

MAYHEW PERFORMANCE LTD.

"Mayhew Performance LTD. (MPL) was founded by Mike and Nicole Mayhew in 2020 with over 150 years of combined experience within the team.

MPL, is a boutique Consulting Firm specializing in Green Engineering, GHG Evaluations, Battery Electric Vehicle Studies, Risk Management and Health & Safety.

MPL is committed to Net Zero by 2025".



this issue

Are you Ready **P.1**

Global Market Outlook **P.2**

Operational Readiness **P.2**

BEVs in Mining Outlook for 2023: From "What do I choose" to "Am I Ready?"

Those of us passionate about BEVs in mining have a lot to look forward to in 2023. They are fast becoming a staple in the industry, and now the big question will be "are you ready?"

Why the global market is choosing BEVs

The global market continues to grow and evolve. This growth is not surprising as more and more operations are looking to BEVs as a key part of their ambitious sustainability commitments such as net-zero by 2050.

For the past three years, Mayhew Performance Ltd. has been supporting diverse mining companies from around the world by validating the business case, calculating financial models, and demonstrating the value proposition of BEVs. We have been thrilled to witness this tremendous growth first-hand as we continue to expand our global reach.

From "what do I choose?" ...

There is, of course, a lot to think about when exploring the trade-off between BEVs and diesel equipment and calculating return on investment (ROI). There's crunching the numbers—net present value (NPV), lifecycle cost, CAPEX, and OPEX. A lot feeds into these numbers beyond buying your new equipment. Do you buy your batteries outright or go for battery as a service (BaaS)? What new skills will your operations and maintenance teams need? And what needs to happen to your infrastructure to accommodate BEVs and charging?

"I promised my stepfather that I would do something for the mining industry to make mining cleaner and safer.

To facilitate that mission, me and my colleagues built the world's first 40T Battery Electric Truck in 2018 which operated at Kirkland Lake's Macassa mine in Northern Ontario.

I had a dream of contributing something to the mining industry, making lives better, and making my stepfather proud.

That's how we launched Mayhew Performance, and the company has been growing ever since."

Mike Mayhew Founder



To "am I ready?"

Are we ready to implement Battery Electric Vehicles at our mining operations

As complicated as the decision-making process can be, buying the equipment is the easy part. Operational readiness is critical as we continue to expand BEV fleets in 2023 and beyond. There is a lot to think about from an engineering perspective before you can operate your BEVs, and making good decisions depends on your life of mine (LOM) plan and the mining method.

Your mine planning, charging integration, ventilation infrastructure, maintenance program, transfer plans, safety processes, and equipment all need to be ready. We currently support this process through peer review, assessing parameters, onsite risk assessments, and operational specifications. Once that is in order, we also validate equipment commissioning and evaluate performance.

We have over 150 years of operational experience combined and a proven track record in BEVs, mine design, mine engineering, and operational execution. We'll leverage this experience and get ready for the new year by ramping up our operational readiness services to support the industry in this next big step.

Mayhew Performance Events

WSN Conference Battery Electric Vehicles Symposium, Sudbury, Ontario Canada (February 9th, 2023)

<https://www.workplacesafetynorth.ca/events>

The Electric Mine 2023, Tuscon Arizona (May 23rd to 25th, 2023)

[Summary - The Electric Mine 2023](#)

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