_2O, incl. 2m @ 1.39% Li_2O
- Hole CIS-34 returned 111.4m averaging 0.54% Li_2O incl. 21.15m @ 0.71% Li_2O

5.6 Resource and Reserve Estimates

5.6.1 Resource Estimates

The lithium resources in the Cinovec deposit were originally defined based on data available in 2017, using almost 800 historic underground and surface drill holes, historic underground channel sampling plus data from additional new diamond drill holes drilled by Geomet.

The resource block model was generated using an ordinary kriging interpolation method, with a two-pass search approach and using an unfolding methodology and geological control from a geological block model with three dimensional solid wireframes representing individual geological domains. A constraint has also been introduced that limits the extent of underground mining below the topographic surface as the area above the proposed Cinovec underground mine is populated. The resource has been restricted by a surface 50m below the topography and all mineralised material above this surface is excluded from the resource inventory.

In the period since the first preliminary resource estimates were prepared for Cinovec, the understanding of the geology and mineralisation has improved and additional drilling has become available with the various drilling campaigns, resulting in a continuous increase in the overall resource and an increase in the confidence in the resource estimate.

Updated parameters as of September 2025 used in resource reporting are as follows:

- $119.55/tonne of total ore processing cost,
- 80.7% recovery of lithium from ore to battery grade Li_2CO_3,
- price of $35,000/t of Li_2CO_3, being the price set for the JORC assessment of mineralisation having a reasonable prospect of eventual economic extraction (“RPEEE” as defined in JORC).

This results in a cut-off grade of 0.08% (w/w) Li.

The Mineral Resource estimate for the Cínovec deposit is classified in the Measured, Indicated and Inferred categories, in accordance with the 2012 Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

Measured material is located in the area of infill drilling to approximately 50m x 50m spacing or closer covered by the recent drilling. Estimated blocks outside the areas defined as Measured, Indicated or Inferred are considered to form part of an Exploration Target.

A summary of the updated September 2025 Lithium Resource Estimate is presented in Table 5.2

Table 5.2: Updated Lithium Resource Estimate

Category	Cut-off Li %	Tonnage MT	Grade Li %	Grade Li_2O %	LCE MT
Measured	0.08	59.82	0.21	0.45	0.67
Indicated	0.08	378.23	0.19	0.40	3.87
Measured + Indicated	0.08	438.05	0.19	0.40	4.54
Inferred	0.08	309.49	0.18	0.38	2.91
TOTAL	**0.08**	**747.54**	**0.19**	**0.40**	**7.45**

Based on the unclassified material in the lithium resource block model and using a nominal 0.1% (w/w) lithium cutoff, an Exploration Target for the remainder of the deposit has been declared of 250 to 350Mt at 0.18 to 0.22% (w/w) Li.

5.6.2 Ore Reserve Estimates

The Cinovec Lithium Project Ore Reserve Estimate is 55.40Mt at 0.27% Li (0.58% Li_2O) for 145,000t contained Li. The Ore Reserve for the Cinovec Project is presented in Table 5.3 below.

Table 5.3: Ore Reserve Statement for Cinovec Lithium Project (JORC 2012) (December 2025)

Category	Cut-off Li %	Tonnage MT	Grade Li %	Grade Li_2O %	Content (Li t)
Proven	0.23	14.5	0.28	0.60	41,000
Probable	0.23	39.9	0.26	0.56	104,000
TOTAL		**54.4**	**0.27**	**0.58**	**145,000**

The Ore Reserve above is an update to the maiden Ore Reserve Statement as at June 2017, which was based on the Preliminary Feasibility Study undertaken at that time.

The Cinovec Lithium Project Ore Reserve was estimated based on a detailed mine design and schedule using a lithium carbonate price of $26,000/t. Declaration of underground Reserves assumes conventional bulk mechanized mining techniques, with costs appropriate to such operations as estimated in the Feasibility Study. A metallurgical recovery of 80.7% of lithium in ore to battery-grade lithium carbonate has been used.

The Ore Reserves are derived from Measured and Indicated Mineral Resources. Proved Reserves are derived from Measured Resources and Probable Reserves from Indicated Resources. In the opinion of the Competent Person, the Ore Reserve Classification is appropriate.

The Ore Reserve classification was based on the assessment of the profitability of recovering Li content from Measured and Indicated Resource categories only.

6 MINING

6.1 Mining Method Overview

The mining method selected for the Cinovec Project is a Sub-Level Open Stoping (SLOS) method with pillar and paste fill support. This is a commonly used method globally and presents no significant risks other than those normally associated with mining.

The stopes will be 20m high and 16m wide. These stopes are nominally combined together into blocks of four (4) stopes high by five (5) stopes wide, creating a nominal block of 80m x 80m. The stopes are up to 50m long. This nominal block size will vary depending on the underlying orebody and lithium grades and could be a subset of this.

A 10m rib pillar is situated either side of the stope block and separates the stope blocks in the horizontal direction. The rib pillar will be mined out when the adjacent stope blocks have been mined out and backfilled. Above and below each stope block is a sill pillar. The sill pillar is 6m high but allowing for the 5m ore drive for the block below this becomes 11m high in total.

A nominal stope block and associated pillars are shown diagrammatically in Figure 6-1: Nominal Sub-Level Stope Block & Pillar Arrangement

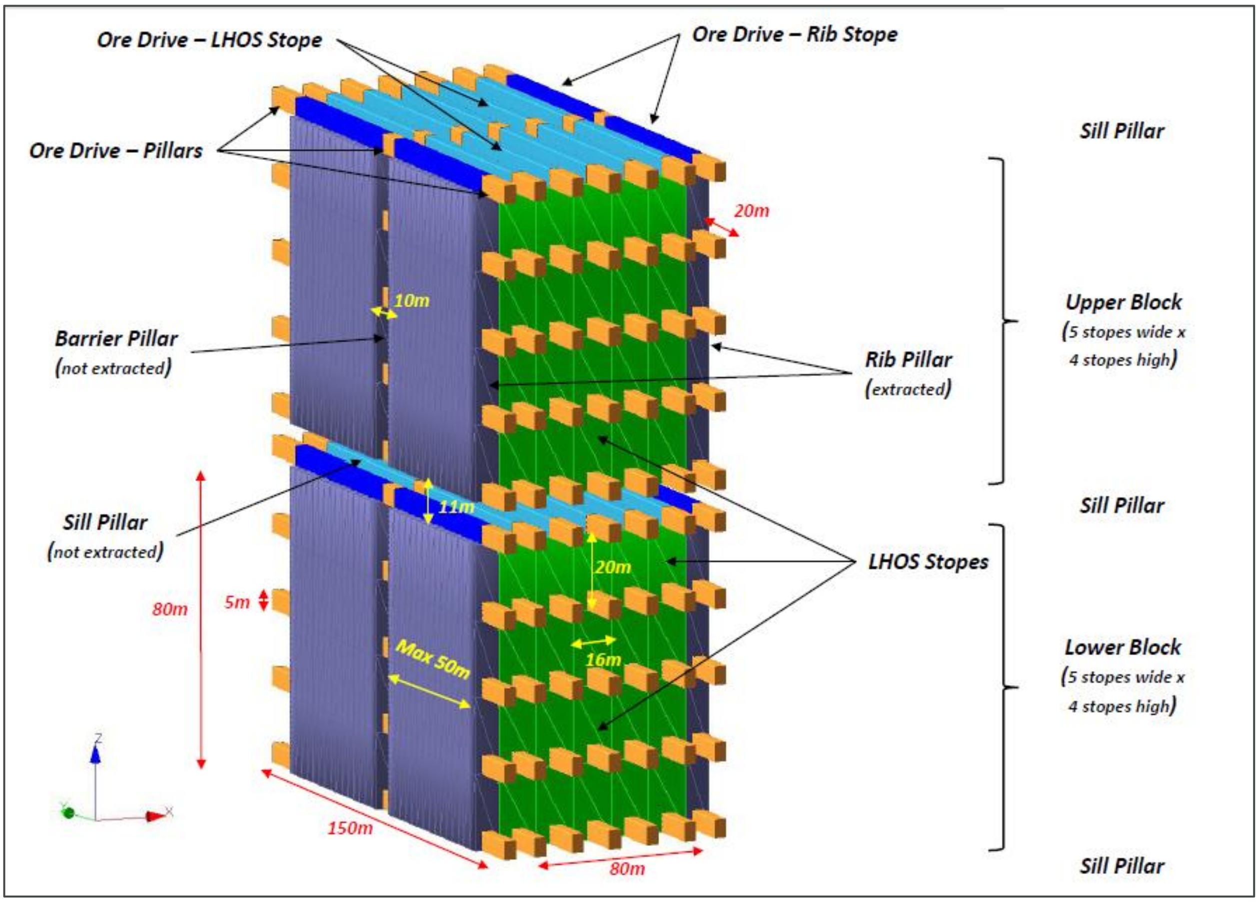


Figure 6-1: Nominal Sub-Level Stope Block & Pillar Arrangement

Access to the mine will be via a straight twin decline system at constant gradient. The portal location was determined taking into consideration the surface access constraints, minimal linear development length and optimum haulage distance to processing plant. The location of the mine portal to the southeast of the orebody allows access to the orebody in a position giving the ability to mine both upwards and downwards through the orebody adding flexibility to the mine plan and schedule. At the point where the decline connects to the footwall infrastructure, a tipping arrangement and crusher installation have been included which will feed crushed ore onto the installed conveyor belt, which transports ore up the conveyor decline.

From the base of the twin-decline mine entry/egress system, a second internal twin-decline system heads in a northeasterly direction to the bottom of the northern part of the mine. A twin haulage system also heads southwest to the southern end of the mine. From the northeast twin decline and southwest twin haulage, the orebody is either directly accessed or via a set of three spiral ramps positioned at the south, middle and north of the orebody. Also, various infrastructure excavations are situated in and adjacent to this access.

These infrastructure excavations include the crushing and tipping arrangements, workshops, water settling and treatment arrangements, backfill, reticulation bays, water handling and pumping bays. All this infrastructure and access development is generally situated outside the orebody including any Inferred ore zones, to avoid sterilising resources that may be upgraded to Indicated and/or Measured in the future.

A tipping arrangement and primary crusher infrastructure will be included at the north end of the northeastern decline and this will add to and complement the crushing infrastructure in the south. Figure 6-2 shows the underground infrastructure looking northwest.

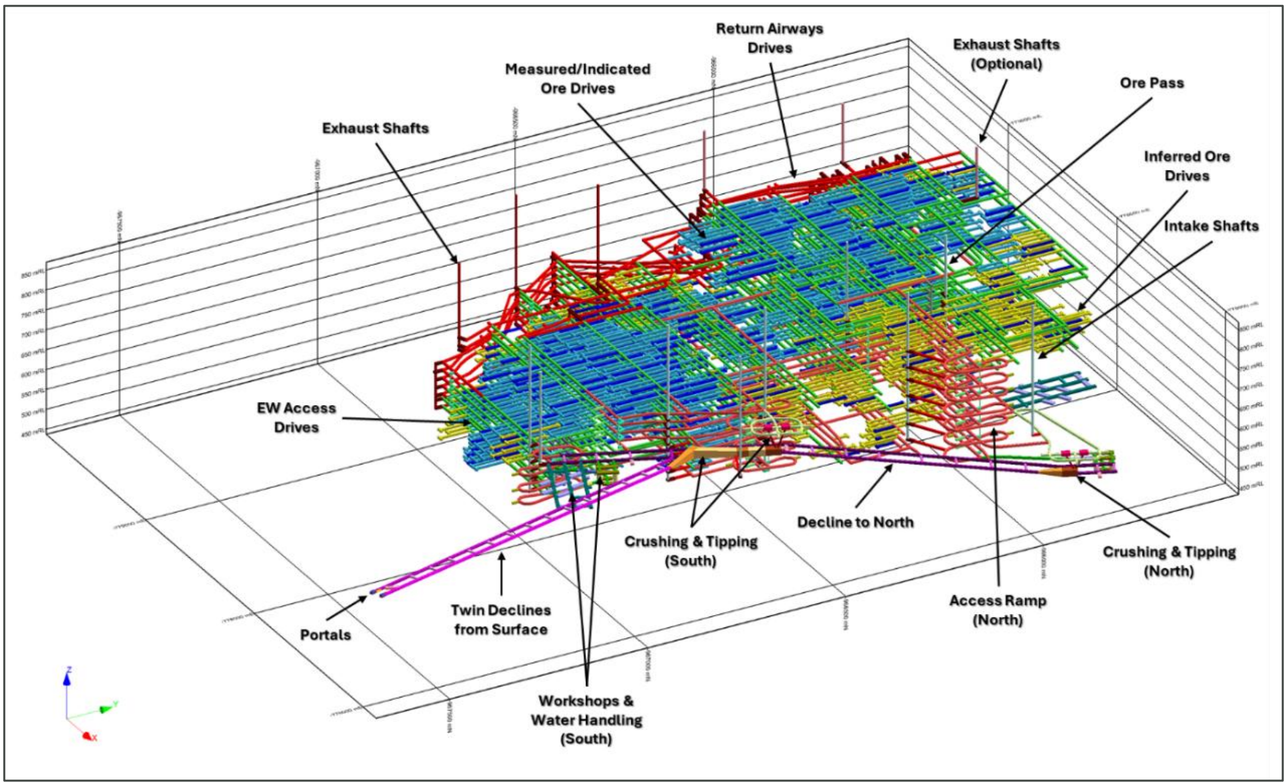


Figure 6-2: Underground Infrastructure - Looking Northwest

6.2 Mine Production Schedule

Table 6.1: Mine Production Schedule

	Totals	Unit	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7
Cinovec Production Totals									
Total Waste Development	**5,269,105**	t	102,409	509,178	653,153	410,623	308,191	347,498	337,126
Total RoM	**73,401,565**	t	-	-	191,781	1,571,935	2,543,932	2,864,449	3,197,159
Average Li grade - RoM	**0.276**	%Li	-	-	0.226	0.269	0.265	0.272	0.273
Li, tonnes contained - RoM	**202,542**	Li t	-	-	434	4,236	6,739	7,788	8,729
Total Backfill - Volume	**16,856,780**	m3	-	-	-	101,255	368,443	472,452	654,427

	Totals	Unit	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14
Cinovec Production Totals									
Total Waste Development	**5,269,105**	t	376,298	370,113	312,046	316,443	304,075	152,685	137,996
Total RoM	**73,401,565**	t	3,195,542	3,210,579	3,201,807	3,201,807	3,201,807	3,210,579	3,201,807
Average Li grade - RoM	**0.276**	%Li	0.276	0.287	0.287	0.294	0.273	0.277	0.269
Li, tonnes contained - RoM	**202,542**	Li t	8,816	9,208	9,190	9,416	8,744	8,883	8,599
Total Backfill - Volume	**16,856,780**	m3	662,673	928,097	963,353	838,044	705,365	631,529	696,406

	Totals	Unit	Yr15	Yr16	Yr17	Yr18	Yr19	Yr20	Yr21
Cinovec Production Totals									
Total Waste Development	**5,269,105**	t	147,641	158,146	126,992	97,573	100,918	-	-
Total RoM	**73,401,565**	t	3,201,807	3,201,807	3,210,579	3,201,807	3,201,807	3,201,807	3,210,579
Average Li grade - RoM	**0.276**	%Li	0.263	0.261	0.269	0.276	0.280	0.289	0.264
Li, tonnes contained - RoM	**202,542**	Li t	8,415	8,356	8,622	8,851	8,968	9,259	8,484
Total Backfill - Volume	**16,856,780**	m3	796,479	701,335	706,304	702,319	818,068	908,112	712,532

	Totals	Unit	Yr22	Yr23	Yr24	Yr25	Yr26	Yr27	Yr28
Cinovec Production Totals									
Total Waste Development	**5,269,105**	t	-	-	-	-	-	-	-
Total RoM	**73,401,565**	t	3,193,341	3,201,807	3,201,807	3,210,579	3,201,754	1,839,459	329,439
Average Li grade - RoM	**0.276**	%Li	0.265	0.281	0.273	0.286	0.288	0.287	0.285
Li, tonnes contained - RoM	**202,542**	Li t	8,474	8,996	8,730	9,178	9,206	5,284	938
Total Backfill - Volume	**16,856,780**	m3	352,043	792,401	959,006	950,795	848,151	483,907	103,285

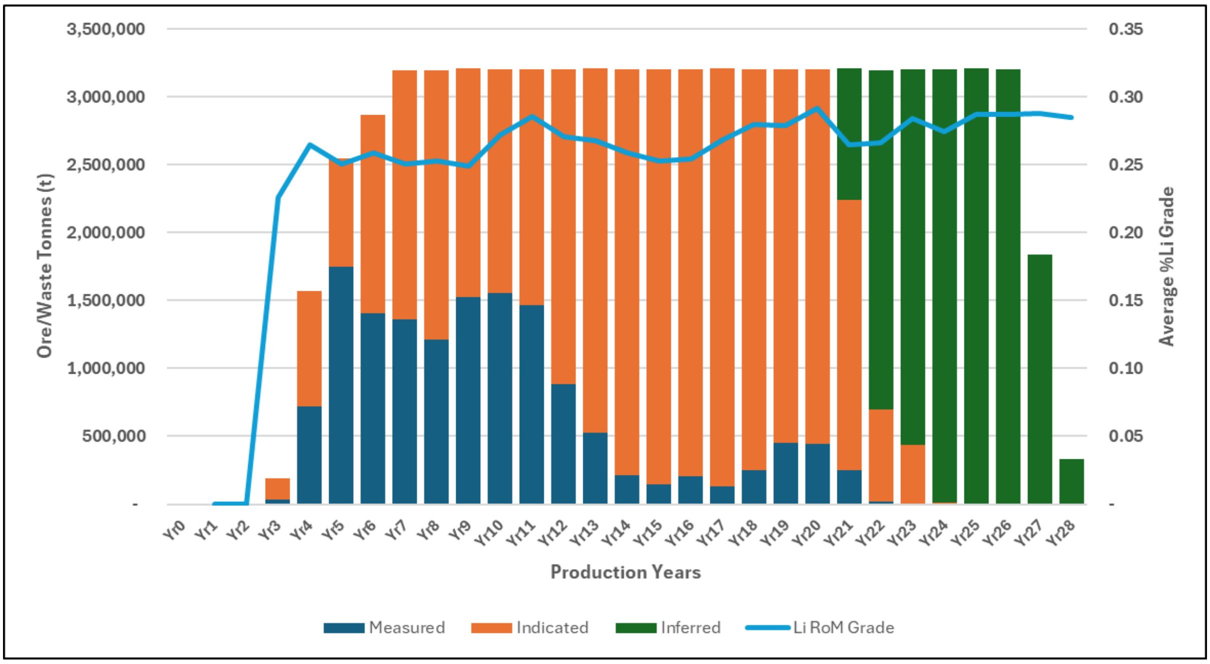


Figure 6-3: Mine Production Schedule By Resource Category

6.3 Mine Design and Layout

6.3.1 Box Cut, Declines and Portal

The box cut with the twin entries to the declines, for the underground mine, is situated to the southeast of the deposit. The area lies within Czech State Forest to the east of the main national road 8. The main road links the town of Teplice in the valley to Cinovec village on top of the escarpment. The road then continues on to the German border. The portal is at an elevation of 750 mRL, which is approximately 85m below the village and top of the escarpment.

Figure 6-4 below shows the portal and boxcut position.

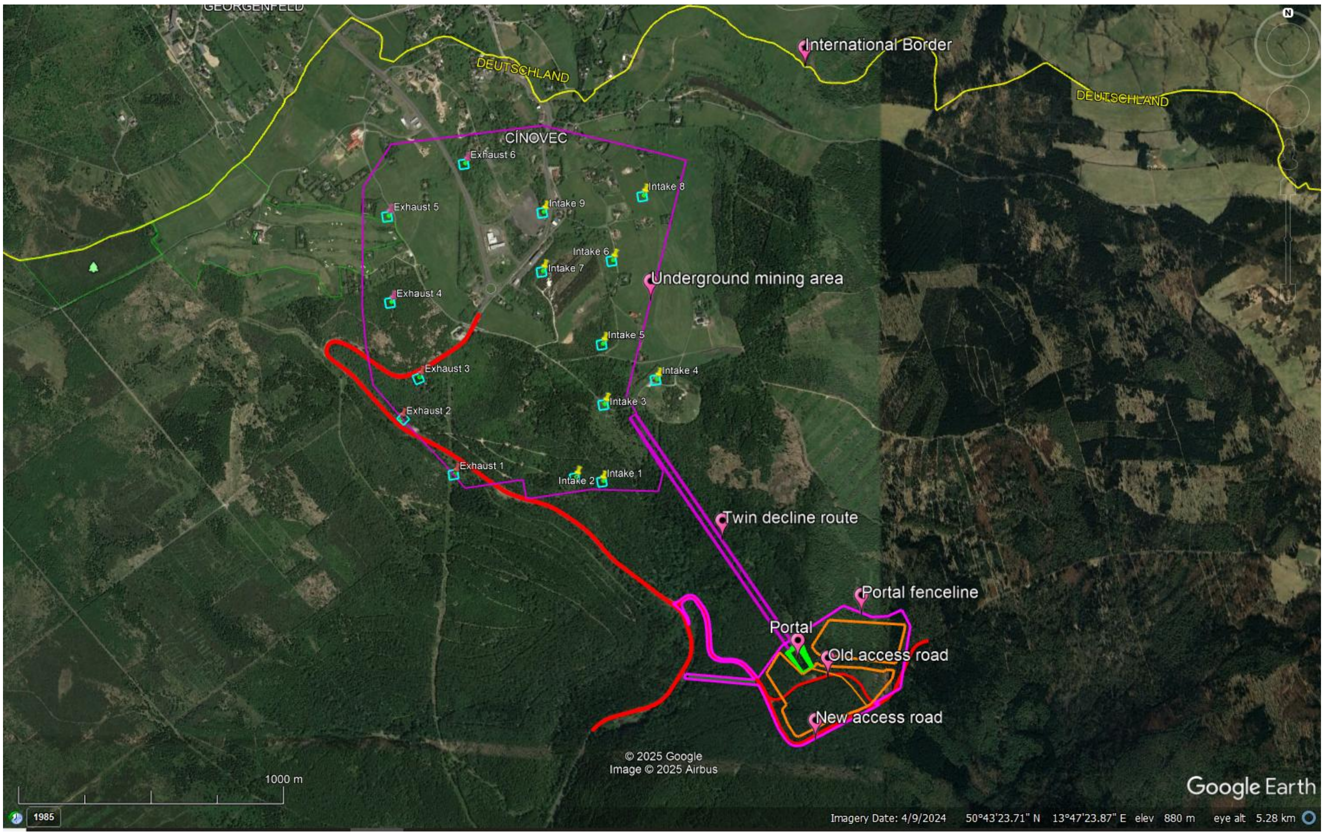


Figure 6-4: Box Cut & Portal Position (including declines and mining area)

The advantages of the box cut and mine portal location are:

- Shortest distance to the deposit of all options considered, allowing for a straight-line concept for the ore conveyor system
- Situated in the forest and below the escarpment to limit any visual, noise or landscape effects;
- Below the escarpment to reduce the depth to the orebody and to reduce the visual, noise and landscape effects as well;

Cross sections of the conveyor and service declines are shown in Figure 6-5 and Figure 6-6.

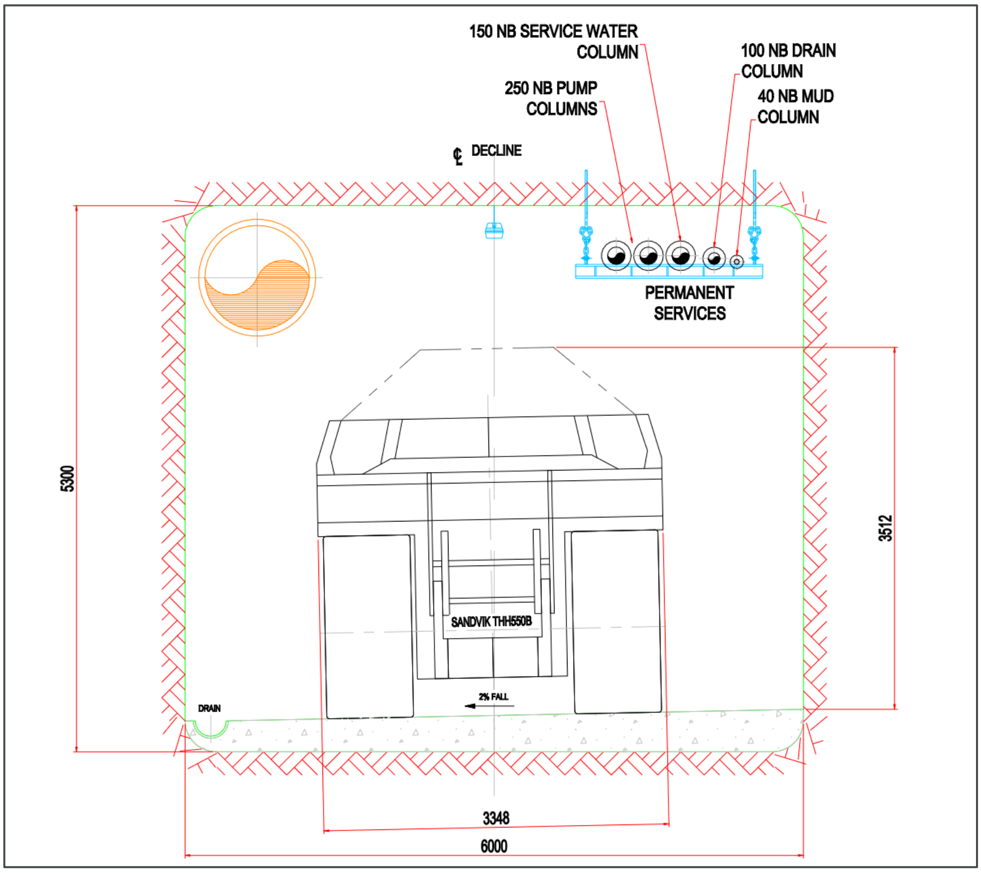


Figure 6-5: Cross Section Through The Service Decline

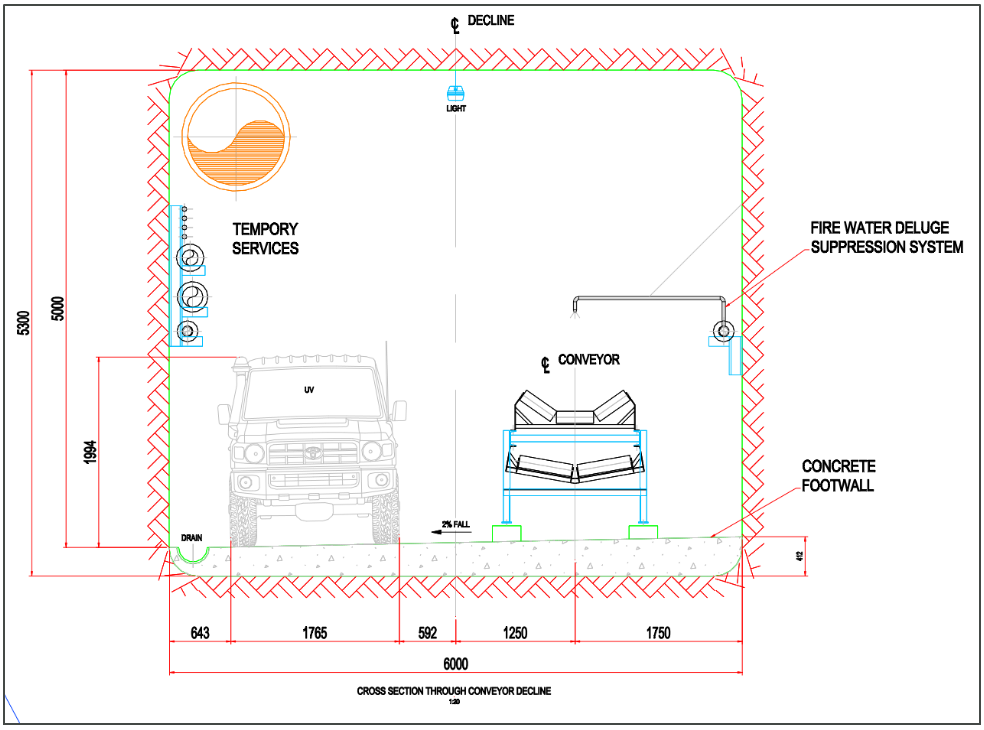


Figure 6-6: Cross Sections Through The Conveyor Decline

6.3.2 Surface Mining Infrastructure

The surface mining infrastructure is located near the boxcut for the twin-decline system. The layout carefully separates underground mobile equipment routes from light vehicle traffic.

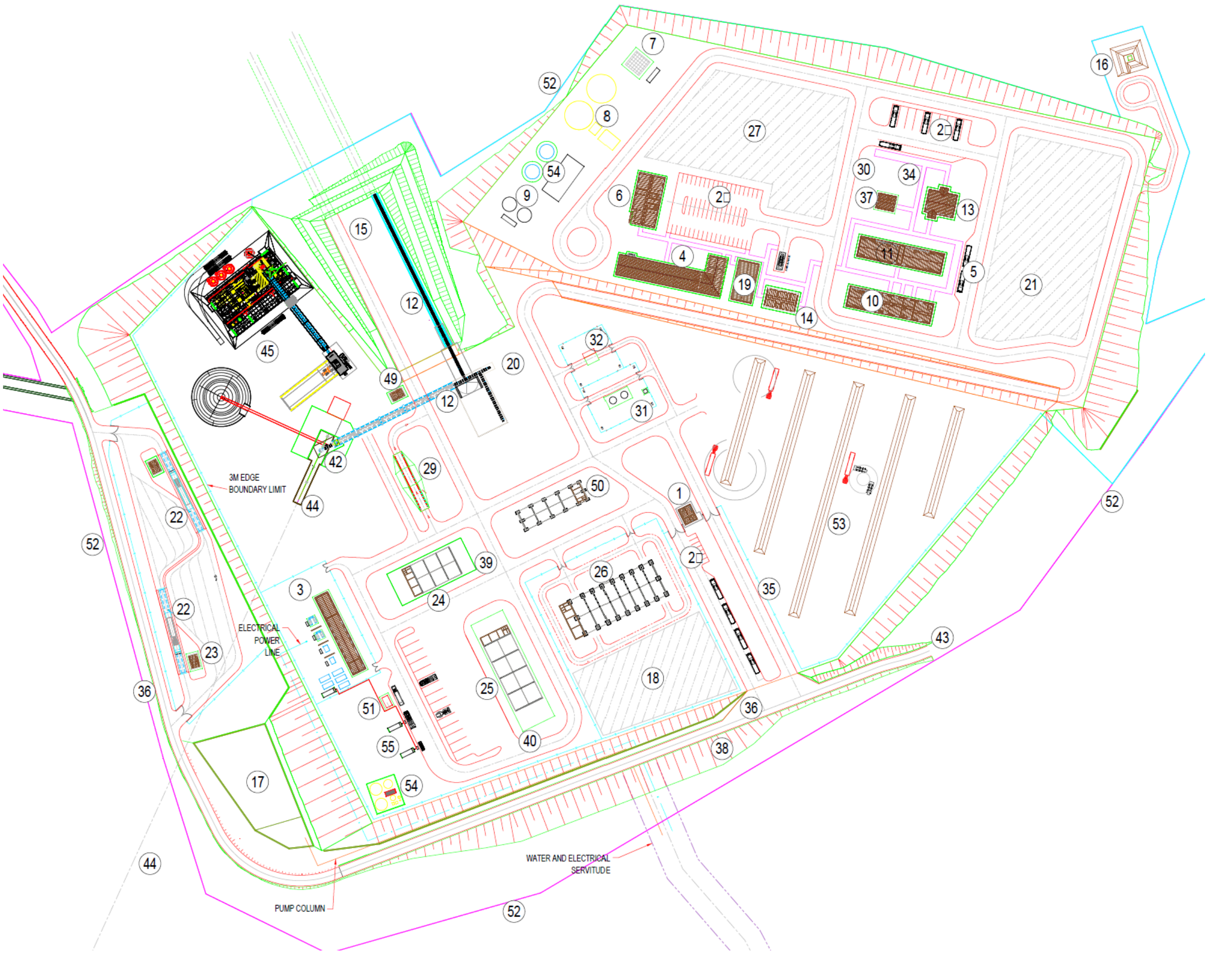


Figure 6-7: Proposed Layout of Surface Mining Infrastructure

Table 6.2 below provided details of the buildings numbered in Figure 6-7.

Table 6.2: Description of Portal Buildings

No.	Name of building	No.	Name of building
1	Security office at main gate	27	Topsoil stockpile
2	Parking	28	Unallocated
3	Substation	29	Brake test ramp
4	Office complex	30	Boilers
5	Drop off zone	31	Emulsion receiving / holding tank
6	Safety and induction centre	32	Explosive delivery
7	Potable water tank	33	Unallocated
8	Raw water reservoir	34	Sidewalk
9	Firewater tanks	35	Haul road
10	Change house (block 1)	36	Access road
11	Change house (block 2)	37	Proto room

12	Conveyor belt	38	New forest road
13	Lamp room and crush	39	Ancillary vehicle wash bay
14	First aid	40	Mining vehicle wash bay
15	Decline portal boxcut	42	Conveyor transfer tower
16	Explosive distribution bunker	43	Existing forestry road
17	Settling ponds	44	Rope conveyor
18	General storage yard	45	Backfill plant
19	Dining room	48	Unallocated
20	Mud press	49	Security office at portal entrance
21	Contractors laydown area	50	General workshop
22	Weighbridge	51	Diesel offloading transfer pump
23	Weighbridge office	52	Property boundary
24	Mine ancillary vehicle workshop	53	Waste handling and loading area
25	TMM workshop	54	Water treatment plant for discharge
26	Main store	55	Diesel refuelling station

Support facilities at surface include;

- An 810m² administration complex with offices, meeting rooms and control and server rooms.
- A maintenance workshop with 4 repair bays and a 10-tonne overhead crane.
- An ancillary vehicle workshop including three repair bays for light vehicle servicing.
- The mine store facility features a 3,377m² yard with 6-tonne crane and storage racks.
- Changehouses and laundry facilities occupy 1,100m² and accommodate up to 600 personnel with separate facilities for workforce and management.
- The safety and induction centre spans 420m² with lecture halls and training facilities.
- A general workshop for boilermaking, fitting and electrical work etc.
- Security perimeter and two controlled access gates.
- The fuel farm has 90,000-litre total capacity for diesel storage (~3 days of mine operation).
- Emulsion storage and explosive delivery facilities support underground blasting operations.

A backfill plant, together with a covered stockpile for backfill material and cement silos, will be located in the northwestern part of the portal area, adjacent to the portal opening into the mine.

6.3.3 Secondary Access and Development

From the end of the primary access twin declines on 565 mRL, additional twin haulages or declines provide access to the south and north ends of the mine.

The dimensions and arrangement of this internal decline system are the same as for the primary (entry/egress) twin declines. At the northern end of the secondary twin declines is another crusher and tipping arrangement (the north crushing station) along with additional underground infrastructure excavations, e.g. settlers, dams, electrical substations, workshops.

In order to make the underground spaces accessible in the initial phase of opening, it is expected that approximately 300,000 m³ of static underground water will be pumped out as the Cínovec mine is currently flooded up to the level of the third floor, and water is overflowing into the TBS adit system).

During mining, the mine will be drained down to its base. Mine water will be generated partly from groundwater inflows from the rock environment around the mine and partly from surface and precipitation water seeping into old mine workings and its underground spaces. Due to the uncertainty of the estimated volume, it is planned to pump approximately 30 l/s of static water accumulated in the mine and, at the same time, to drain dynamic inflows into the mine for a period of approximately six months.

6.3.4 Ore Access and Development

From the footwall development and infrastructure there are drives or ramps providing access to all the required stoping levels. These access drives and ramps are situated north/south at 150m intervals. These access drives/ramps connect to east-west access haulages that traverse the orebody from east to west.

To access the northern part of the orebody from the eastern footwall development and infrastructure, the access haulages traverse the Inferred resource part of the orebody. This development will not report to Reserves. However, it will be included in the mining inventory and scheduled in the last few years of the mine life, after the Measured/Indicated areas have been mined.

6.4 Water Management Systems

Peak underground water inflow reaches 2,304m³/day in Year 7. Service water demand at steady-state is 1,383m³/day. The backfill plant consumes 610 m³ per day when operating at steady state.Potable water production is 73m³/day via reverse osmosis treatment.

The dewatering system includes two main pump stations with high-rate clarifiers. Main Pump Station 1 is located at 565 mRL elevation with 6000m³ storage capacity. Main Pump Station 2 serves the lower workings at 473 mRL elevation. Multiple intermediate cascade pump stations are positioned in the ramps to transfer water between levels.

The surface water control dam provides 20,000m³ capacity for run-off and pumped water storage plus 2,400m3 in service water tank. A mud press dewaters solids for placement on the ROM ore conveyor. The water treatment plant ensures all discharged water meets Czech environmental standards.

The fire suppression system provides 600m³ storage capacity with a containerised pump station. A 250mm HDPE ring-main supplies 19 hydrants throughout the surface area of the mine portal. All designs comply with Czech Republic mining legislation. Main pump stations can handle average daily inflow within 16 hours with 50% back-up capacity. Pump station sumps provide minimum 32-hour storage capacity. Dual discharge pipelines from main pumping stations ensure redundancy.

6.5 Communications, Control & Instrumentation

The network backbone uses fibre optic-based ethernet technology. The main ring operates at 10Gbps with secondary connections at 2.5Gbps. This provides redundant connectivity between surface and underground areas.

The VoIP telephone system connects over the mine wireless network with handsets for personnel. Fixed telephones are installed at key locations including offices, workshops, refuge chambers, station areas and pump stations.

CCTV monitoring provides 64-channel capacity covering critical infrastructure. Digital video recorders in the main control room display real-time visuals from surface portal areas, main pump stations, tipping points, workshops, ventilation fan stations, substations and station levels.

SCADA and PLC control systems monitor and control pump stations, ventilation systems, heating systems and substations. All systems integrate with the surface control room for remote operation. Personnel and asset tracking systems enhance safety management. MV switchgear monitoring provides real-time operational data to the control room. WiFi coverage extends throughout underground operations to support mobile devices and systems.

7 UNDERGROUND PROCESSING

Due to environmental reasons, limited available area at the mine portal site and the requirement to transport the ore via conveyors to surface, the primary and secondary ROM crushing process of the FECAB will be located in the underground mine.

The arrangement includes two primary crushers, a primary screen, a secondary crusher and conveyor feed with connecting conveyors between crushing elements, and other ancillary equipment. The crushing and screening will be carried out in open circuit.

Figure 7-1 is a 3D view of the south crushing equipment & construction within their excavations, including the ore passes.

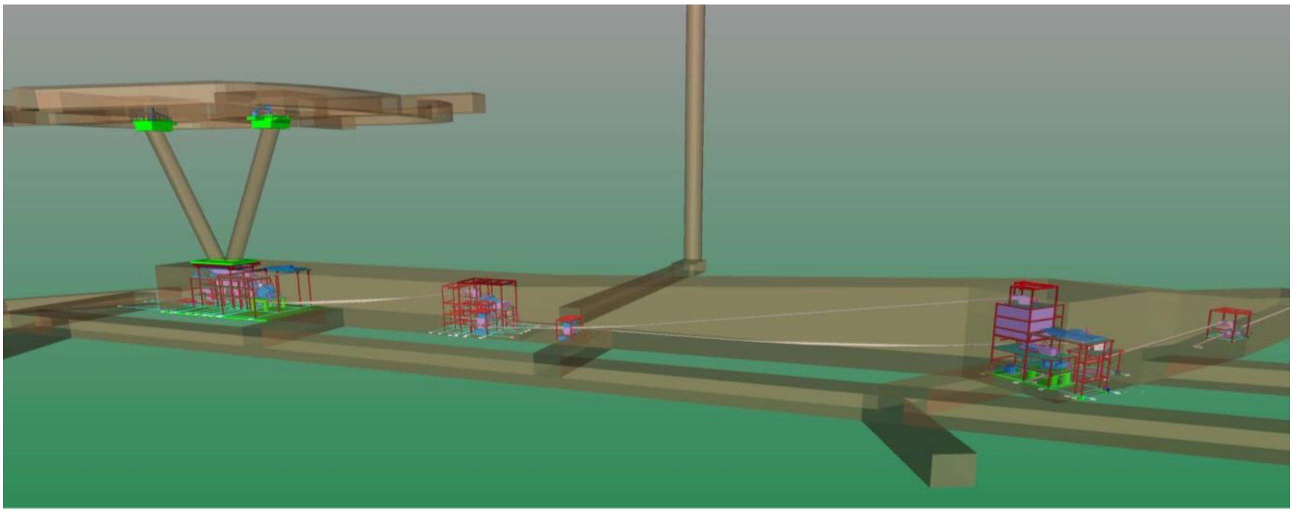


Figure 7-1: South Crushing and Screening Arrangement within Underground Chambers

ROM ore recovered from underground stopes is discharged into four ore passes (two at the north crushing station and two at the south crushing station), which provide surge capacity upstream of each primary crushing circuit. The ore passes are equipped each with a static grizzly and a rock-breaker to reduce any oversize material. Within each circuit, ore is extracted from the two ore passes via a variable-speed apron feeder onto a vibrating grizzly feeder, which scalps off fines prior to feeding the oversize to the primary jaw crusher.

Table 7.1: Underground Crushing Design Parameters

Description	Values	Comments
Throughput (t/a)	3,200,000	
Processing (hours per annum)	6307	
Nominal throughput (t/h)	507	
Maximum throughput (t/h)	533	5% design margin to accommodate production variability and rock size variation

8 AERIAL CONVEYOR

8.1 The System

The aerial conveyor for the Cinovec Lithium Project consists of two separate sections which link the mine portal area to the bulk materials transfer hub at Dukla. Crushed ore is conveyed from the mine portal site via an aerial conveyor spanning 7.3km to the Dukla bulk materials handling hub.

The ore is conveyed on the upper belt, while backfill tailings are simultaneously transported on the return (bottom) belt of the aerial conveyor. This is possible as both carrying sides of the upper and lower belts are facing upwards during transport. The aerial conveyor is equipped with a belt rotating section at the top and bottom ends of each section, which turns the belt around after discharging.

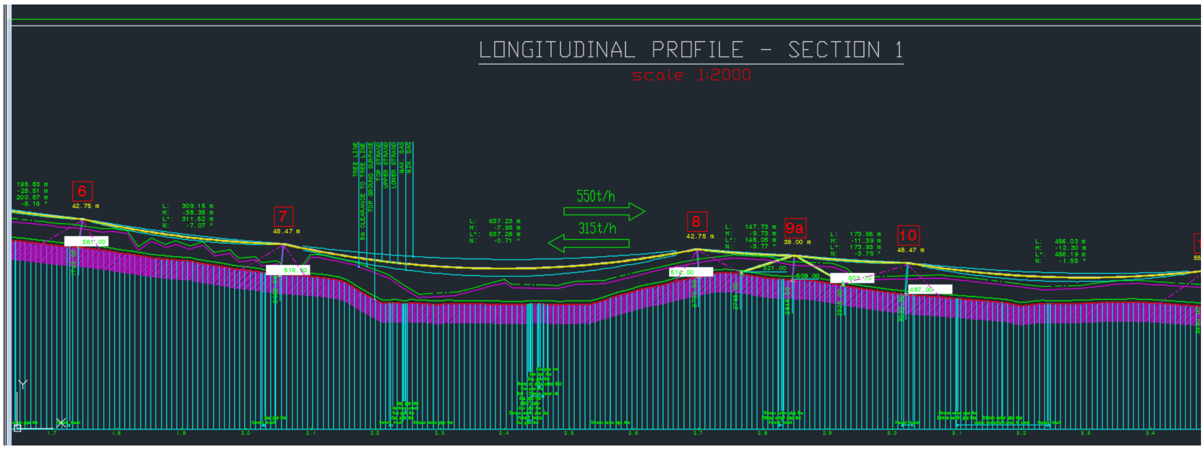


Figure 8-1: Aerial Conveyor Cross Section - example

Figure 8-2: Aerial Conveyor example

The upper drive station is located at the mine portal site. A transfer station between the first and second legs of the aerial conveyor is situated between the villages of Mstišov and Střelná. Access to the transfer station will be by using the existing road which connects Zámecká street with Lobkowicz hunting castle. The distance from Zámecká street to the transfer station is approximately 300m.

ROM ore is unloaded from the aerial conveyor onto a stockpile at the Dukla site. The Dukla ROM stockpile holds up to 4 days of ROM to supply the train loading facility at Dukla.

9 DUKLA BULK MATERIALS TRANSFER HUB

The Dukla site is an integrated Bulk Materials Handling facility, linking the supply of ROM ore from the mine portal via the aerial conveyor and rail operations to the processing plant at Prunéřov. At Dukla, ROM is loaded on the rail while backfill material is off-loaded from rail to be transported to the mine portal for backfilling operations, via the aerial conveyor.

9.1 ROM Ore

ROM is transferred from the mine portal to the aerial conveyor to the Dukla Bulk Material handling site.

- 550tph ROM from aerial conveyor transferred to a 40,000-tonne covered stockpile to allow surge between rail loading cycles;
- 1,100tph bridge-type bucket wheel reclaimer delivering to a rail loading station; and
- The rail loading station can handle two trains simultaneously.

9.2 Tailings Backfill

At Dukla, backfill material is transferred from the rail either directly onto the aerial conveyor or via a surge stockpile, to be transferred to the portal site backfill operations.

- Backfill rail offloading station and systems
- Offloading station to backfill stockpile with 12,500-tonne surge capacity and dedicated stacker equipment; and
- 315tph capacity from the backfill stockpile onto the aerial conveyor.

Figure 9-1 shows a view of the Dukla site from the west. The main operations are to the west with the rail loading station at centre. The area to the east is the Project’s rail maintenance depot.

Figure 9-2 shows the ROM ore stockpile building (main building) and backfill tailings stockpile building (small building) in the foreground together, with the aerial conveyor loading station. The rail loading station is shown in the background.

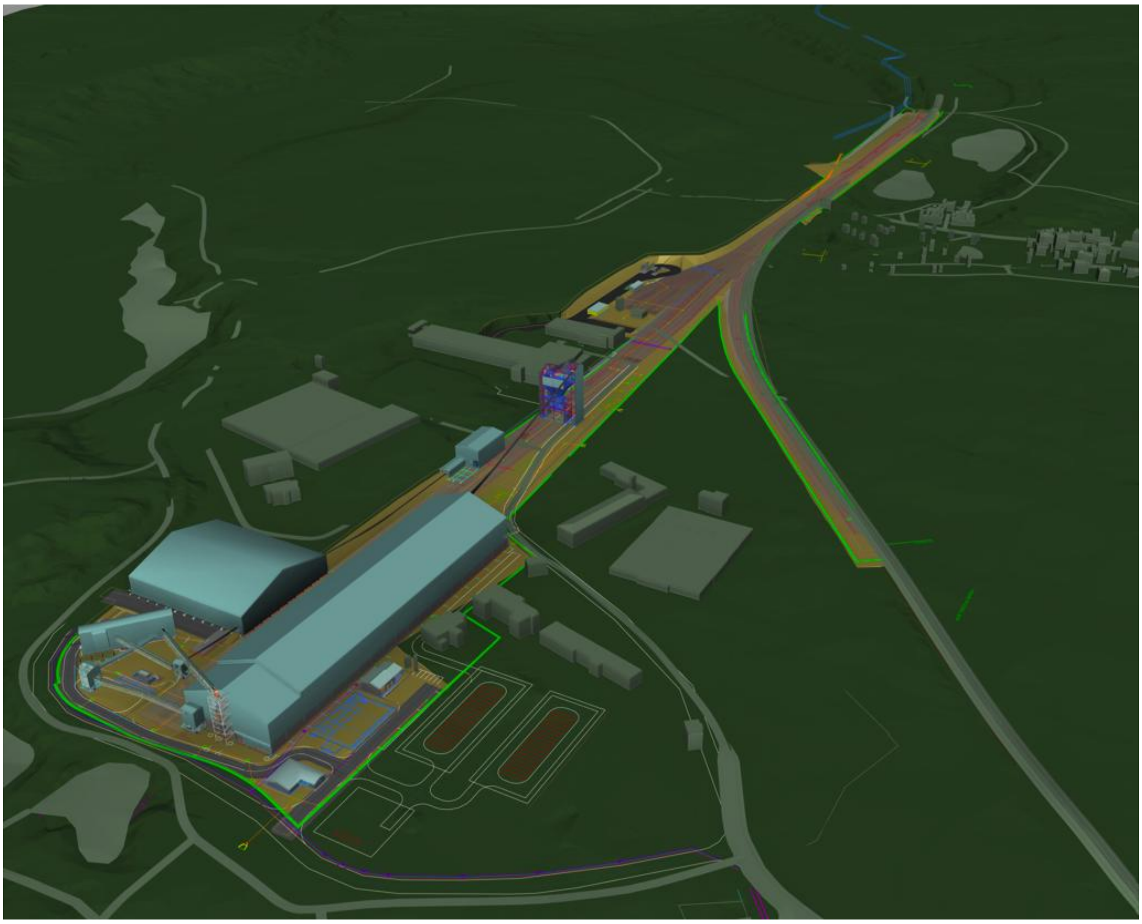


Figure 9-1: View of Dukla Site from the west.

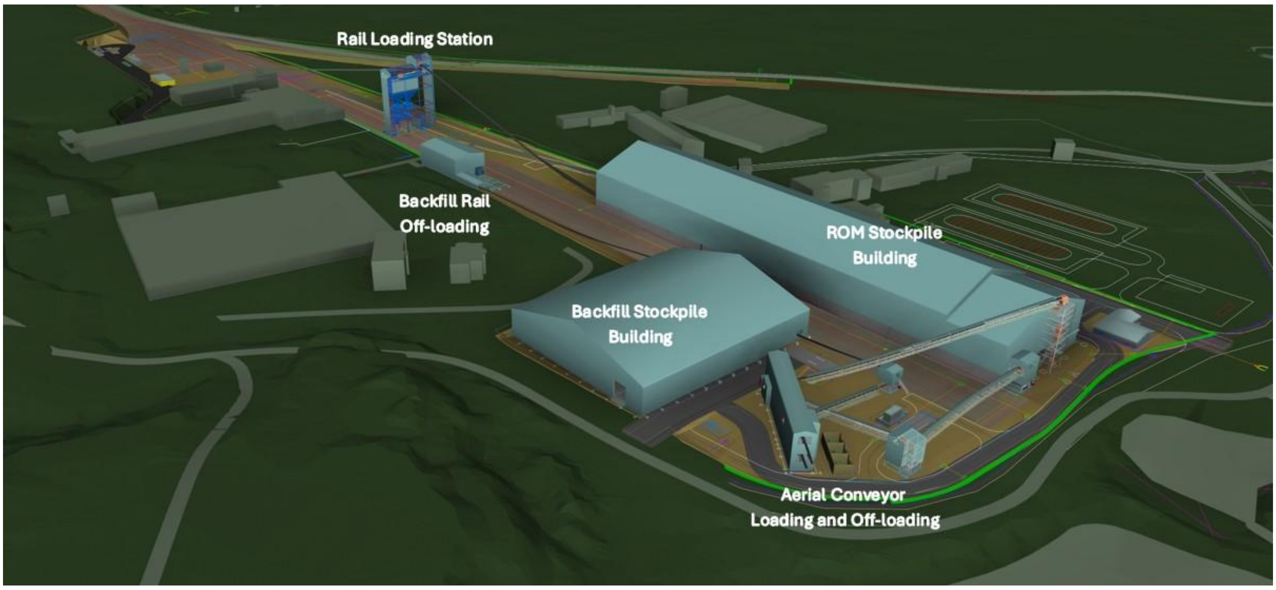


Figure 9-2: Aerial view of Dukla from the north west

10 RAIL

The rail network in the Czech Republic extends over 9,600km, with approximately 3,000km currently electrified. The network operator is Správa železnic (SŽ), which manages the rail infrastructure and ČD Cargo a.s. is the main national freight operator, handling block trains, individual wagons and single-wagon loads.

Established rail links will be used to transfer ore from Dukla to Prunéřov and tailings for backfill into the mine from Prunéřov to Dukla. In addition, rail will be used to deliver other raw materials required for the plant and for the distribution of product from Prunéřov.

The DFS rail study has completed rail capacity assessments for the Project at both Dukla and Prunéřov, confirmed both the feasibility of connecting up to and using the existing rail lines and the available capacity of the rail network to handle the additional rail traffic resulting from the Project.

At Dukla between 10 and 14 trains per day will operate on working days from 06h00 to 22h00 and from 06h00 to 18h00 on a Saturday. At Prunéřov, additional trains will operate for the delivery of raw material and the dispatch of product.

At both Dukla and Prunéřov additional rail tracks and sidings will need to be developed to link up to the existing rail lines. See Figure 10-1 and Figure 10-2 below for an indication of the new rail requirements (shown in red, wagons / locos in blue).

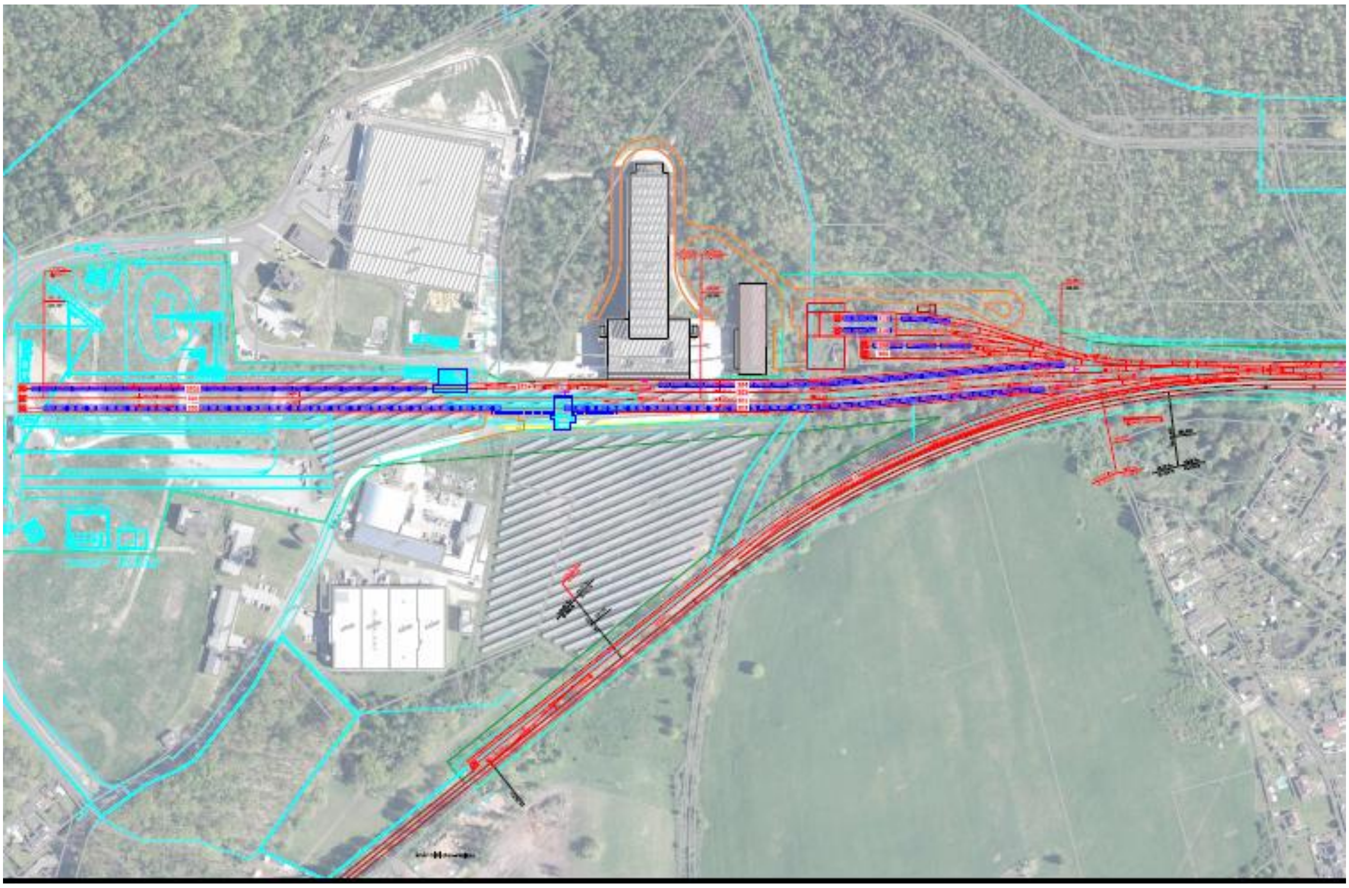


Figure 10-1: Additional Tracks Required at Dukla

Dukla requires a total of 4,250m of new track installed, including 3 transfer tracks, 2 unloading tracks, 2 loading tracks and a rolling stock depot.

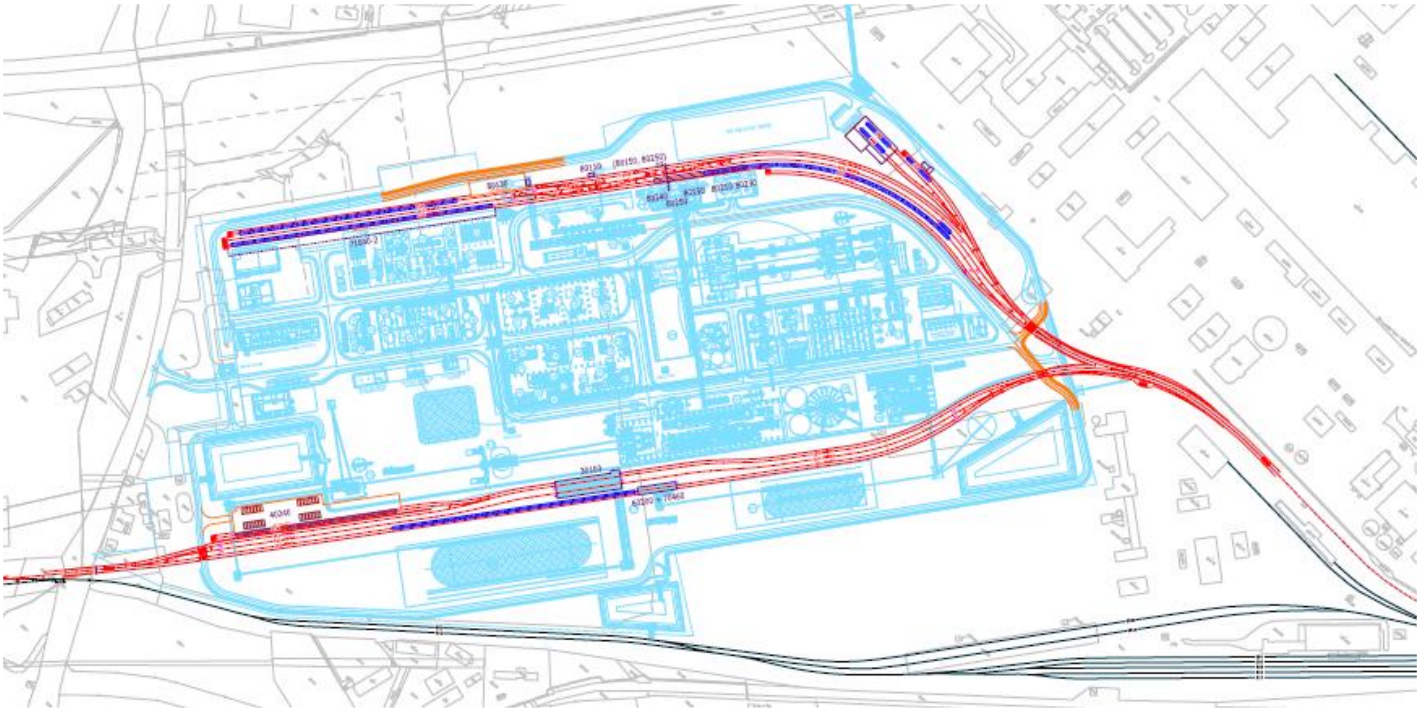


Figure 10-2 - Additional Tracks and Sidings required at Prunéřov

Prunéřov requires a total of 7,678m of new track installed, including 2 tracks for unloading ore and base material, 2 tracks for unloading reagents and loading final products and 2 tracks for train departure readiness operations and a rolling stock depot.

11 PRUNÉŘOV SITE

Prunéřov is the name of the entire site containing the old Prunéřov 1 demolished power station (EPR 1) and the still-operating Prunéřov 2 power station (EPR 2). After extensive analysis by the Project team, the site has been identified as the most suitable site for the mineral processing plant FECAB and lithium chemical plant LCP and reagent receipt and product dispatch.

The FECAB separates the lithium-bearing value mineral Zinnwaldite, from gangue minerals such as quartz and feldspar, into a concentrate which is dewatered and fed to the LCP for lithium extraction.

The LCP consists of pyrometallurgical and hydrometallurgical processes for the production and export of battery-grade lithium carbonate. The FECAB concentrate is conveyed to be mixed with roasting reagents, pelletised and then through the pyrometallurgical system, after which the resulting lithium sulphate is leached using water. Leached residue slurry from the LCP processes will be combined with FECAB tailings, for rail transport back to Dukla and finally the mining portal for backfill.

The Pruneřov site is linked to Dukla via a 65 km rail link (including the sidings to be built), with approximately 10 trains of ROM ore being received per day and approximately 5 trains of tailings for backfill loaded in the opposite direction for receipt, storage and transfer at Dukla.

ROM ore is offloaded at Prunéřov at a rate of 1,500 tph from “Falls” wagons into bunkers, extracted with vibrating feeders and transported via conveyors for storage in a 70,000 tonne 7-day capacity open stockpile area, using a dedicated stacker system to deposit the ore. The ore is then reclaimed from the ROM stockpile with a bucket wheel reclaimer and transported via conveyors to the tertiary crushing and screening area. Figure 11-1 shows a plan of the processing plant at Prunéřov,

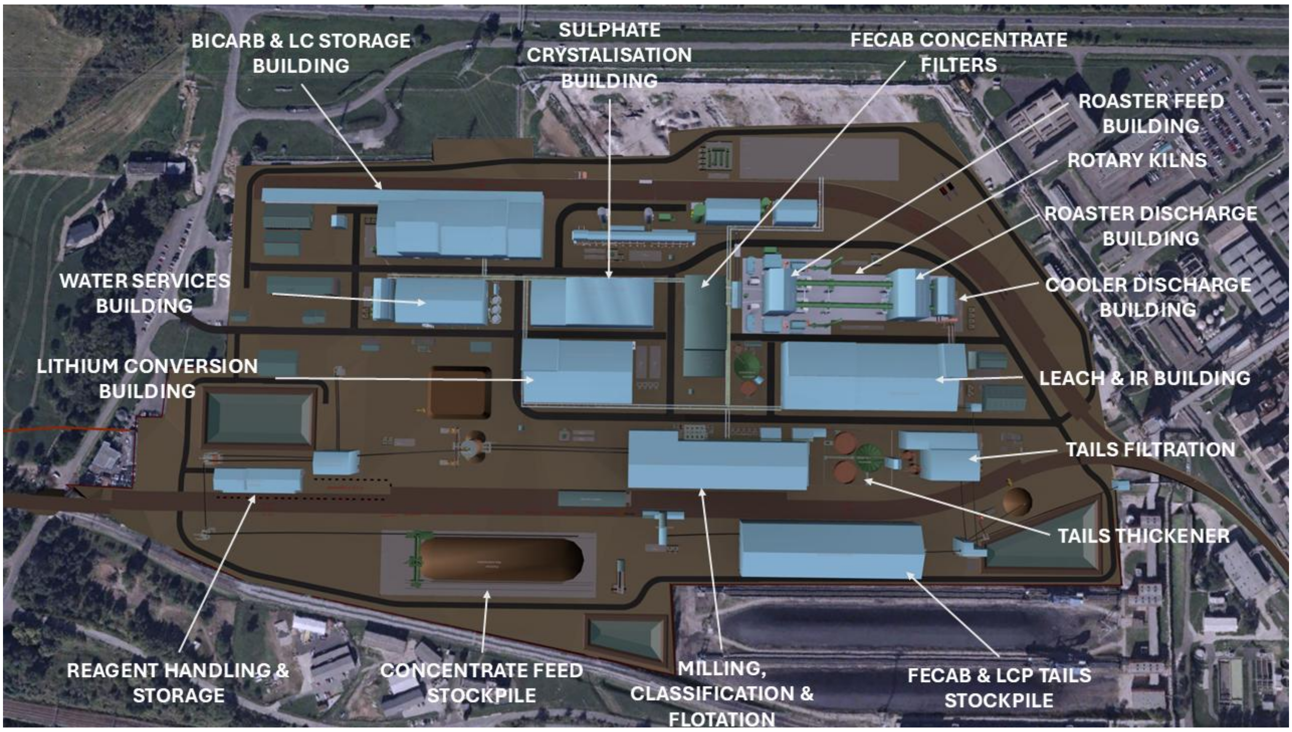


Figure 11-1: Processing Plant Complex at Prunéřov

Tertiary crushing and screening is carried out in a closed circuit. The crushed and screened ore is transported via a series of conveyors to the mill feed bin for storage and feed to the rod milling process area. The ore is further processed through the milling section to prepare a suitable feed for the flotation beneficiation circuits. The Zinnwaldite flotation concentrate is processed through a tower mill prior to dewatering via a thickening and filtration circuit. The dewatered concentrate is finally stockpiled in the LCP Concentrate Stockpile area. Figure 11-2 shows the Prunerov site as it currently is. EPR2 is the background.

Figure 11-2: Prunéřov Site following Demolition of EPR 1

12 BENEFICIATION

The FECAB beneficiates the lithium-bearing value mineral Zinnwaldite, from gangue minerals such as quartz and feldspar, into a concentrate which is dewatered and passed to the LCP for lithium extraction. On average, the mass reduction during beneficiation is approximately 5 times, or the mass of concentrate is on average 17% to 20% of ROM mass.

The FECAB utilises primarily flotation technology for concentration of the value mineral Zinnwaldite.

A schematic representation of this integrated operation is provided in Figure 12-1Figure 12-1 below.

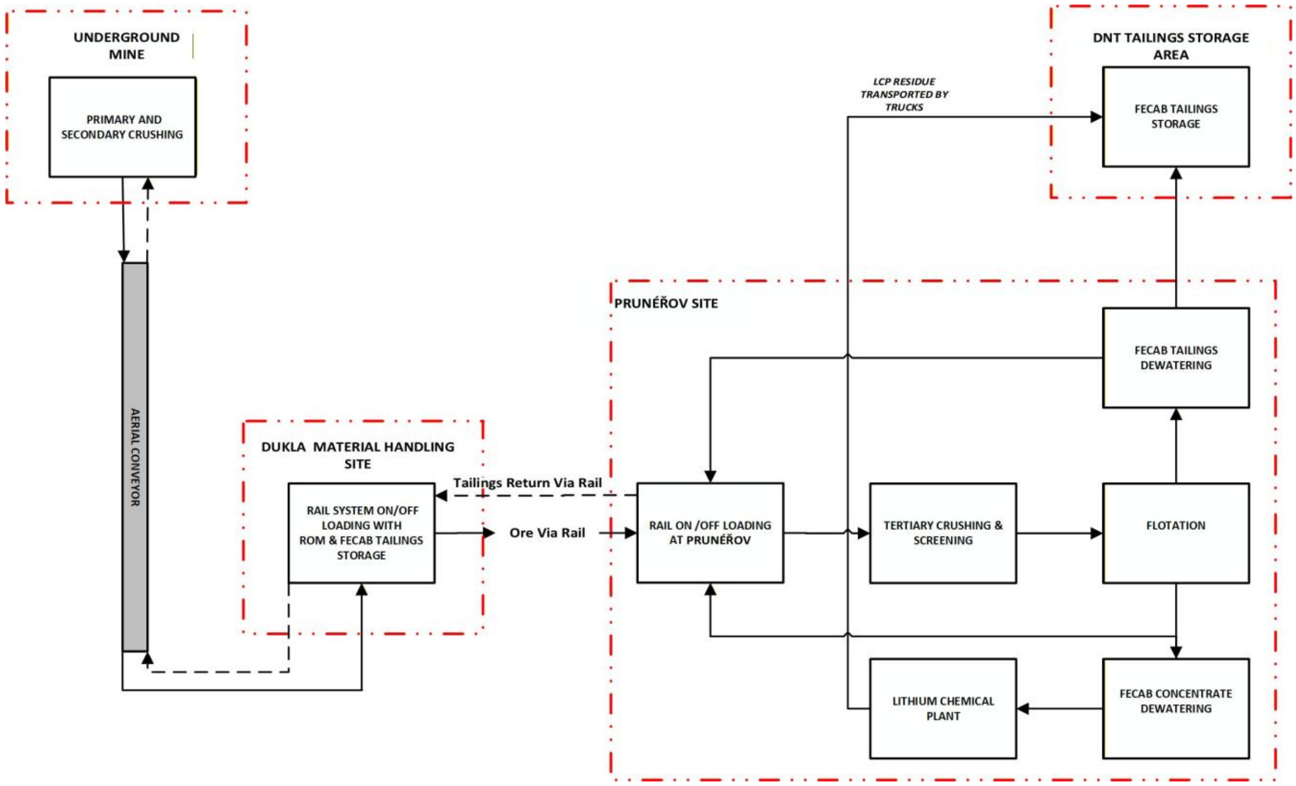


Figure 12-1: Overall Process Schematic

12.1 Beneficiation Flowsheet

The complete FECAB process consists of:

- Underground comminution comprising open circuit jaw crushing, screening and open circuit secondary crushing for size reduction from nominal <800mm to a convenient transportation size of <80 mm.
- Aerial conveyor comprising a series of steel rope-supported conveyors configured to enable bi-directional material transport. The upper strand facilitates the continuous conveyance of ROM ore from the mine portal to the Dukla bulk materials handling facility, while the return strand concurrently transports tailings material from Dukla to the mine portal for use as underground backfill.
- A bulk material handling site (Dukla) including:
  - Aerial conveyor off-loading system
  - ROM ore storage stockpile
  - ROM bucket wheel reclaimer
  - ROM ore train loading station
  - Backfill tailings material rail carriage off-loading system
  - Backfill tailings stacker and stockpile
  - Aerial conveyor return loading system
- Beneficiation circuit located at Prunéřov comprising:
  - Ore storage, tertiary crushing and screening
  - Rod milling and classification
  - Desliming

- Froth flotation
- Zinnwaldite concentrate milling
- Concentrate dewatering and storage
- Tailings dewatering
- Flotation reagents make-up, storage and dosing

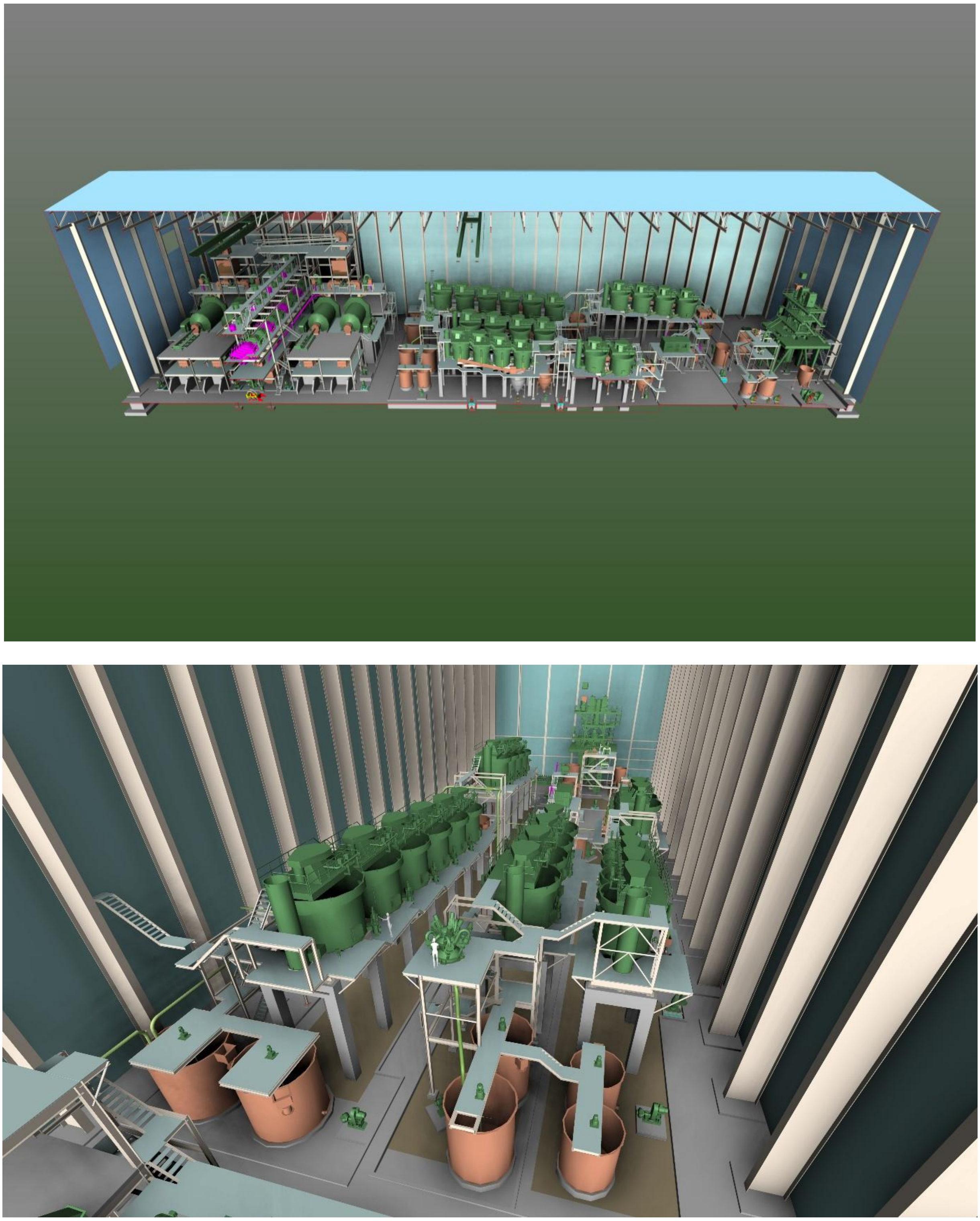


Figure 12-2: Inside the Flotation Building

12.2 Testwork

The FECAB process flowsheet has undergone several revisions since commencing DFS testwork in 2020. In principle, the initial design consisted of a four-stage WHIMS circuit operating at a grind size of P_{100} < 250µm. This was later changed to a coarser grind of P_{80} < 500µm, with the WHIMS circuit treating the 500µm × 150µm fraction and froth flotation applied to the 150µm × 25µm fraction of the beneficiation plant feed. Middlings from the WHIMS circuit were milled to -212µm, deslimed at 25µm and combined with the flotation feed. Initial flotation testwork demonstrated excellent selectivity and successful flotation of Zinnwaldite at neutral pH. The flotation concentrate subsequently underwent an additional WHIMS cleaning step to further increase lithium grade and purity. This process achieved higher lithium recoveries and zinnwaldite concentrate grades, primarily by overcoming the proven low separation efficiency of WHIMS for particles below 150µm.

Further DFS testwork commenced in 2023 using drill core to create three composite samples at different head grades. The three samples with head grades of 0.212% Li, 0.299% Li, and 0.357% Li were compiled from intervals of a diamond drill core (CIS-36) through stopes included in the mine plan. The resulting testwork and flowsheet produced a usable relationship between head grade and zinnwaldite concentrate grade. The average concentrate grade was 1.2% Li at an 85% lithium recovery. A key recommendation from the 2023 work was to investigate further concentrate upgrading which could reduce throughput capacity requirements and operating costs in the downstream LCP chemical processing stages.

A sub-sample of the flotation concentrate produced from the testwork was sent to an alternative flotation research institute for evaluation. Re-flotation using an alternative reagent scheme achieved concentrate grades of 1.43% Li and 1.46% Li, with stage recoveries exceeding 98%. The results from the re-flotation testwork were used to update the concentrate grade and recovery estimates previously established for the three composite head grades (0.212%Li, 0.299% Li, and 0.357% Li).

Updated head grade–recovery correlations were then applied to the revised mine schedule representing the increased throughput of 3.2Mtpa. Based on this analysis, beneficiation concentrate production was projected to increase by approximately 26%, from 440,000tpa to 550,000tpa, with an improved lithium grade of 1.328% Li compared to 1.198% Li. Lithium recovery in the FECAB was also expected to improve from 85.5% to 87.5%.

The testwork proved that flotation could benefit the broader Project by producing a zinnwaldite concentrate at higher lithium grades and recoveries, which could result in lower throughput requirements for the downstream LCP process, as a greater proportion of gangue material was being rejected in the process. A whole-ore flotation circuit, in which 100% crushed ROM is milled, deslimed and subjected to flotation separation, was considered to replace the coarse WHIMS and fine flotation circuit. This approach would allow for a significantly simplified process flowsheet, with less equipment, making it more suitable for the revised throughput of 3.2Mtpa.

Geomet subsequently commissioned additional flotation testwork in June 2024, during which testwork was carried out on 80 kg of development rock samples milled to P_{80} < 150µm without desliming. Desliming is the effective removal of ultrafines (−20µm) prior to flotation. The composite sample contained all three lithologies expected to be mined (greisen, greisenised granite and granite).

Optimised open-circuit batch flotation tests on un-deslimed samples produced concentrate at a grade of 1.47% Li with a lithium recovery of 86.27%. Building on these results, three sets of locked-cycle tests (LCTs) were performed, all of which yielded high lithium recoveries exceeding 92%. The best outcome was a lithium recovery of 94.67% with a concentrate grade of 1.477% Li.

Additional flotation testwork was commissioned in December 2024, with the main aim of reducing reagent consumption. This was expected to be achieved by desliming the flotation feed at a target size of 10µm, thereby effectively removing a significant proportion of the reagent-consuming surface area. The testwork demonstrated that a target concentrate grade of 1.44% Li was attainable, with some results reaching grades of 1.6% Li.

Overall, the testwork achieved the main aim of significantly reducing reagent consumption by 40% to 50% when compared to the un-deslimed flotation testwork carried out in June 2024. These results have been adopted as the basis for the DFS concentrate recovery and grade estimate.

In summary, the metallurgical projection for the deslimed flotation testwork, derived from the average performance of the four deslimed samples hosting greisenised lithology, indicated an average lithium recovery of 88.72% at the target concentrate grade of 1.441% Li, based on a life-of-mine (LOM) average head grade of 0.276% Li and a desliming cut size of 10µm.

13 LITHIUM CHEMICAL PLANT (LCP)

The LCP, which is designed to process the lithium-bearing mica (zinnwaldite) concentrate at a nominal rate of 550,000 dry tonnes per year, is expected to:

- Yield approximately 37,500 tonnes of battery-grade lithium carbonate annually, based on the average production rate from Year 5 through to Year 26.
- Achieve an average lithium recovery of 90.6% from FECAB concentrate to final product over the life of operation.

This gives an overall recovery of lithium from ROM ore to final product of 80.7%.

The LCP facility at Prunéřov processes mica concentrate from the beneficiation plant. After treating the mica concentrate through the pyrometallurgy circuit, the lithium is extracted into a pregnant leach solution, producing a dewatered and washed residue. LCP residues, including those from impurity removal and polishing filters further downstream, are sent to rail loading or to the tailings storage facility at DNT.

The objective of the Project with respect to LCP residue (also referred to as LCP tailings) is to utilise as much of these tailings for backfill paste in the mine as possible, limited only by geotechnical support requirements in the mine, supplemented when there is a shortfall of LCP tailings, by FECAB tailings. In periods in which it is not possible or not required to backfill all LCP tailings, these tailings are permanently stored at a dedicated LCP filtered tailings storage facility at the DNT site, immediately adjacent to but separate from the main FECAB filtered tailings storage facility.

Figure 13-1 shows the overall LCP process.

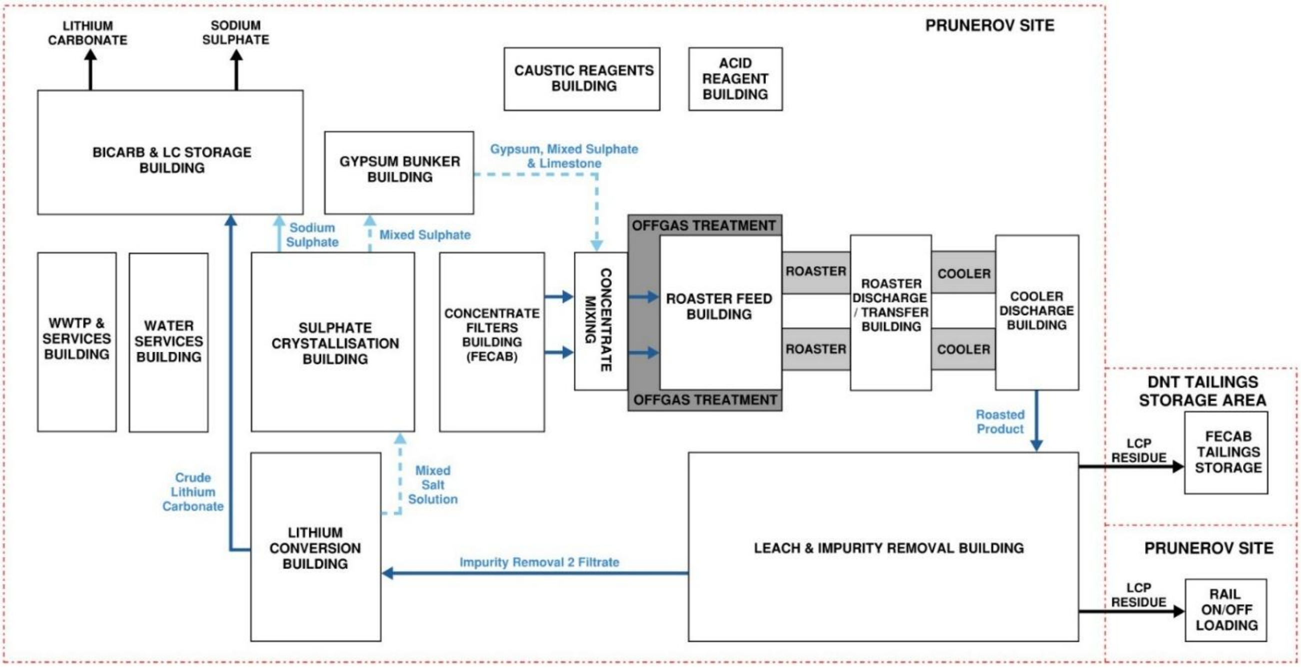


Figure 13-1: Overall LCP Process

Figure 13-2 below shows the LCP roasters and coolers.

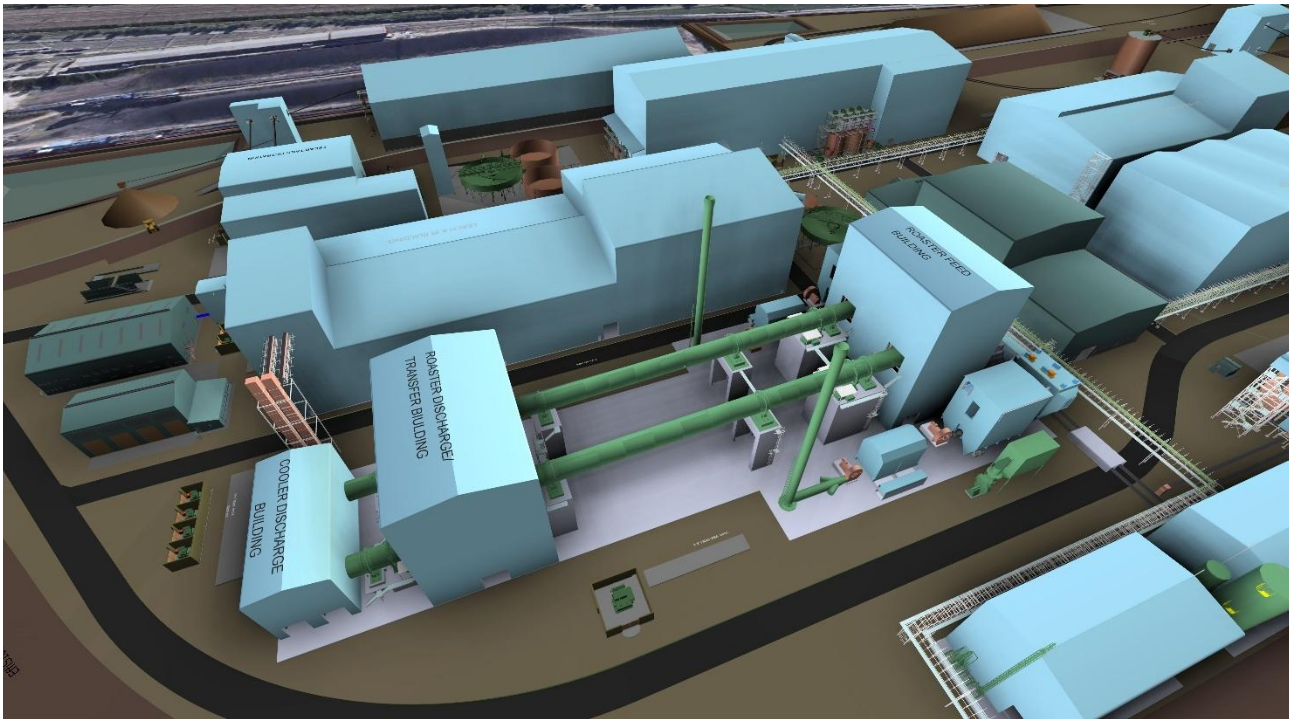


Figure 13-2: LCP – Roasters and Coolers

13.1 LCP Flowsheet

The LCP process consists of two main areas:

Pyro-metallurgical section consisting of:

- Concentrate handling - receipt of mica concentrate discharged from the FECAB dewatering filters and subsequent storage on the concentrate stockpile within the facility.
- Concentrate mixing - blending the mica concentrate with reagents in preparation for the roasting process.
- Feed treatment - mixing and extruding the pre-mixed concentrate, reagents and recycled off-gas treatment (bag house) dust to form elongated pellets.
- Roasting - subjecting pellets to sulphation roasting for one hour at 925°C to produce a roasted material containing soluble metal sulphates.
- Milling - wet milling of the cooled, partially agglomerated roasted product to optimise metal sulphate extraction in downstream leach tanks, as well as enhanced dewatering and washing.
- Leaching with water at 60°C - extracting 93.23% of lithium into solution as lithium sulphate using agitated leach tanks.
- Leach filtration - filtering the leach slurry to obtain a lithium sulphate-bearing solution (pregnant leach solution or PLS) and a solid residue, with the latter being washed prior to disposal.

Hydro-metallurgical section where:

Impurity Removal 1 & 2 – a two-stage chemical process for the purification of the PLS. Stage 1 reduces the concentrations of solubilised Mg, Mn, other transition metals and flouride. Stage 2 reduces the concentration of solubilised calcium in the PLS.

- Phosphate conversion - transforming soluble lithium sulphate into solid lithium phosphate precipitate and separating the resultant phosphate solids from the barren mixed sulphate solution containing sodium, potassium and rubidium sulphates.
- Mixed sulphate solution / Barren Liquor evaporation - concentrating the mixed sulphate solution.
- Glauber's salt 1 crystallisation - cooling process liquor from the crude lithium carbonate circuit to crystallise and separate Glauber's salt (sodium sulphate decahydrate); the resulting solution is recycled to the lithium phosphate conversion circuit.
- Glauber's salt 2 crystallisation - cooling of the concentrated mixed sulphate solution to crystallise and separate Glauber's salt.
- Sodium sulphate (anhydrous) crystallisation – re-melting Glauber's salt crystals from both crystallisation units to enable the crystallisation and isolation of anhydrous sodium sulphate, which is sold or disposed of.
- Mixed sulphate crystallisation - concentration of the mixed salt solution to yield a complex mixed sulphate salt which is dried and recycled to the kilns as a re-used reagent, replacing the need for an ongoing supply of fresh sodium sulphate.
- Acid dissolution of lithium phosphate and crystallisation of lithium sulphate - converting lithium phosphate into a soluble lithium sulphate solution that is then concentrated to yield lithium sulphate crystals as an intermediate product. The washed lithium sulphate crystals are dissolved in demineralised water – water addition is varied to control the concentration of Li.

- Impurity Removal 3 - phosphate removal from lithium sulphate stream.
- Carbonation - production of crude lithium carbonate from the lithium sulphate solution.
- Bicarbonation – purification of crude lithium carbonate to battery-grade specification via a single bicarbonation step.
- Final product handling - drying, micronizing, magnetic impurity removal, and packaging of the final product.

The block flow diagram for the LCP process flowsheet is shown below in Figure 13-3

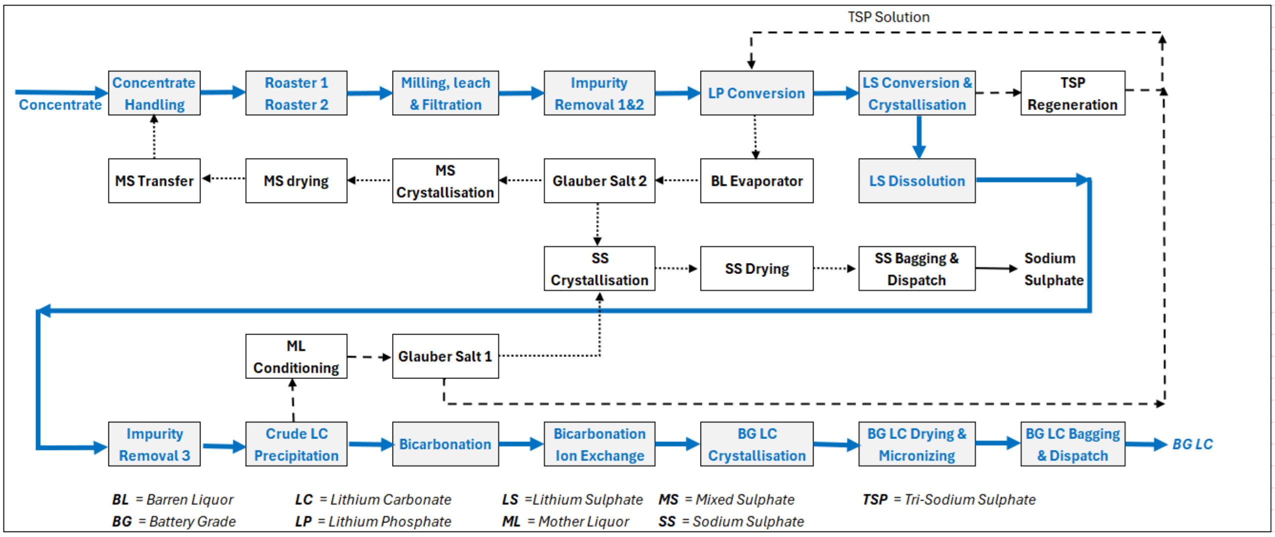


Figure 13-3: Block Flow Diagram

13.2 Testwork

Geomet has undertaken a pre-feasibility study, two distinct feasibility studies (the first of which was not completed and not published) and an initial phase of a Front-End Engineering Design (FEED) study for the Cínovec Project. Multiple testwork campaigns were conducted throughout these phases. While earlier studies implemented alternative processing routes compared to those in the current Definitive Feasibility Study, there is some overlap in the unit processes selected for both the present and prior flowsheets.

In 2022, a Locked Cycle Test (LCT) program consisting of 6 cycles, was commissioned to validate the lithium phosphate process route. The test program was conducted at laboratory-scale by ALS Metallurgy (Perth) and under the direction and supervision of Lithium Consultants Australasia (LCA) – Geomet's process consultant.

The LCT program produced crude lithium carbonate via the lithium phosphate route, evaluating various process iterations that included the exclusion and partial inclusion of recycling streams. In the final cycle of the test program, a composite of crude lithium carbonate from cycles 4, 5 & 6 was treated through the bicarbonation process for further purification. Analysis of the product from bicarbonation indicated that the purity exceeded the Chinese specification for battery grade lithium (YS/T 582-2013), applicable at that time.

Additionally, bulk pilot plant testwork was executed using drill core samples from the resource definition drilling campaign at the Cinovec deposit during 2020 and 2021. These samples were chosen as they are representative of the ore anticipated to be mined during the first five years of operation. Drill core samples were processed at independent testing and vendor facilities, where they were crushed, blended, milled, and passed through a WHIMS circuit, resulting in the production of 1,500 kg mica concentrate between Q4 2021 and Q1 2022.

The mica concentrate was mixed with reagents and roasted in a vendor pilot-scale rotary kiln in June 2022. The roasted bulk sample was contract milled. The milled roasted bulk sample was then leached, dewatered and washed on a horizontal vacuum belt filter at Dorfner ANZAPLAN in Hirschau, Germany. The lithium bearing solution from the bulk pilot plant campaign was shipped to ALS Metallurgy (Perth).

During the 2023 work in Q2 and Q3, a batch-continuous pilot plant testwork campaign was conducted at ALS under the direction of LCA. The lithium phosphate route was followed starting from Impurity Removal 1 unit step. Crude lithium carbonate was produced with some additional sighter testwork on bicarbonation producing battery grade lithium carbonate (BG LC). Further bicarbonation pilot plant testwork was conducted at ALS. Additional testing conducted from 2024 to 2025 enhanced the LCP design by addressing risks and opportunities identified in 2023.

Testwork programs initiated throughout the Cinovec Project development serve to validate the LCP process design criteria and parameters applied in the 2025 DFSU. Representative drill core samples and development rock stockpiles were identified and processed to produce concentrate samples for LCP testwork.

The 2025 FECAB DFS design produces mica concentrate with higher lithium mineral content and less gangue when compared to the 2023 work. Although roast-to-leach lithium extraction tests are pending, maintaining key process parameters will allow the process to achieve the targeted 93.2% lithium extraction rate (measured from mica content to PLS content) as per the processes design criteria. Testwork throughout Project development showed 92 to 96% roast-to-leach lithium recoveries, regardless of the mica concentrate origin or lithium mineral content, if key process parameters are met.

The leach residue, sodium sulphate by-product and final product have all been qualified through bench-scale and locked cycle test campaigns. Validated process parameters were used to update the design criteria, which informed the SysCAD model for mass and energy balances in the DFS and guided the sizing of the LCP plant. SysCAD model calculations were verified where required, using vendor-provided high-level mass and energy balances.

The table below shows a high level summary of the design progression of the concentrate grade fed to the LCP and total LCP lithium recovery:

Table 13.1: LCP Feed and lithium recovery comparison during the last three study phases:

Consideration	2023 (Base case)	2024 Concept Study	2025 DFS
Beneficiation concentration method	WHIMS & Flotation	Flotation Only	Flotation Only
LCP feed, P_{80}	< 110µm	< 110µm	< 110µm
LCP feed, lithium content (%)	1.19%	1.33%	1.44%
LCP feed, tpa (dry concentrate tonnes)	444,240	550,000	550,000
LCP overall lithium recovery (%)	88.46%	89.49%	90.82%

13.3 LCP Process Design

The initial process flow diagrams were provided by Geomet and were based on testwork conducted prior to the DFS study. LCA provided process design support to Geomet and assisted with the process flow diagram development for the Project. The lithium phosphate route selected for the DFS is supported by the LCA Locked Cycle Testwork report. The continuous pilot plant testwork campaign conducted at ALS Metallurgy during the DFS was completed and supported the impurity removal to final product section and a Battery Grade (BG) Lithium Carbonate (LC) product was produced.

Identified deviations in the continuous pilot plant testwork were further investigated in the 2024 and 2025 period and the process flowsheet adjusted to incorporate the testwork conclusions.

The plant design is based on the steady-state SysCAD model and Process Design Criteria (PDC) provided by Geomet. The SysCAD model utilises the values as stipulated in the PDC for reaction extents, wash efficiencies and recoveries.

The process uses conventional, well-tested equipment in sections of the process route but with some less common sections e.g., sulphation roasting, lithium phosphate conversion, lithium sulphate crystallisation and continuous crude lithium carbonate precipitation. These sections were successfully proven on a pilot scale, but published operational data from an industrial-scale plant has yet to be reported.

13.4 Further Testwork

Due to the change to a flotation-only concentrate, post-DFS confirmation testing is required for the detailed design of the roaster feed through to leach filtration. Scoping tests have been completed on a preliminary flotation-only concentrate which indicate that there will be no major deviation from the proposed flowsheet, however this needs to be confirmed and optimised with a more rigorous testing program.

No significant variations are expected from the previous testwork covering the hydrometallurgical area and impurity removal to final product. However, vendor testwork is essential for the detailed design of lithium sulphate crystallisation, mixed sulphate crystallisation and crude lithium carbonate crystallisation to ensure design and process parameters are validated.

Additionally, the testwork programme should encompass contingency studies to address any unforeseen process challenges that may arise during scale-up. Collaboration with equipment suppliers is recommended to obtain representative samples and feedback, thereby ensuring reliable performance in full-scale operations. Regular reviews of testwork progress and results will be necessary to promptly identify optimisation opportunities and potential bottlenecks.

14 OFF-SITE INFRASTRUCTURE

The infrastructure required to service the requirements of the Project, outside the battery limits of the mining and processing scopes, is summarised below

14.1 Portal

- Upgrade of existing forestry road to create the main access into the mine portal site.
- 20 MW 22 kV power supply from the Lesní brána substation, connected via buried cables to the Cínovec mine substation. This is a temporary supply, providing power from 2026 to 2032.
- 30 MW 22 kV supply from the Cinovec mine substation which will be connected to the future ČEZ Distribuce new Lesní brána substation expected in 2031-2032.
- No gas supply is required at the portal.
- Potable water for the mine will be produced by an RO plant or common potable water treatment plant fed from water ingress into the decline or a local stream or well.
- All run-off water, treated grey water and water pumped out of the mine will report to a surface water catchment dam at the portal. From this, dam water will be reused for underground mine services, fire water requirements, surface dust suppression and the water needs for the backfill plant.

14.2 Dukla Bulk Materials Transfer Hub

- Dukla is serviced via an existing access road.
- Electricity will be supplied by ČEZ Distribuce via an existing 35 kV O/H line.
- There is gas reticulation at Dukla vicinity which needs to be relocated due to the construction of the rail sidings (one gas supply, gas crossing, 300m of gasline and gas protection zone).
- There are existing potable water and sewage wastewater connections to the Dukla site.
- The site is well serviced in terms of communications.

14.3 Prunéřov

Given that Prunéřov was the site of the now demolished EPR 1 power station, it is already well serviced by utility and transport connections.

- The I/13 is a major dual lane road and runs adjacent to the site.
- High-voltage lines supplying the EPR 2 and Tušimice power plants run in the immediate vicinity of the site – a 110 kV / 22 kV substation will be constructed using three 40 MW transformers. The expected running load of the Prunerov Plant site is 57 MW.
- A buried main gas line DN 300 runs past the site boundary approximately 300m away. Average gas consumption is estimated at 10 500 Nm3/hour.
- The potable water supply for the Prunéřov site will be provided by the Hradiště Water Treatment Plant, which is supplied by the Přísečnice Reservoir on the Přísečnice river. Potable water will be supplied from existing the water supply line which fed the previous EPR 1 power plant.
- The source of raw water will be the Ohře River using the pumping station at Mikulovice and 2 water lines leading into Prunéřov site.
- Sewage and rain water from the processing plant will flow to the renovated Prunéřov sewage water treatment plant. Treated water will be discharge into Prunéřov creek.

15 TAILINGS HANDLING AND STORAGE

Knight Piésold Limited (Knight Piésold) carried out a definitive feasibility study (DFS) for the filtered tailings ("dry-stack") storage facility at the Cinovec Lithium Project. The work was undertaken to consider the tailings management approach for filtered tailings storage for the FECAB tailings and LCP residue streams at an offsite area. The tailings storage facility has been designed in accordance with the Global Industry Standard on Tailings Management (GISTM).

The design of filtered tailings storage facility (TSF) for FECAB tailings and LCP residue is based on the Project LoM Production Year 3 to production Year 27. The total estimated FECAB tailings LoM production to be stored at the TSF is 58.24 Mt and the LCP residue LoM production to be stored at the TSF is 3.36 Mt. Estimated filtered tailings dry densities of 1.77 t/m^3 and 1.47 t/m^3 were used for the FECAB tailings and the LCP residue, respectively. The estimated settled dry densities used in the study were from compaction tests carried out in 2022.

As part of the DFS scope of works, geotechnical laboratory testing and geochemical testing was carried out (FECAB, LCP and DNT layering/capping materials). Geotechnical laboratory testing included particle size distribution (PSD), Atterberg Limit tests, proctor compaction tests, falling head permeability testing and multistage consolidated undrained and consolidated drained tests.

FECAB tailings will be transferred from the tailings stockpile at the plant site by conveyor to a stockpile adjacent to the TSF. LCP residue will be transferred to the TSF by truck from the LCP tailings stockpile. Throughout operations, tailings and residues exposure will be minimised through progressive rehabilitation and closure techniques implemented during the construction process.

A surface water management plan has been developed to divert and maintain separation between non-contact and contact water and to establish water management requirements.

Figure 15-1 below shows the layout of the TSF at DNT.

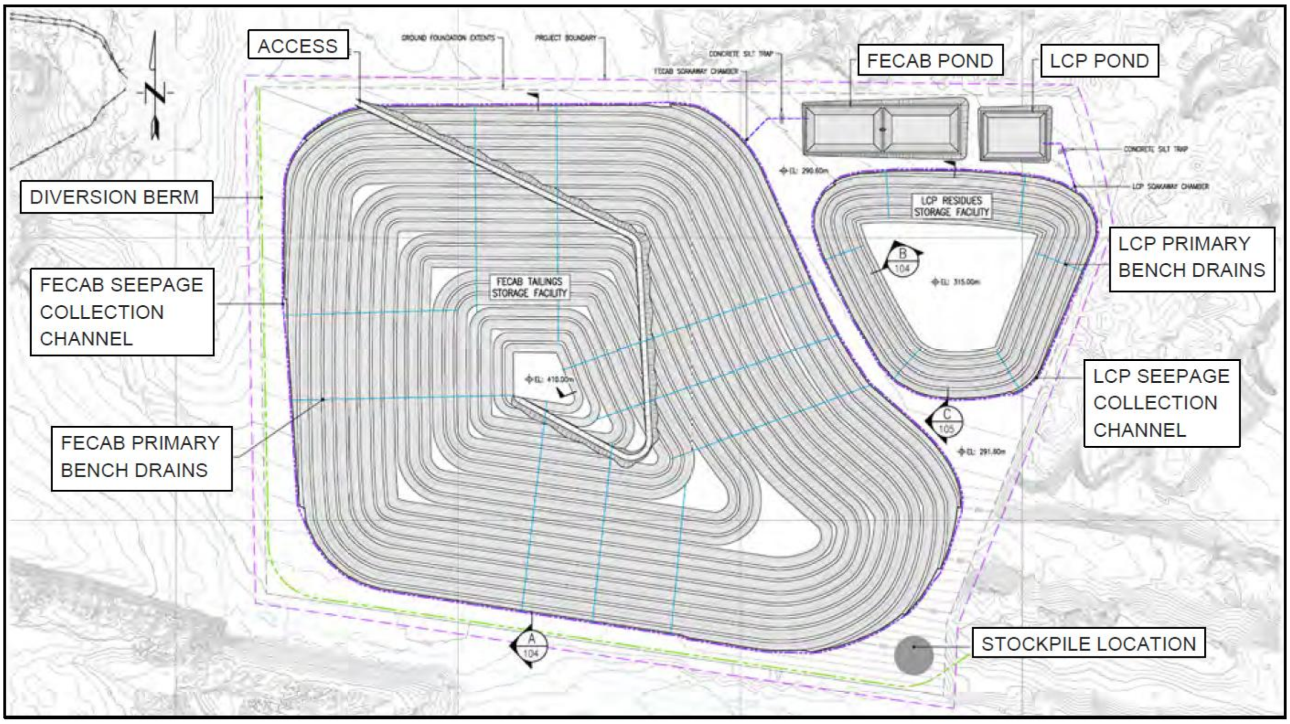


Figure 15-1 FECAB TSF and LCP TSF – Final Configuration Layout at DNT

16 Project Schedule

Table 16.1 outlines the key milestones for the Project

Table 16.1 Key Project Milestones

Task Name	Start	Finish
Implementation		
Cinovec Execution Commences	05/01/2026	
Design and Engineering	05/01/2026	30/072027
Process Testwork - Complete		15/12/2026
All Permitting finalised		03/08/2027
Long Lead Procurement	15/05/2026	30/11/2027
Fabrication and Transport	17/08/2026	29/01/2029
Construction		
Portal (Mining and Processing)	15/05/2027	25/12/2029
Aerial Conveyor	18/11/2026	06/10/2029
Dukla Transport Hub	23/10/2027	31/12/2029
Prunéřov Infrastructure	30/01/2027	19/02/2030
FECAB (Prunéřov)	24/08/2028	18/06/2030
LCP	24/08/2028	03/07/2030
Commissioning C1 – C5		
Portal (Mining and Processing)	25/12/2029	05/12/2030
Aerial Conveyor	06/10/2029	27/02/2031
Dukla Transport Hub	31/12/2029	22/05/2031
Prunéřov Infrastructure	19/02/2030	14/08/2031
FECAB (Prunéřov)	19/06/2030	14/08/2031
LCP	03/07/2030	14/08/2031

16.1 Long Lead Items

The following have been identified as priority long lead items.

Package	Estimated Time (months)
Falls Wagons, Specialist Tailings Wagons, Shunting Locomotives	26
Crystallizers	24
MCC & E-Houses	19
Aerial Conveyor, Roaster off-gas treatment	18
Kilns, Rod Mills, MV Switchgear & E-Houses	17
Evaporators	16
Stacker Reclaimers, Rail Load Out, Unloading Robot	14
Power Connections	10

17 CAPITAL COST

17.1 Estimate Classification and Accuracy

The capital cost estimate meets the required level of accuracy that will facilitate a DFS level study and complies with the typical industry standard for a Class 3 estimate as defined by the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice.

Table 17.1: Definition depicts the anticipated accuracy range and the typical variation in low (L) and high (H) ranges. The capital cost estimate is considered to be accurate to +/- 15%.

Table 17.1: Definition

Project Study Estimate Class	Maturity Level of Project Definition Deliverables	End Usage (Typical Purpose of Estimate)	Methodology (Typical Estimating Method)	Anticipated Accuracy Range (Typical Variation in Low (L) and High (H) Ranges)
Class 3	10 % to 40 % (of complete definition)	Funding Authorisation	Detailed unit costs for major equipment Mix of preliminary MTOs with semi-detailed unit costs for the balance	L = −10 % to −20 % H = +10 % to +30 %

17.2 Capital Cost Estimate

The Project up-front capital development costs of US$1,703,880 million (net of approved grants of USD461M) are forecast to be incurred over a four-year period, from July 2027 to completion in August 2031. These costs include:

- Engineering design
- Procurement of equipment, materials, and subcontracted works
- FECAB and LCP and infrastructure construction and commissioning
- Mine pre-production costs including mine development, mining contractor establishment and mobilisation, mining facilities construction
- Project management costs
- Owner's costs including permits and approvals, insurances, mobile equipment purchase, and capital spares purchase
- Bulk materials transport costs
- Bulk Infrastructure costs
- Operations pre-production costs including operations labour and G&A (general and administration), plant first fills, reagent and consumables opening stocks
- Withholding taxes, where applicable.

Table 17.2 below summarises the initial capital cost of the Project (before approved grants).

Table 17.2 Capital Cost Estimate

Cinovec Lithium Project - Capital Cost Estimate (USD)	
Mining	
Site Preparation	$24,198,681
Surface Facilities (Includes TSF)	$85,166,107
Surface Utilities and Reticulation	$13,051,840
U/G Facilities and Services	$28,010,477
Mining Equipment	$801,765
Mine Development	$117,174,008
Indirect Costs	$12,055,961
Mining Total	$280,458,840
Process Plant and Non Process Infrastructure	
Processing - Portal	
Mining Infrastructure & Processing	$58,970,300
Overland Rope Conveyor	$92,195,880
Offsite Infrastructure	$25,904,403
Dukla Transport Hub	
Site Preparation	$14,979,290
Materials Handling Infrastructure	$79,675,916
Offsite Infrastructure	$36,663,048
Owners Costs	$20,996,829
Prunéřov - Process Plant	
Site Preparation	$64,392,424
Concrete Works	$59,947,117
Structural, Mechanical, Platework and Piping	$614,996,057
Electrical, Control and Instrumentation	$127,441,078
Turnkey Packages	$21,800,311
Onsite Infrastructure (Buildings)	$10,600,927
Offsite Infrastructure	$114,740,702
Indirect Costs	
EPCM	$223,315,600
Owners Costs	$69,531,868
Capitalised Opex	$31,887,000
Process Plant and Non Process Infrastructure Total	$1,668,038,750
Contingency	$216,382,584
Total Capital Cost	$2,164,880,174

17.3 Estimating Methodology

Equipment pricing and construction rates were obtained, where possible, from European vendors. Quantities were based on take-offs from designs and drawings.

Designs and cost were specific to the Project and location, as far as possible, and of a sufficient level to give the necessary accuracy to the estimate.

The estimate further assumes that the Project will be executed on an EPCM (engineering, procurement and construction management) basis; therefore, no main (or EPC) contractor risk or mark-up has been included in the base costs. There is an overall contingency allowance developed using quantitative risk assessment methods.

18 OPERATING COSTS

18.1 Operating Cost Summary

Table 18.1 below presents a high-level overview of operating costs, using the Brook Hunt definition.

Table 18.1: Operating Cost Summary

Operating Cost Estimate (Real) (USD)	Life of Mine (000's)	Cost per ROM Tonne	Cost per Product Tonne
Mining Opex	$ 3,279,573	$ 44.68	$ 3,771
Contractor Costs	$ 1,059,369	$ 14.43	$ 1,218
Owners Costs	$ 736,566	$ 10.03	$ 847
Tech Service & Management	$ 607,791	$ 8.28	$ 699
Backfill	$ 176,485	$ 2.40	$ 203
Power	$ 314,937	$ 4.29	$ 362
Fuel	$ 384,425	$ 5.24	$ 442
Process Plant and Onsite Infrastructure	$ 6,179,457	$ 84.19	$ 7,106
FECAB Opex	$ 1,393,363	$ 18.98	$ 1,602
Fixed Costs	$ 305,648	$ 4.16	$ 351
Electrical Power	$ 308,435	$ 4.20	$ 355
Processing Water	$ 1,237	$ 0.02	$ 1
Process Consumables	$ 8,439	$ 0.11	$ 10
Reagents	$ 532,425	$ 7.25	$ 612
Flocculant	$ 18,110	$ 0.25	$ 21
Mechanical, E&I Spares, Wear Linings and Piping	$ 121,568	$ 1.66	$ 140
Grinding Media	$ 51,251	$ 0.70	$ 59
Train Loadout / Ropecon system	$ 46,249	$ 0.63	$ 53
LCP Opex	$ 4,786,094	$ 65.20	$ 5,503.58
Fixed Costs	$ 139,897	$ 1.91	$ 161
Electrical power	$ 635,356	$ 8.66	$ 731
Fuel (Natural Gas)	$ 721,491	$ 9.83	$ 830
Reagents	$ 2,728,363	$ 37.17	$ 3,137
Plant Consumables	$ 46,739	$ 0.64	$ 54
Bagging	$ 174,990	$ 2.38	$ 201
Laboratory	$ 15,749	$ 0.21	$ 18
Maintenance Cost	$ 323,511	$ 4.41	$ 372
Opex Other	$ 1,404,297.04	$ 19.13	$ 1,614.82
Tailings Handling OPEX	$ 326,329	$ 4.45	$ 375
Rail OPEX	$ 816,318	$ 11.12	$ 939
Mobile Equipment (total Site incl LCP)	$ 128,532	$ 1.75	$ 148
Owners Cost OPEX	$ 165,004	$ 2.25	$ 190
Capitalised Opex	$ (31,887)	$ -0.43	$ (37)
Total C1 Costs	$ 10,863,327	$ 148	$ 12,492
CAPEX Depreciation	$ 2,682,234		
Total C2 Costs	$ 13,545,561		$ 15,576
Royalties	$ 528,078		
Total C3 Costs	$ 14,073,639		$ 16,183
Sustaining CAPEX	$ 498,710		$ 573
CAPEX Depreciation	$ (2,682,234)		
All-in-Sustaining Cost	$ 11,890,115		$ 13,673

18.2 Operating Costs by Area

18.2.1 Mining

Mining operating costs are based on the mining contractor amortising the cost of supplying/funding the mining fleet. Mining costs include:

- Contractor, e.g. ore and waste development, drilling and charging, stoping, haulage, etc.
- Owner's costs, e.g. explosives, equipment, manpower, etc.
- Fuel
- Backfill
- Technical services and management
- Power.

18.2.2 FECAB Processing Costs

FECAB processing costs include both fixed and variable costs.

Fixed costs include:

- Human resources
- Electrical power at site.

Variable costs include:

- Portal including underground crushing
- Dukla material handling site
- Beneficiation.

18.2.3 LCP Processing Costs

LCP processing costs include both fixed and variable costs.

Fixed costs include:

- Human resources
- Laboratory.

Variable costs include:

- Electrical power
- Fuel
- Reagents
- Plant consumables
- Product bagging
- Laboratory
- Maintenance.

19 FINANCIAL EVALUATION

19.1 Physicals

The Project physicals are shown in Table 19.1 and are based on the Mine design and Ore reserves estimates by Bara Consulting. The Project LOM production will be 869.6 kt of battery grade lithium carbonate (Li_2CO_3) Produced.

Table 19.1: Project Physicals

Project Physicals	Unit	LOM	Per Avg Operating Year
Mining			
Total Ore Development Drives	kt	16,532	599
Total Stoping Ore	kt	56,869	2,062
Total Waste Development	kt	5,269	191
Processing			
Total Ore Processed	kt	73,402	2,661
Average Lithium Head Grade	% Li	0.276%	0.276%
FECAB Recovery	%	89.1%	89.1%
LCP Recovery	%	90.6%	90.6%
Lithium Carbonate Production	kt	869.6	31.5
Lithium Carbonate Production (@full run rate)	kt		38.3

19.2 Financial Highlights

The results of the financial model show the potential within the asset. The model applies a long-term lithium carbonate price of US$26,000/t (real) on a flat line basis from commencement of production.

NPV8% pre-tax, nom as at construction start date is US$1,348,315 with an IRR of 13.1%.

Pre-tax payback period is 7.3 years starting from production start date.

Project lithium carbonate production averages 31,527 tonnes per year over the life of the Project and 37,500 tonnes per year at full production, excluding two ramp-up and two ramp-down years.

The life of mine all-in sustaining cost ("AISC") on a per tonne basis ranges between US$13,673/t (real) to US$13,752/t (real), where AISC includes mining costs, FECAB & LCP processing costs, tailing handling costs and owner's costs, royalties and sustaining capex. LOM AISC is $11,890m (real).

19.3 Principal Assumptions

19.3.1 Project Configuration

The Project's DFS financial analysis basis assumes a project life of 28.5 years. Details of Project configuration are outlined in Table 19.2. The lithium carbonate production period is the same life of mine (LOM) period for the LOM cost calculation.

Table 19.2 Project Configuration

Life of Mine	Date Start	Date End	Years
Mining Construction Period	01-Jul-27	30-Jun-31	4.0
Mining Operations	01-Jul-28	31-Dec-55	27.5
FECAB & LCP Construction Period	01-Aug-27	31-Aug-31	4.1
FECAB & LCP Operating Period	01-Nov-30	31-Dec-55	25.2
LOM Period	01-Jun-28	31-Dec-55	27.6
Project Life	**01-Jul-27**	**31-Dec-55**	**28.5**

19.3.2 Discount Rate

Pre-tax, nominal discount rate of 8% has been applied for the financial evaluation. The sensitivity analysis in Section 19.4 outlines the impact to financial outcomes based on minimum and maximum discount rate.

19.3.3 Basis of Estimates and Assumptions

The Project will require upfront development CAPEX of US$2,165M (real) and total sustaining CAPEX of US$498M (real) over the Project life. Initial CAPEX includes costs for all site construction works, mine development, project management costs and owner's costs required to develop the mine, Front-End Comminution and Beneficiation (FECAB), Lithium Chemical Plant (LCP), and supporting infrastructure, as well as bulk infrastructure and all bulk materials transport costs. The CAPEX excludes Project sunk costs (including historical studies and exploration) up to the end of year 2025.

The LOM OPEX is inclusive of all activities required to mine, process and transport ore to produce lithium carbonate. This also includes all costs for the rail, management, administration, operation and maintenance of the Project.

Accounting depreciation (non-cash) expenses for each aggregated capital item is calculated using a straight-line methodology. All capital items were assumed to have a 20-year operating life.

19.3.4 Revenue

Project revenues are derived from sales of battery grade lithium carbonate. The lithium carbonate price basis for revenue calculation is US$26,000/t (assumed ex-site price, real). The sale basis is lithium carbonate sold at the LCP, with the cost of transport and insurance covered by buyers.

The total gross revenue for life of mine is estimated to be US$22,610M (real).

19.4 Sensitivity Analysis

19.4.1 Sensitivity Analysis Results

Multiple hypothetical scenarios have been considered for analysing the impact to Project NPV ((@ 8% pre-tax, real) by adjusting selected critical assumptions and cost inputs within a given range. The following sensitivity analyses have been performed using a pre-tax (real) discount rate of 8% with each variable as follows flexed ±X% using the midpoint price range applied as the central case. The central case assumes a lithium carbonate price of US$26,000/t (real terms) and results in an NP PV pre-tax (real) @ 8% discount rate is US$1,715,785 with an IRR of 15.2%.

- Operating expenditure (±10%)
- Capital expenditure (±10%)
- Sustaining capital expenditure (±10%)
- Product prices (±20%)
- Discount rate (7% and 11%, post-tax nominal)

The sensitivity analysis results are shown in Figure 19-1

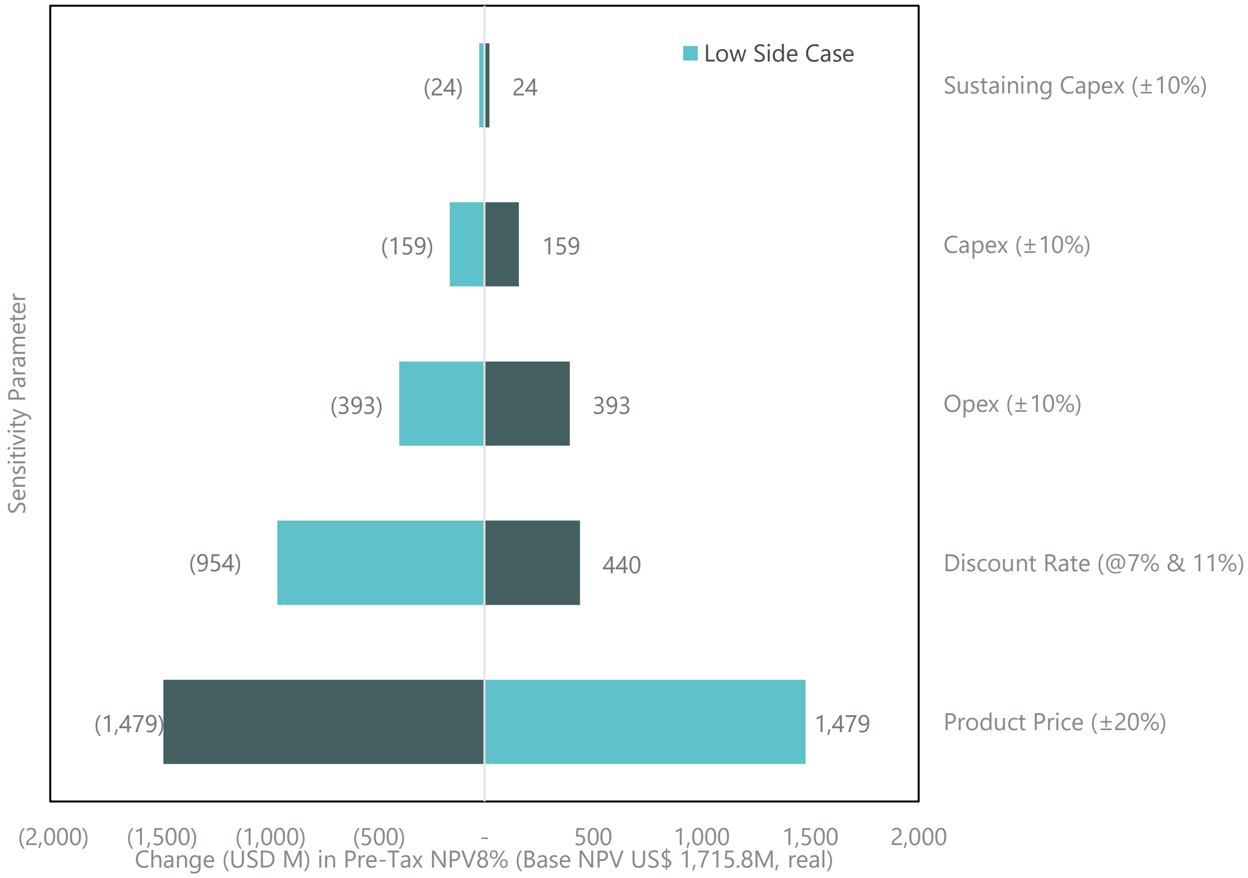


Figure 19-1: NPV @post-tax (reall) discount rate (US$'000)

The results also show that the Project is most sensitive to an increased discount rate (@7% & 11% Pre-tax real) and lithium carbonate prices. After this, the next most important are the operating expenditure and capital expenditure. There is a relative insensitivity to sustaining capital expenditure changes.

19.5 Scenario Analysis

The Cinovec Project has been awarded a government grant of up to US$410.7 million. The government grant will be paid annually over three years, with payments made at the end of August each year. The government grant is assumed to offset initial capex spending and is non-taxable.

Additionally, the Project has been awarded a grant of up to CZK 800m (US$38.6m) from the Just Transition Fund

Table 19.3: Grants expected drawdown

Grant (US$M)	30-Jun-27	30-Jun-28	30-Jun-29	30-Jun-30	30-Jun-31	Total
Government Grant			177.3	116.7	116.7	**410.7**
JTF Grant	19.3	19.3				38,6

By incorporating these grants, Project NPV pre-tax @ 8% discount rate is US$1,715,785 with an IRR of 15.2%.

20 MARKET STUDY

Lithium is central to the transition to clean energy, yet remains a small, poorly understood market, with limited liquidity. Unlike bulk commodities such as iron ore and copper, the lithium market also lacks mature futures and options needed for risk management and, as a commodity, behaves more like a specialty chemical.

Battery-grade lithium carbonate is not a fungible product, with specifications varying by producer and alternatives such as technical grade and hydroxides also available. Most buyers require rigorous qualification testing before accepting a new supply.

20.1 Market Studies

20.1.1 Demand

In 2010, global demand for lithium chemicals was less than 100,000tpa of lithium carbonate equivalent (LCE), concentrated in industrial applications such as glass, lubricants, air treatment, and organometallics. Lithium-ion batteries were then primarily used in portable electronics. By 2020, global demand exceeded 300,000t LCE, with growth driven by battery-related uses such as in electric transportation (EV/HEV) and battery energy storage systems (BESS).

Supply Chain Insights (SCI), a publication focused on market trends in technology supply chains, projects for 2030 a battery output of over 4.5 TWh (4,500 GWh), equivalent to more than 3.5 Mt LCE (**Error! Reference source not found.**).

Benchmark Mineral Intelligence projects a 2035 battery demand of 5.7 TWh which according to Future Market Insights is forecast to reach USD 377.6 billion by 2035 and exhibiting a remarkable 15.8% CAGR between 2025 and 2035.

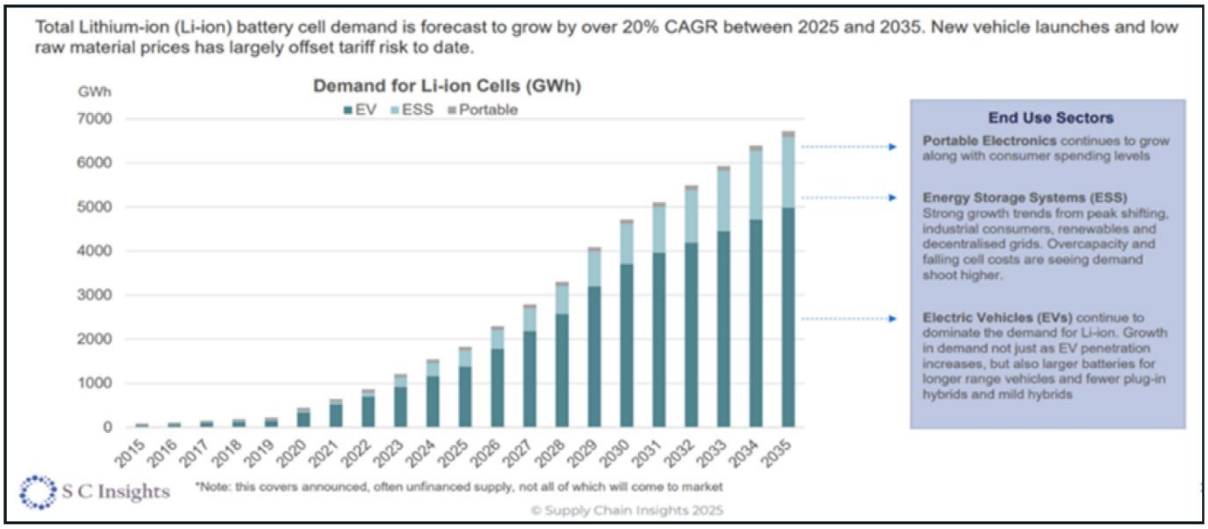
McKinsey forecasts LMFP battery demand CAGR of 28% between 2023-30 and NMC battery demand CAGR of 15% over the same period (**Error! Reference source not found.**). All common battery formats used for transport and BESS – such as NMC, LFP LMFP – use lithium in the cathode.

The growth of EV sales projected by Fastmarkets in select geographies is shown in **Error! Reference source not found.**. BESS adoption has also rapidly accelerated since 2022 and is expected to comprise a growing share of battery demand as indicated in**Error! Reference source not found.**.

Future Market Insights has indicated that the global BESS market is anticipated to report a valuation of USD 74.8 billion in 2025 and is projected to reach USD 178.7 billion by 2035, expanding at a compound annual growth rate (CAGR) of 9.1% during the forecast period.

Lithium demand in 2025 is expected to exceed 1.3 Mt LCE. iLi Markets, a consulting firm specialising in the lithium industry, projects demand of approximately 3.2 Mt LCE by 2030. Fastmarkets, a price reporting agency for several market sectors including mining, predicts demand of 3.9 Mt.

Asia is expected to remain the largest lithium chemical market over the next decade. China currently holds over 70% of global lithium-ion cell production capacity and remains the largest EV market. Korea and Japan are also major battery producers.



Source: Supply Chain Insights (2025).

Figure 20-1: Global Lithium-Ion Cell Demand

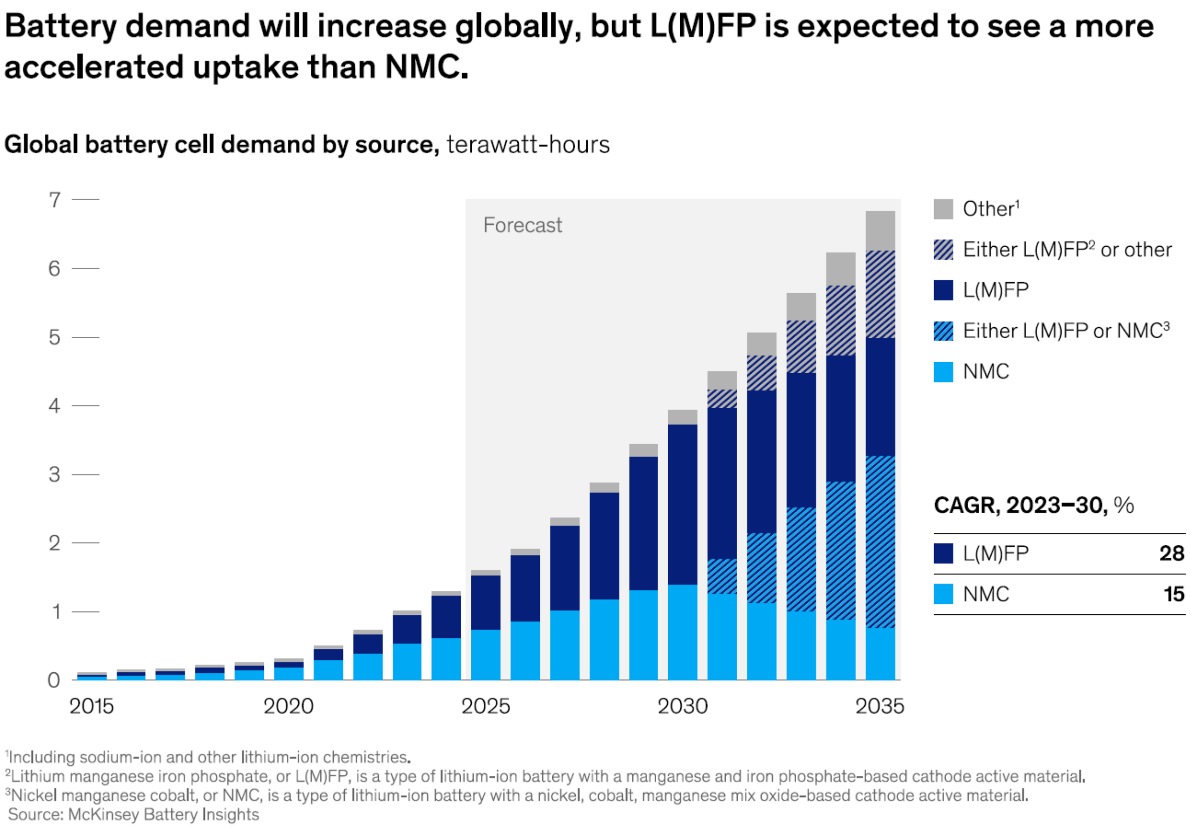
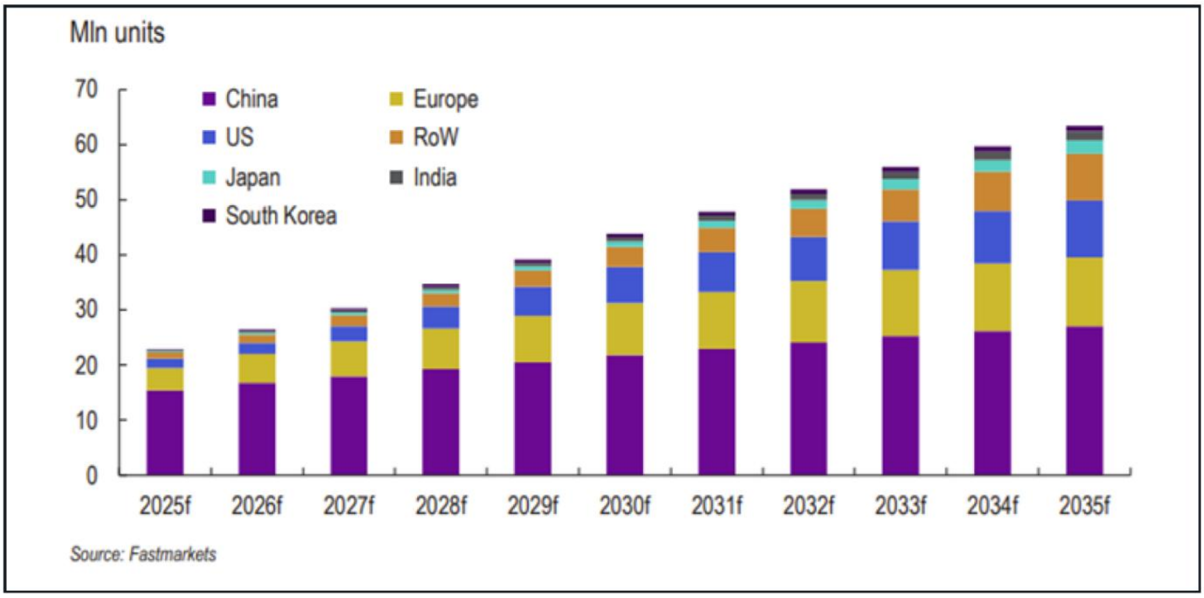


Figure 20-2: **Global Battery Demand**



Source: Fastmarkets (2025).

Figure 20-3: EV Sales Forecast by Market

North American lithium-ion battery capacity is expected to grow substantially in coming years, supported by government programs and US Department of Energy loan guarantees. Europe is similarly expanding its supply chain under the EU Green Deal and the Fit for 55 package, although some implementation timelines have recently been adjusted.

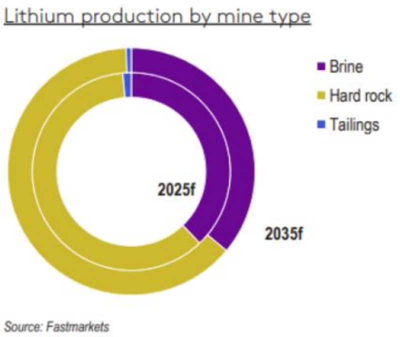
Battery-grade lithium carbonate remains essential for major cathode chemistries, including lithium iron phosphate (LFP), lithium manganese iron phosphate (LMFP) and nickel-cobalt-manganese types such as NCM523 and NCM622.

LFP and LMFP are widely used in mass-market EVs, electric buses and grid-scale ESS, particularly in China, with adoption expected to accelerate in North America and Europe as costs decline and local supply chains mature.

20.1.2 Supply

Battery-quality lithium carbonate will lead market growth over the next decade, followed by lithium hydroxide. These chemicals are produced primarily from two types of resources, hard rock (spodumene) and brines, although there will be production from sedimentary assets (also referred to as clay) later in this decade. China dominates the conversion of various feedstocks from around the world into lithium chemicals with over 95% of hard rock conversion capacity.

Error! Reference source not found. shows the current mix of sources and projected output for 2035.



By sub-type,'000 tonnes LCE		2025f	2035f
Brine	Continental	582	1,081
	Geothermal	0	19
	Oilfield	0	7
Hard rock	Spodumene	749	1,502
	Lepidolite	177	330
	Petalite	8	42
	Zinnwaldite	0	12
	Jadarite	0	16
	Mica	0	2
	Sediments (Undifferentiated)	0	7
	Clay (Undifferentiated)	0	33
Tailings		21	21

Source: Fastmarkets

Source: Fastmarkets (2025).

Figure 20-4: Li Supply Forecast

The lithium market experienced a shortage in 2021 to 2022, resulting in Chinese battery-quality carbonate spot prices exceeding US$80/kg. High prices triggered a rapid supply response in China, accelerating the development of domestic lepidolite assets in Jiangxi Province and brines in Qinghai. In addition, new hard-rock supply from Africa came onto the market alongside higher spodumene concentrate exports from Australia.

By mid-2023, these additions, combined with greater imports of African lithium-bearing ores into China, created an oversupply financed in large part by aggressive strategies from two major Chinese battery producers, CATL and BYD. In addition, there was a simultaneous decrease in the growth of the adoption rate of EVs when compared to earlier forecasts that informed mine and refinery production strategies.

As a result, prices dropped to below US$10/kg, curtailing investment in many Western projects, where longer development timelines, financing constraints and regulatory hurdles can slow the pace of new capacity additions compared with the speed of project execution in China.

Forecasters, including Fastmarkets, Benchmark Mineral Intelligence, and iLi Markets, project that demand growth between 2026 and 2028 will end the oversupply situation, followed by a sustained shortage potentially lasting into the mid-2030s. As shown in the iLi Markets projection (Figure 19-5), the current oversupply is forecast to reverse in 2026 and increase each year to 2030. Benchmark Mineral Intelligence currently forecasts a lithium shortfall beginning in 2028 and growing to over 1 Mt by the end of the next decade.

Lithium Chemicals Forecast kMT LCE SD Balance	20	21	22	23	24	25 F	26 F	27 F	28 F	29 F	30 F
Demand (Consumption)	333	522	711	902	1.070	1.346	1.667	2.068	2.463	2.790	3.216
Yoy		189	189	191	169	276	321	401	395	327	426
Supply	355	583	722	910	1.173	1.368	1.618	1.980	2.270	2.536	2.780
Yoy		229	139	188	262	195	249	363	290	266	244
Supply - Demand Balance		62	12	9	103	22	-49	-87	-193	-254	-437
% of Demand		12%	2%	1%	10%	2%	-3%	-4%	-8%	-9%	-14%

iLi MARKETS

Source: iLi Markets (2025).

Figure 20-5: Lithium Chemicals Forecast

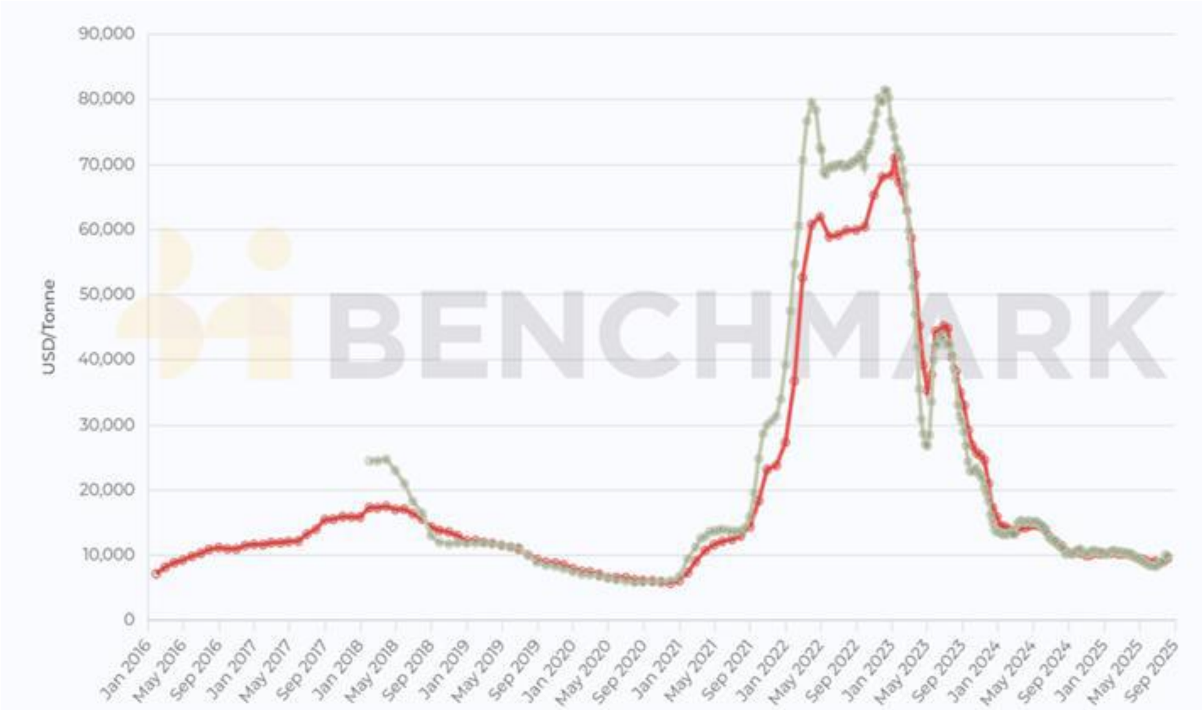
Currently, Western Australia is the largest source of lithium globally. Benchmark Mineral Intelligence forecasts Australian hard rock will provide 33% of global supply in 2025, mostly in the form of spodumene concentrate converted in China to lithium chemicals. China's domestic supply from hard rock, brine and other sources will be approximately 20% of the market in 2025, followed by Chile (16%), and Argentina (7%). Other countries, such as Africa, Canada, and the US, will supply 24%.

Lithium recycling is expected to remain a minor contributor until at least the late 2030s because recycling technology is in its infancy with relatively low demonstrated efficiency and is unlikely to materially offset primary supply requirements before the 2040s.

20.2 Commodity Price and Price Projections

Lithium carbonate prices have been highly volatile in recent years. After bottoming out at near US$5/kg in 2020, in 2022 prices peaked at over US$80/kg on the Chinese spot market. Ex-China contract prices averaged US$60/kg in 2023, before declining sharply as China brought on an increased domestic supply of lepidolite, in combination with increased exports from Australia and Africa.

Error! Reference source not found. illustrates the volatility of lithium chemical pricing from 2016 to mid-2025. The red line represents the global weighted average carbonate price and the green line the Chinese battery-grade spot price.



Source: Benchmark Mineral Intelligence (2025).

Figure 20-6: Recent history of Lithium Carbonate Pricing

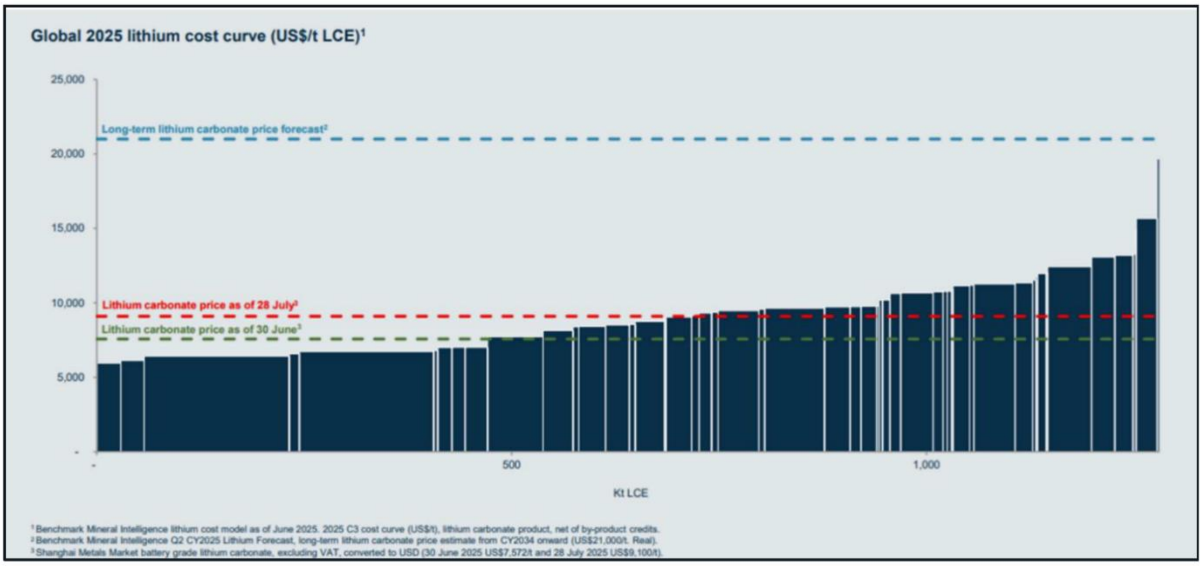
Currently, a significant portion of global lithium suppliers are believed to be operating at a loss, which is not sustainable over the long term. **Error! Reference source not found.** indicates that prices will need to rise to incentivise capacity additions, particularly outside China.

Production from what is shown in **Error! Reference source not found.** needs to approximately double by 2030 to meet forecast demand. Yet, at current pricing, over 40% of production is marginal or losing money.

As lower-quality mineral-based capacity is added in the next five years, the right-hand side of the cost curve is expected to increase, supporting higher prices.

Another significant factor is that much of the new production in China from lepidolite and certain brines in Western China is under increasing regulatory pressure. On July 1, 2025, China's revised Mineral Resources Law took effect, closing permitting loopholes that enabled several lepidolite mines in Jiangxi Province and brine operations in Qinghai to operate. As of August 2025, at least eight operating mines are under environmental review and multiple mines – including the largest one measured by LCE output and owned by CATL - have temporarily halted production.

Even before the new Mineral Resources Law took effect in China, most forecasters were already projecting the market to move into a sustained shortage in the second half of the decade. While volatility is likely to continue in the short term, structural demand growth and persistent project delays are expected to maintain price support.



Source: Benchmark Mineral Intelligence (2025).

Figure 20-7: Global Lithium Cost curve

Long-Term Price: Battery-Grade Lithium Carbonate – Europe

Summary

As the developer of a battery-grade lithium carbonate project in the Czech Republic, our long-term price assessment supports a **realised contract price of USD 26,000/tonne** for the life of the forward-looking feasibility study. This number is anchored in three broad pillars:

1. Recent price trends supporting a trailing average price of over $24,000/t LCE
2. **Structural cost support mid-to-long term** – production cost curves and Europe-adjacent cost disadvantages justify a higher floor price.
3. **Supply / demand fundamentals** – while near-term weakness is observed, medium to long-term tightening and strategic supply imperatives underpin pricing upside.
4. **Regional premium and strategic value** – a European domestic producer benefits from risk-mitigation, premium logistics and strong regulatory / ESG value, justifying a supranormal price relative to import benchmarks of potential non-European competitors.
5. **General current market indications are for a long-term 2030+ lithium price of above $24,000/t**

20.3 European Domestic Producer Premium – Czech Republic Context

- As a producer located in central Europe, the Cinovec Project offers specific advantages:
    - Proximity to major European auto manufacturers and battery manufacturing hubs (Germany, Netherlands, etc), reduces inbound and outbound logistics costs, inventory/lead-time risk and supply-chain complexity.
    - Domestic value-chain and "local supply" premium: battery makers increasingly value geographical diversification, security of supply, local content / ESG factors.

- Reduced freight/import duties, lower import-supply risk and currency/logistics risk compared to overseas imports.
- Ability to enter long-term offtake contracts with European PCAM, CAM and battery cell manufacturers seeking upstream supply-chain stability – enabling premium pricing.

- Given these advantages, the producer is in a weaker-competitive position (higher cost) relative to low-cost global producers, but in a **stronger-value proposition** position relative to importers for European battery makers. That "value capture" supports a long-term contract premium.
- From a project risk perspective (permitting, ESG, localisation), having domestic operations mitigates downstream risk, which underwriting parties will factor favourably, supporting a higher sustainable price assumption for modelling.

20.4 Conclusion

- We set a long-term (10+ year) contract average price of USD 26,000/tonne, benchmarked as follows:
  1. **Cost floor benchmark** – assuming the European producer all-in sustaining cost (mining, processing, logistics, overheads, sustaining capex) in the region is approximately USD 15,000–18,000/tonne (internal modelling aligned with cost curves). A USD 26,000 price gives ~30-40 % margin, sufficient for capital recovery, contingency, and inflation.
  2. **Import parity / premium** – imported Li_2CO_3 into Europe via low-cost jurisdictions might transact after 2030 at or above USD 24,000. As a domestic producer offering shorter logistics, no import tax and higher security of supply, a premium of USD 2,000/tonne is justified.
  3. **Strategic upside buffer** – Given the possibility of supply tightening and contract rollover after 5–7 years, the USD 26,000 figure provides headroom to capture cycle-recovery pricing while remaining conservative relative to historical peaks.
  4. **Sensitivity buffer** – The price assumption allows for downside risk (slower EV growth) while still maintaining project viability, and upside (higher demand, tighter supply) without being overly optimistic.
- In the contract modelling, Geomet expects to apply an escalation or review clause (e.g., inflation + index or revision every 3–5 years) to account for cost inflation/chemistry shifts, but the base price assumption is USD 26,000/tonne in real 2025 USD terms.