

Why Mayhew Performance?



Industry Leaders and Subject Matter Experts in Battery Electric Vehicle Technology and Mining Due Diligence.



Over 100 Years of combined experience in Surface and Underground Operations.



Innovation experts in Green Technology, GHG Emissions and Off Grid Power



Sustainable operations with increased Performance, Productivity and Audits



Timely execution of Projects, Practical and Operational Global expertise.





Feasibility Study and Technology Roadmap	
Client	Discovery Silver Corp.
Location	CAN: Toronto (Head Office)
Mine Site	Mexico: Cordero
Commodity	Silver
Timeframe	2023-Ongoing
Nature of Project	Feasibility Study
Scope of Work	Technology Roadmap Development and Mining Engineering Support
Technology	MPL BEV proprietary Simulation Software.

Image: Mexico, Cordero Future Mine Layout





Image: Wallbridge Mining Company Limited Fenelon Mine site

Preliminary Economic Assessment (PEA)		
Client	Wallbridge Mining Company Limited	
Location	CAN: Toronto (Head Office)	
Mine Site	Fenelon, Northern Abitibi Québec, CAN	
Commodity	Gold	
Timeframe	2024-Ongoing	
Nature of Project	PEA	
Scope of Work	PEA and Project Management	





Mine Due Diligence & Acquisition	
Client	Discovery Silver
Location	Timmins, Ontario CAN, Porcupine Assets
Mine Site	Borden, Hoyle, Pamour, Dome, Hollinger
Commodity	Gold
Timeframe	2024-2025
Nature of Project	Mine Due Diligence and Acquisitions
Scope of Work	Mine Due Diligence and Evaluations including recommendation and onsite reviews
Deliverables	M&A recommendation and reporting including PEA contribution

Image: Mining Stock Image





Image: NEXGEN ENERGY LTD

Peer Review	
Client	NEXGEN Energy Ltd.
Location	CAN: Toronto (Head Office)
Mine Site	Rook I, Saskatchewan. Canada
Commodity	Uranium
Timeframe	2024-Ongoing
Nature of Project	Peer Review
Scope of Work	CAPEX, OPEX, BEV Assessment and Mine Design Review





Image: Wesdome Gold Mines Ltd. Kiena Mine

BEV Operational Readiness Support	
Client	Wesdome Gold Mines Ltd.
Location	CAN: Toronto (Head Office)
Mine Site	Val D'or, Québec, Kiena Mine
Commodity	Gold
Timeframe	2024-Ongoing
Nature of Project	Operational Readiness Support
Scope of Work	Battery Charge Station Design and Operational Readiness



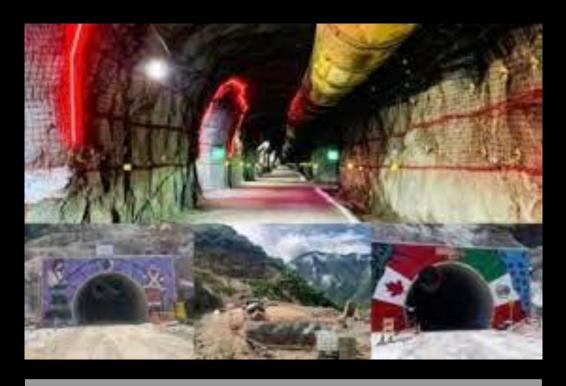


Image: Torex Gold Resources Inc, Media Luna

BEV Feasibility Study and Operational Readiness	
Client	Torex Gold Resources Inc
Location	CAN: Toronto (Corporate Office)
Site	Mexico, Minera Media Luna
Commodity	Precious Metals
Timeframe	2022-Ongoing
Nature of Project	BEV Audits, Peer Review, Procurement and Supply Change, including Operational Readiness at the mine site
Scope of Work	BEV Audits, Peer Review, Infrastructure Review, Mine Design and Charging philosophy including supporting procurement.
Technology	MPL BEV proprietary Simulation Software.





Image: Torex Gold Resources Inc, Media Luna

BEV Audit and Operational Readiness Support	
Client	Torex Gold Resources Inc
Location	CAN: Toronto (Corporate Office)
Site	Mexico, Minera Media Luna
Commodity	Precious Metals
Timeframe	2024-Ongoing
Nature of Project	BEV Audits, Peer Review and Operational Readiness support
Scope of Work	BEV Audits, Peer Review and Operational Readiness
Technology	MPL BEV proprietary Simulation Software.





Image: Glencore, ODP (Onaping Deep)

BEV Audit	
Client	Glencore, Onaping Deep
Location	CAN: Toronto (Corporate Office)
Site	ODP (Onaping Deep)
Commodity	Precious Metals
Timeframe	2024-Ongoing
Nature of Project	BEV Audits, and Operational Readiness support
Scope of Work	BEV Audits and Operational Readiness support
Technology	MPL BEV proprietary Simulation Software.





BEV Confidential Project	
Client	Teck Resources
Location	CAN: British Columbia, Canada
Mine Site	CAN: Greenhills Operations
Commodity	Coal
Timeframe	2022-Ongoing
Nature of Project	BEV Confidential Project
Scope of Work	BEV Confidential Project
Technology	MPL BEV proprietary Simulation Software.

Image: Greenhills, British Columbia, Canada





BEV Trade Off Study	
Client	Kinross Gold Corporation
Location	CAN: Toronto (Corporate Office)
Mine Site	CAN: Red Lake, Ontario Canada
Commodity	Gold
Timeframe	2023-Ongoing
Nature of Project	BEV Trade Off Great Bear
Scope of Work	BEV Trade off Study and Mining Support
Technology	MPL BEV proprietary Simulation Software.

Image: Kinross Great Bear, Red Lake, Ontario Canada



SURGICAL MINING TECHNOLOGIES

Data-Driven Solutions To Unlock Uneconomic

Deposits - Quickly And Sustainably.

Advisory Board Member and Mining Support	
Client	Novamera
Location	CAN: Oakville, Canada (Corporate Office)
Mine Site	Several Mine Sites
Commodity	Base Metals and Precious Metals
Timeframe	2024-Ongoing
Nature of Project	Surgical Mining vs Conventional Mining
Scope of Work	Advisory and Mining Support
Technology	MPL Surface and Underground Experience

Image: Novamera, Surgical Mining





Advisory Board Member and Mining Support	
Client	Riino
Location	CAN: Sudbury, Ontario Canada
Mine Site	Several Mine Sites
Commodity	Base Metals and Precious Metals
Timeframe	2023-Ongoing
Nature of Project	Zero Emission Monorail
Scope of Work	Advisory and Mining Support
Technology	MPL Surface and Underground Experience

Image: Riino, Zero Emission





Image: Tucson, Arizona, USA

BEV Desktop Study	
Client	South32
Location	Tucson Arizona, USA
Mine Site	Hermosa Project, Taylor Deposit
Commodity	Zinc, Lead Silver
Timeframe	2022-2023 (Complete)
Nature of Project	Desktop Study
Scope of Work	BEV Desktop Study, Pre-feasibility Study, Risk assessment, Technical and Economical Analysis based on 15 work packages
Technology	MPL proprietary Simulation Software.





Image: Codelco, El Teniente, Chile

El Teniente Extension Project	
Client	CODELCO
Location	El Teniente, Chile
Mine Site	Andesita, Diamante, Andes Norte, Recursos Norte, Mina Diablo Regimento Phase 4&5
Commodity	Copper
Timeframe	Q3 2021-2022 (Complete)
Nature of Project	BEV Desktop Study
Scope of Work	BEV Desktop Study, Pre-feasibility Study, Risk assessment, Technical and Economical Analysis, Onsite Workshop Training.
Technology	MPL BEV proprietary Simulation Software.

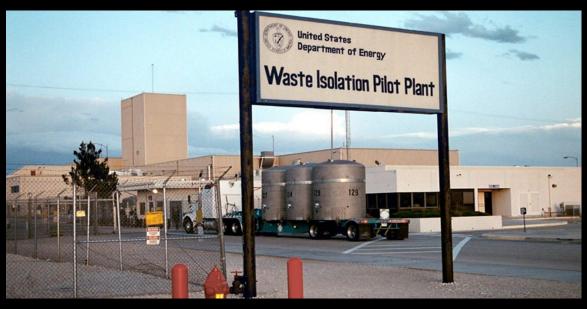




Image: Detour Mine , Ontario, Canada

Green House Gas Emissions	
Client	Kirkland Lake Gold
Location	CAN: Detour Lake, Macassa Mine AUS: Fosterville
Mine Site	CAN: Detour Lake, Macassa Mine AUS: Fosterville, Cosmo
Commodity	Gold
Timeframe	2021-2023 (Complete)
Nature of Project	GHG Consultation
Scope of Work	SOW1 GHG Program Audits, SOW 2 GHG Calculation, SOW 3GHG Recommendation to Leadership, and GHG implementation at sites.
Technology	MPL BEV proprietary Simulation Software.





BEV Operational Feasibility	
Client	United States Department of Energy (DOE)
Location	New Mexico, USA
Mine Site	WIPP Project
Commodity	Nuclear Waste
Timeframe	2021-2022 (Complete)
Nature of Project	BEV Operational Feasibility
Scope of Work	BEV Assessment, Audit and implementation including recommendation of new equipment.
Technology	MPL BEV proprietary Simulation Software.

Image: WIPP Project, New Mexico, USA





Image: Vale, Sudbury

BEV Study and Support Program	
Client	Vale North Atlantic Operations
Location	Sudbury, Ontario
Site	Vale, Sudbury
Commodity	Base Metals
Timeframe	2022-2023 (Complete)
Nature of Project	BEV Study and Support Program
Scope of Work	BEV Fleet review, BEV vs Diesel, North Atlantic fleet review and procurement and operational readiness
Technology	MPL BEV proprietary Simulation Software.





BEV General Awareness Training Program	
Client	Vale North Atlantic Operations
Location	Sudbury, Ontario
Site	Learning and Development, Sudbury Operations
Commodity	Base Metals
Timeframe	2021 - 2022 (Complete)
Nature of Project	BEV Training Development and E- Learning modules.
Scope of Work	Video Production for BEV General Awareness; Onsite and In-house Training development for Battery Electric Vehicles. (Train the Trainer, E- Learning Modules, Underground Training)
Technology	MPL BEV proprietary Simulation Software.

(L: Marcel Levesque R: Shawn Frappier)

Image: Mayhew Performance Head office, Sudbury





BEV Audit Program for Executive Leadership		
Client	Kirkland Lake Gold	
Location	Kirkland Lake, Ontario	
Mine Site	Macassa Mine	
Commodity	Gold	
Timeframe	2021-2023 (Complete)	
Nature of Project	BEV Productivity Audit	
Scope of Work	Inspection Audit, Performance and Productivity tracking, GAP analysis, Charging audit with cooling system, Operational Recommendations.	
Technology	MPL BEV proprietary Simulation Software.	

Image: Macassa Mine, Kirkland Lake, Ontario

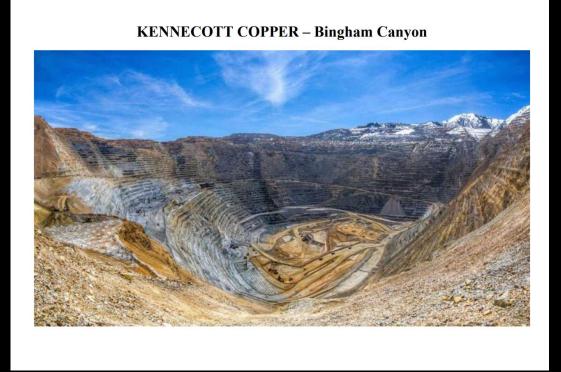




Enhanced Recycling Program, Canada	
Client	Kirkland Lake Gold
Location	Detour Lake, Ontario, Canada
Mine Site	Detour Lake
Commodity	Gold
Timeframe	2021- 2022 (Complete)
Nature of Project	Enhanced Recycling Program, GHG Reduction
Scope of Work	Design, Manage and Implement Enhanced Recycling Program. Audits and Reporting on GHG Carbon Footprint reduction at site.
Technology	MPL BEV proprietary Simulation Software.

Image: Detour Mine , Ontario, Canada





BEV/ Railveyor/ Conveyor Desktop Study	
Client	Kennecott Copper, RioTinto
Location	Utah, USA
Mine Site	Bingham Canyon, USA
Commodity	Copper
Timeframe	2020-2021 (Complete)
Nature of Project	Operational Feasibility for BEV, Railveyor and Conveyor.
Scope of Work	Desktop Study for the open pit, Trade-off Study for BEV vs Diesel, and power calculation and assumptions; Material handling and logistics
Technology	MPL BEV proprietary Simulation Software.

Image: Kennecott Copper, Bingham Canyon, USA





BEV Desktop Study	
Client	Twin Metals
Location	Minnesota, USA
Mine Site	Maturi project
Commodity	Base Metals
Timeframe	2021-2022 (Complete)
Nature of Project	Desktop Study and Evaluation for Board Approval
Scope of Work	BEV Desktop Study, Pre-feasibility Study, Risk assessment, Technical and Economical Analysis.
Technology	MPL BEV proprietary Simulation Software.

Image: Twin Metals, Minnesota, USA





Nickel Rim South, Extension Project	
Client	Vale, Glencore
Location	Sudbury, ON
Mine Site	Nickel Rim South(NRS)
Commodity	Base Metals
Timeframe	2022-2022 (Complete)
Nature of Project	BEV Peer Review
Scope of Work	BEV Peer review, Validation of Production Profile for Equipment selection.
Technology	MPL BEV proprietary Simulation Software.

Image: Nickel Rim South, Glencore, Sudbury





Nalunaq Feasibility Study and Mine Manager	
Client	AEX Gold
Location	Nanortalik, Greenland
Mine Site	Nalunaq
Commodity	Gold
Timeframe	2020-2021 (Complete)
Nature of Project	BEV Operational Assessment and mine operation readiness.
Scope of Work	BEV Trade-offs, Operational assessment to return into production.
Technology	MPL BEV proprietary Simulation Software.

Image: Nalunaq Project Nanortalik, Greenland





Image: SAN Gabriel mine Lima, Peru

BEV Desktop Study		
Client	Buenaventura	
Location	Lima, Peru	
Mine Site	SAN Gabriel mine	
Commodity	Base Metals	
Timeframe	2021-2022 (Complete)	
Nature of Project	BEV Desktop Study	
Scope of Work	BEV Desktop Study, Pre-feasibility Study, Risk assessment, Technical and Economical Analysis.	
Technology	MPL BEV proprietary Simulation Software.	





Nickel Rim South BEV vs. Diesel		
Client	Glencore Sudbury Integrated Nickel Operations (INO)	
Location	Sudbury, ON	
Mine Site	Nickel Rim South (NRS)	
Commodity	Nickel	
Timeframe	2021-2022 (Complete)	
Nature of Project	BEV vs Diesel Comparative Analysis	
Scope of Work	BEV vs Diesel comparison, data simulation and Validation study and Report findings.	
Technology	MPL BEV proprietary Simulation Software.	

Image: Nickel Rim South, Glencore, Sudbury





Glencore FHP SOP development		
Client	Glencore Sudbury Integrated Nickel Operations (INO)	
Location	Sudbury, ON	
Mine Site	Nickel Rim South (NRS)	
Commodity	Nickel	
Timeframe	2021-2022 (Complete)	
Nature of Project	Fatal Hazard Protocol — Development of Standard Operating Procedures.	
Scope of Work	Standard Operating Procedure development for Tires and Rims, Updating Fatal Hazard Protocols	
Technology	MPL BEV proprietary Simulation Software.	

Image: Nickel Rim South, Glencore, Sudbury



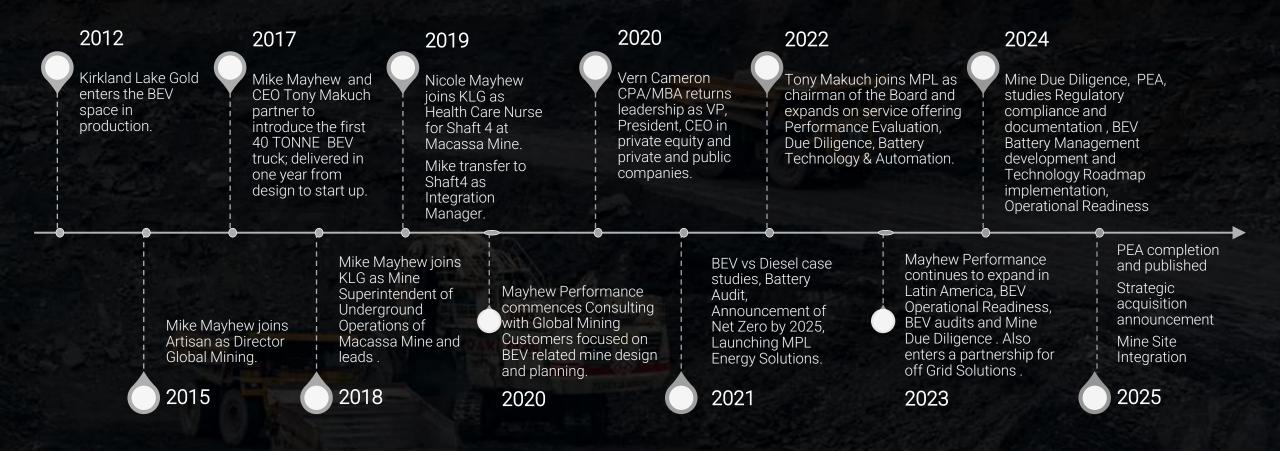


College Boreal Training, Canada		
Client	College Boreal	
Location	Sudbury, Ontario	
Site	Mayhew Performance Headquarters	
Commodity	Education	
Timeframe	2020-2021 (Complete)	
Nature of Project	BEV Training Development and E-Learning modules.	
Scope of Work	1 st BEV Training in the world developed by MPL. SOW included BEV General Awareness course development and training College students.	
Technology	MPL BEV proprietary Simulation Software.	

(Image: College Boreal, Sudbury



MPL Journey





Global Projects

We are committed to making the world a better place. We are a Canadian company reaching out to the world. We provide technical expertise around the world.



Mayhew Performance LTD

Services we Provide

- This a detailed description of services we provide.
- For further information, contact us.

Mike Mayhew Mikemayhewperformance.com Mobile: 705-923-6298

MPL Consulting

We provide consulting services which include Mine Due Diligence, Front End Decision Process, Feasibility of BEV, Mine Design for effective BEV implementation.

Mine Due Diligence

Mine Acquisition, Due Diligence and Performance Evaluation.

Battery Management

Effective Battery
Management and fleet
utilization including safe
handling.

BEV Audits and Support

Replacement batteries and chargers, Spare Parts, Business Service & Support Field Service Support

Case studies

We provide Case Studies uniquely designed for your mine

- Desktop Studies
- BEV vs Diesel
- Trolley Assist
- Material Handling tradeoff

MPL Energy Solutions

We provide energy solutions uniquely designed for homes/mines which includes Solar energy and End of Life



Mayhew Performance – Horizons of Growth





- Trade-off/Prefeasibility
- BEV Awareness Training
- BEV Health and Safety
- BEV Vs. Diesel Performance Studies
- MPL announces to be Net Zero 2025

- Recognized leader in trade-off studies
- BEV Annual Summit
- BEV Online Training
- Patent S-B-B technology
- Off Grid Studies
- GHG Roadmap Strategy

- Mine Due Diligence
- BEV Audits, Operational Readiness
- Leaders in GHG Net Zero
- EPCM Leaders BEV/Solar
- Leaders in Off-Grid Systems for Mining
- MPL achieves NET Zero by 2025

Fundamentals 2020 - 2022 2022 - 2024

Net Zero Leaders 2024 - 2027





Client Testimonials



"Torex Gold Resources engaged with Mayhew Performance Ltd in 2023 to assist us in evaluating the safety and technical aspects of BEV equipment during the selection of suppliers and models for our battery electric hybrid fleet at the Media Luna project in Mexico. Mike's indepth knowledge, coupled with his hands-on underground operating experience was key in the timely evaluation and selection, as well as in establishing key partnerships for our project. Mike understands the operational challenges when it comes to BEVs; and enabled us to appropriately understand and mitigate the risks associated with battery management, safe handling and storage, all of which is invaluable to our team as we prepare for the successful implementation of our (large) battery fleet".

Gertjan Bekkers, P.Eng Vice President Mines Technical Services



"Discovery Silver is proud to be working closely with Mayhew Performance Ltd. as they continue to expand into the Green Energy Space. MPL is supporting DSV mission towards reducing our carbon footprint and developing our technology roadmap for the Cordero Project in Mexico.

Tony Makuch, P.Eng President & CEO



"Twin Metals Minnesota is committed to reducing our carbon footprint and moving towards Net Zero in order to be a sustainable mining company. We engaged with Mayhew Performance early as the Subject Matter Experts in Battery Electric Vehicles to help us rationalize and prove the business case to allow us to move towards BEV as the mine goes into production. Having MPL as a partner in the study was paramount to our overall decision-making process in moving forward with Battery Electric Equipment for the mine".

Glenn Barr, Vice President, Project Development

Mayhew Performance Clients

Discoverysilver











GLENCORE







































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