



YEAR IN REVIEW

2024





KEVIN MACLEAN
CEO - MacLean Engineering

LETTER FROM THE CEO

Our Real Zero 2040 Pledge to the mining world

Going green is not a new thing for MacLean Engineering, it has been built into our DNA from the outset. However, it is only recently that I've come to realize that being vocal and public about these goals is also important to lead the industry forward together. So from now on, we are going to be much more public about our intentions.

We are incredibly excited to be moving forward with Fortescue on a mining industry decarbonization partnership that will see us deliver a fleet of BEV surface motor graders to Fortescue's Western Australia operations. MacLean was the first equipment manufacturer to stand up and publicly make the Real Zero 2040 pledge, but we certainly won't be the last.

The single biggest impact that MacLean can have on the mining world is to provide our customers with high-performing and financially feasible alternatives to using diesel-powered mining trucks in their operations. We've come a long way in almost ten years of our EV Series program (100+ battery electric mining vehicles sold around the globe), but we have much, much more to do to help move the industry further, faster towards electrification. As I look out towards 2040, what I hope and what I will work hard to make a reality, is a day when the vast majority of our customer base only wants to order battery powered MacLean mining vehicles from us.

I urge you now to roll your sleeves up and get involved in this generational challenge, for MacLean, for the planet, and for your families.

LETTER FROM THE PRESIDENT

STELLA HOLLOWAY
President - MacLean Engineering



The Power of Our People

At the heart of any successful organization are the people—the ones who show up every day with passion, commitment, and a drive to make things happen. It's not about the technology, the products, or the profits. It's about the individuals who turn challenges into opportunities, ideas into action, and visions into something real.

As president, I'm lucky to be part of a team that's always pushing limits and striving to do things better. We're not here just to carry on what's been done before—we're here to make it even better. We're building a culture that challenges the status quo, drives real change, and helps shape the future—for us and for the generations to come.

My goal is to create an environment where everyone feels empowered, valued, and inspired to reach new heights. This is more than just a workplace—it's about being leaders, having our voices heard, and seeing our talents recognized. ***Together, we're not just shaping this company— we're rewriting what's possible.***

Finally, I want to reiterate and underscore our profound thanks to our customer partners whose trust in our products and services has allowed us to prosper and flourish, providing meaningful work for thousands of employees over five plus decades. Designing, manufacturing, and supporting mobile equipment that helps make mining safer and more productive around the globe is a most worthy endeavor that stands the test of time. ***A sincere thanks to the customer support that allows us to do pursue this vocation.***

HALL OF FAME BEGINNING TO 2025

Almost a year after the passing of our founder, Donald Roderick MacLean, the Canadian Mining Hall of Fame inducted Don into its ranks at a ceremony on January 9th, 2025, along with three other industry leaders – Sean Boyd, Patricia Sheehan, and Frank Giustra. The gala event turned a spotlight on these four individuals and the industry as a whole, showcasing the innovation, work ethic, collegiality, and collective economic contribution that makes Canadian mining such a positive if not under-recognized force for good in Canada and the world.



Don would have been proud of the assembled community of mining. These people and this industry were his driving passion over six decades of a career as a mining engineer working underground then working in equipment sales and ultimately, starting up his own equipment manufacturer. Thank you to the CMHF organizers for putting on such a world-class, memorable show and sharing these four inspiring stories of service and success.

Now we continue Don's work without him. Under his son Kevin's leadership, the company has leapt in size, product range, technological sophistication, and market reach. But the overriding focus on making mining safer for miners remains as hard rock solid as it was in the beginning, when Don started modifying Massey Ferguson farm tractors in his apple orchard barn in the early 1970s.

MINEXPO, FORTESCUE PARTNERSHIP - REAL ZERO 2040

The 2024 version of MINExpo was our first without Don in our midst, and it was one for the ages for MacLean, with a global announcement of a decarbonization partnership with the Australian iron ore producer, Fortescue.

MacLean will design and manufacture a fleet of BEV surface motor graders for Fortescue's operations in Western Australia before decade's end. It's an ambitious timeline that is entirely in keeping with how Fortescue as a global change agent is walking the talk on decarbonization results.

We also used the global stage of MINExpo to announce a pledge for 'Real Zero 2040', going beyond the commitment of 'net' zero with its trade-offs and contingencies, joining Fortescue's call to the industry to more rapidly electrify, in keeping with the urgency of the climate change threat and the massive opportunity for collective action up and down the supply chain.



Now that the dust has settled on the industry gathering where the mining world unites every four years, the decarbonization path forward is becoming clearer for MacLean.

Left to right: Dino Otranto, Chief Executive Officer, Fortescue Metals ; Stella Holloway, President, MacLean Engineering ; Kevin MacLean, Chief Executive Officer, MacLean Engineering ; Mark Hutchinson, Chief Executive Officer, Fortescue Energy

We have successfully completed a baseline analysis of our current emissions, so now we have the clarity to understand where our actions should be focused to get to zero carbon emissions within 15 years. We have, relatively speaking, a very light footprint, but that doesn't mean it will be easy to get to zero. And we know that it's on us to convince our suppliers, fellow OEMs, and mining customers, that the decarbonized path is viable and the only option for the planet.

THE BEVOLUTION CONTINUES...

Our biggest contribution will lie in succeeding to grow the global footprint of our diesel-free mining vehicles, both in underground and surface operations. When you look at the scale of diesel fuel consumption elimination that a 30-unit motor grader fleet represents over the products' lifecycle, it's approaching some 70 million litres of diesel fuel that isn't being burned and producing GHG emissions. We need more mining customers to follow the lead of producers like Agnico Eagle, Torex, Glencore Canada, and Newmont, who have made the EV switch. This is MacLean's major opportunity to affect positive change that will ripple out for generations to come.



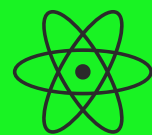
Manufactured & commissioned

**100+
BEV**



Operating Hours

**500,000
HRS +**



Models Designed

25+

With the delivery of MacLean BEV fleets to Agnico Eagle's Odyssey Mine, Torex's Media Luna Project, and Glencore INO's Onaping Depth Project, MacLean will soon surpass the milestone of 100+ battery electric units manufactured and commissioned, with well over 500,000 hours of operating time accumulated since the launch of its Fleet Electrification Program in 2015.

Canadian mining has led the way internationally, both at home and abroad, when it comes to making the switch to battery electric mobile equipment. The example is now there for other mining regions to follow suit, leveraging the lessons learned and benefiting from the depth of TCO data (Total Cost of Ownership) data that has been collected over the years. MacLean is there to help current and future customers, plan and operationalize the diesel-free mine. It takes foresight and know-how, but the proof is in the pudding; it can be done and we will be doing everything in our power to support the BEV switch around the globe.

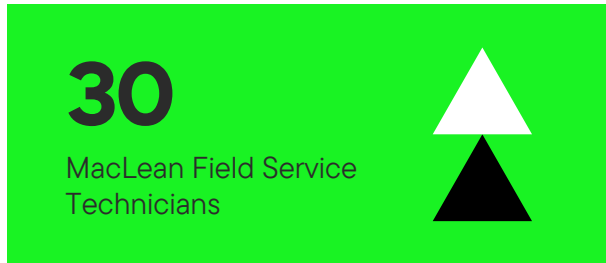


INVESTING IN INFRASTRUCTURE

MacLean has invested in production facility and branch growth significantly in recent years. 2024 continued that trend in earnest and we're doing even more in 2025

Our business remains agile to the core as we scale up manufacturing capacity and technology integration capabilities, in keeping with the long-term move in the global mining industry towards removing internal combustion engines from the underground environment, reducing operator exposure through increased automation, increasing OEM interoperability, and improving the quality of real-time equipment data.

Of note, the construction of a new MacLean Service and Support Centre in our Abitibi hub of Val d'Or, Quebec, is well underway and on track to being completed by mid-year. This new facility will increase our rebuild shop and parts depot footprint in Val d'Or by two and a half times. It will truly be a world-class support platform for the over 500 MacLean mining trucks that are currently working in the Province. Some 30 MacLean Field Service Technicians are based out of our Val d'Or branch and every day they are working underground at our customers' mine sites, helping to ensure that their MacLean fleets are well-maintained and high performing.



New Build Projects Underway in Val'dor

* Quebec's Abitibi region is where Don cut his teeth in the 1940s and 50s as a youngster in the mining camps of East Malartic and Chibougamau, and it remains the heart and soul of our global service and support business, spurred on by longstanding customers including Agnico Eagle, Glencore, Iamgold, Newmont, Canadian Royalties, Niobec, Hecla, and Eldorado.



* In Ontario, we spent 2024 continuing to upgrade and modernize our underground Research & Demonstration facility in Sudbury. Our 'Ducky Mine' is 1,000+ linear feet of an underground decline that we extended last year, in order to give us fresh headings for our robotic bolter testing as well as other bolting and shotcrete product development activities.





- * The big news from 2024 at our Research & Demonstration test facility was the completion of the installation of a private mobile network by Bell. This new communications infrastructure provides the continuity, stability, and security of connectivity from surface to underground, which will allow us to accelerate our technology development along the continuum of automation to full autonomy.
- * Looking south from our manufacturing home base in the southern Georgian Bay region of Ontario, our Queretaro, Mexico production facility is currently ramped up to over 100,000 square feet of fabrication and assembly capability, including MacLean battery electric mining vehicle manufacturing. This site will become even more pivotal for our 21st century business growth due to our multi-year GR8 surface BEV motor grader project, and the ongoing support of the MacLean BEV production support fleet at Torex's Media Luna Project.
- * Our first proof point is surface controlled MacLean production support vehicles (water cannon and blockholer) that can operate safely and productively with other OEMs' production fleets, as we've demonstrated at Newmont's Cadia mine in New South Wales, Australia. Interoperability is the name of the game in the 21st century as mining companies look to maximize their productivity and increase operator safety, and MacLean is working hard to unlock the value in automation and interoperability, for producers.
- * Our Elko team completed major rebuilds this year, including a Scissor Lift, Transmixer, and Fuel Lube Truck. The MacLean shop in Elko was also expanded, doubling the original footprint, to accommodate the demand for additional rebuilds. MacLean also continued to purchase and install major tooling to supply full-service operations to the Western US mining sector.
- * On January 28, 2025 we closed on the purchase of 274 Bayview Drive in Barrie. This building adds 20,000 sq. ft. to our holdings and brings to us approximately 4,000 sq. ft. of office space and 16,000 sq. ft. of warehouse space. The synergies achieved by having the neighboring property will be great, and we expect to be moved into the offices late spring early summer.



* As always, the reason the slogan 'Service & Support' is emblazoned on the walls in each of our facilities is because after 50+ years in business, the primordial importance of aftermarket as a value proposition to our customers, remains unchanged. We've built a global business on designing and manufacturing mobile equipment that is customized for the minesite and the application, but a big part of the equation for our customers is the field service, parts support, and curated, real-time telemetry data that we provide. This means that we devote significant resources to the development of a user-friendly portal to access real-time equipment data. And it means we never lose focus on our fill rate, which stands at >80% of parts orders shipped within five days, globally.

SERVICE. SUPPORT.

The MacLean Way. 

PRODUCT DEVELOPMENT

2024 was a year where MacLean bore down on advancing a number of key new products, namely the 985 Abi Bolter. The nomenclature 'Abi' is a nod to the Abitibi region of Quebec that nurtured Don MacLean's love of mining as a young boy, and the next generation of MacLean bolting will stay true to the MacLean bolting philosophy that made the 900 Series scissor bolter a market leader in Canada over the past 30 years – safety, versatility, and productivity. But with continuity will come something truly new and novel – **the introduction of robotics technology to ground support installation. This year, the first two Abi Bolters will undergo testing at our Ducky Mine in Sudbury, followed by customer trials.**



GR5 GRADER

The shining star of our 5 Series product line in recent years has been our GR5 Grader, which we now have sent out into the mining world far and wide, from Alaska to Mexico to South Africa and multiple mine sites in between.

With the importance of well-maintained roadbeds especially in EV mines, where down-ramp energy regeneration is such an important part of the value proposition, we see this latest addition to our UTV product line, a purpose-designed grader for the underground environment, as having a long runway. We offer both diesel and battery electric options.



COLLABORATING FOR SUSTAINABLE COMMUNITIES

Collaborations with Indigenous communities, technology development partners, non-governmental organizations, even other OEMs - this is now par for the course for MacLean as we seek any and all avenues to sustainably grow our support of customers globally, by growing our capabilities.

Over the span of just a few short years, we now have **three active** Indigenous business partnerships in place (Labrador, Ontario, and Nunavut), and **three others in the works**.



We have successfully **partnered with major OEMs on different aspect of fleet interoperability**, work that continues at a customer site in Australia and at our Research & Demonstration Facility in Sudbury.



Closer to home, we also continue to see great benefit from our **partnership with Cambrian College** in Sudbury, successfully completing a concrete transport real-time measurement technology development project together, providing our Ducky Mine as a location for the hands-on portion of

Cambrian's BEV Heavy Duty Mechanics course, and actively nurturing the school's mechatronics talent pipeline, in order to build out the MacLean capacity and stay on the leading edge of on-vehicle technology development in mining.



SAFETY AS A STATE OF MIND ——— *The MacLean Way*

At the core of our company culture, safety is more than just a priority — it's a value we live by every day. We take pride in our safety performance, with consistently lower-than-industry averages on injuries and lost time rates.

But these numbers don't tell the full story. ***Behind our impressive stats is a collective commitment that starts with each employee taking ownership of their workspace and their role in maintaining a safe environment.***



We empower our people with the tools and resources they need to succeed, including a comprehensive Learning Management System, the MacLean Academy, which supports over 6,000 training assignments annually, including monthly safety talks. Employees also engage with the company's safety program in other meaningful ways, from conducting inspections to connecting with safety coordinators and committee representatives and reviewing our program through our intranet portal. Supervisors play a key role as well, ensuring training is timely and relevant, and involving employees in safety discussions by reviewing incidents and preventative measures during monthly safety meetings. Finally, MacLean senior management is fully invested, regularly assessing the program to ensure it's a living part of our organizational strategy.

Looking ahead, our 2025 goals emphasize strengthening our training catalogue by offering all content in English, French, and Spanish, and embracing new technologies like digital signage and video storytelling to keep safety at the forefront. The Health and Safety department objectives are driven by the theme ***"Safety through Connection,"*** reinforcing the idea that when we communicate, collaborate, and invest in our people, safety becomes a shared responsibility we all take pride in.

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