

# Accelerating The Energy Transition With Adaptive Electrification

Decarbonizing Through The Efficient Flow Of Energy

Investor Presentation

DECEMBER 2023



OPTIMIZING POWER

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This presentation contains forward-looking statements within the meaning of Canadian securities laws. These statements relate to future events or future performance and reflect management's expectations regarding the Company's growth, results of operations, performance and business prospects and opportunities. Such forward-looking statements reflect management's current beliefs and are based on information currently available to management. In some cases, forward-looking statements can be identified by terminology such as "may", "will", "should", "expect", "plan", "anticipate", "believe", "estimate", "predict", "potential", "continue", "target" or the negative of these terms or other comparable terminology.

Forward-looking statements are necessarily based on estimates and assumptions made by management in light of management's experience and perception of historical trends, current conditions and expected future developments, as well as factors management believe are appropriate. Forward-looking statements may include but are not limited to statements respecting volatility of stock price and market conditions, technology risks and risks associated with the commercialization of Company's technology, regulatory risks; the Company's reliance on key personnel; the Company's limited operating; market uncertainties, and the protection of patents and intellectual property.

These forward-looking statements are based on the beliefs of the management of Exro and on assumptions which such management believes to be reasonable, based on information available at the time such statements were made. However, there can be no assurance that forward-looking statements will prove to be accurate. Such assumptions and factors include, among other things: demand for the technology of the Company; the Company's ability to maintain existing partners and attract new partners; the impact of competition; the Company's ability to obtain and maintain existing financing on acceptable terms; the

Company's ability to retain skilled management and staff; currency, exchange and interest rates; the availability of financing opportunities, risks associated with economic conditions, dependence on management; conflicts of interest and market competition; the ability to commercialize the Company's technology; and operating in an environment subject to regulation.

The preceding list is not exhaustive of all possible factors. Although the Company believes that the assumptions underlying these statements are reasonable, they may prove to be incorrect, and the Company cannot assure that actual results will be consistent with these forward-looking statements. Given these risks, uncertainties and assumptions, any investors or users of this document should not place undue reliance on these forward-looking statements. Whether actual results, performance or achievements will conform to the Company's expectations and predictions is subject to a number of known and unknown risks, uncertainties, assumptions and other factors

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*We stand at a pivotal crossroad.  
The Electrification transition isn't just an upgrade –  
it's a necessary leap*

- Vehicle cost
- Vehicle performance
- Charging infrastructure
- Increasing demand for rare earth materials





# EXRO IS USING POWER ELECTRONICS TO RESHAPE THE WAY THE WORLD CONSUMES ENERGY

Utilizing minimum energy with maximum results to  
decarbonize how we move and live



# Who We Are

Our patented technology expands the capabilities of motors and batteries to utilize minimum energy for maximum efficiency

This allows an electrified future where we consume less while doing more.



Automotive News PACEpilot  
Program 2023 Finalist



Edison Award winner  
2022



Independent Validation:  
Ability to switch from series to parallel



NEMA Illumination Award  
2022

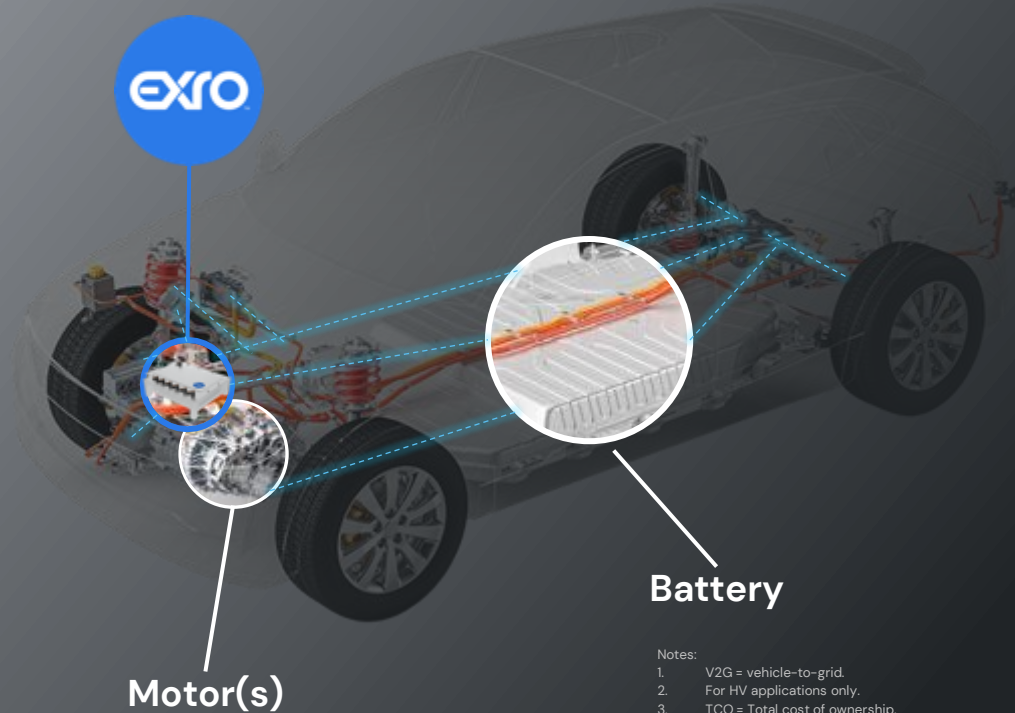


Innovation of the Year Award  
winner 2022



# Real World Energy Efficiency

Significantly Improved Total Cost of Ownership



→ Inverters are the heart of electric vehicles, providing the link between the battery and the electric motor

→ Advances in inverter technology have ALL been component related

... until Exro



Notes:

1. V2G = vehicle-to-grid.
2. For HV applications only.
3. TCO = Total cost of ownership.
4. Comparison based on 800v systems.

# Exro Motor Control Solution – Coil Driver™

More than just a traction inverter: it is the brainbox inside the vehicle

An inverter is an electronic device that converts direct current (DC) from the battery to alternating current (AC) for the electric motor.

The Coil Driver™ is next generation inverter; an adaptive motor control that replaces a standard inverter in electric vehicles. Performing all the traditional features of an inverter the Exro Coil Driver™ can control and gear electronically



Boost **performance** by up to 50%.

Reduce **system cost** by up to 20%.

Improve **highway efficiency** by up to 15%.

More cost effective, capable, and efficient electric vehicles.

COIL DRIVER™ INVERTER



# Scalable Technology Across Applications



A020-100V



L040 400V-800V



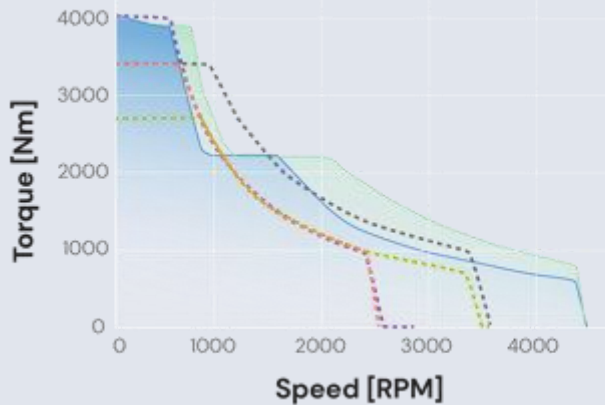
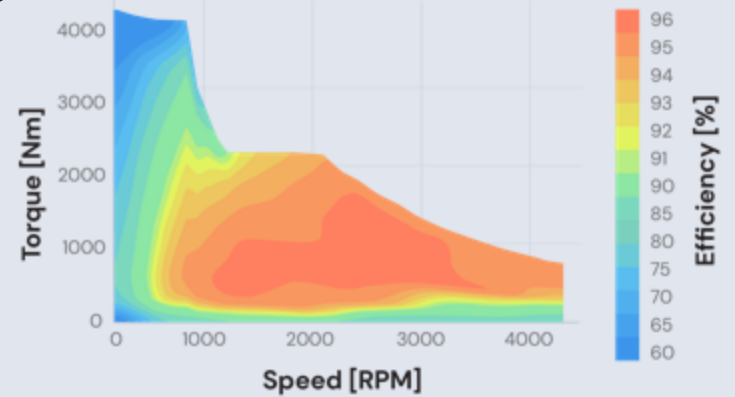
L080 400V-800V



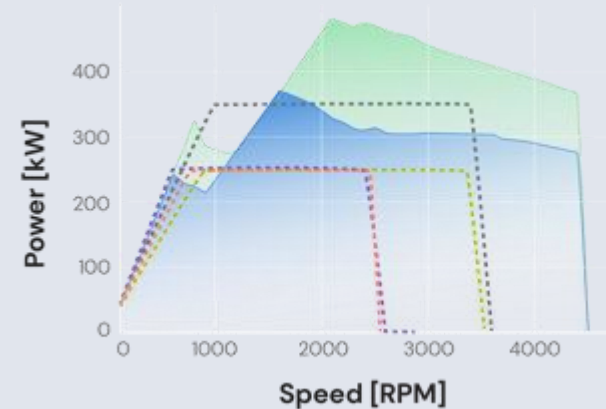


# Third-Party Validation - UTAC

- Improve System Efficiency by 5%+
- Setting the benchmark for continuous power
- On-the-fly response to speed and torque for maximum system efficiency



- Exro 600V
- Exro 750V
- Competitor 1
- Competitor 2
- Competitor 3
- Competitor 4



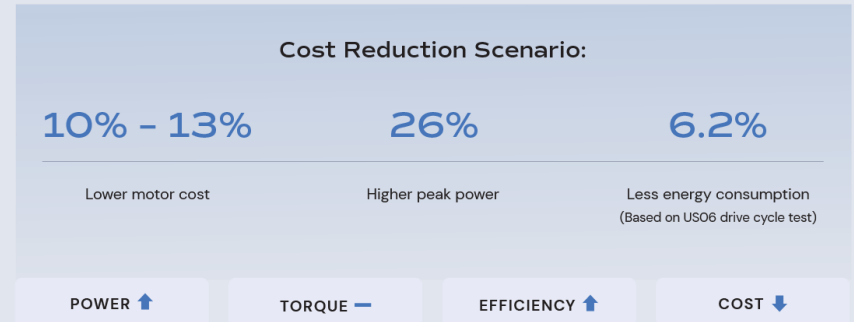
# Third-Party Validation – AVL Engineering

Exro collaborated with independent third-party organization AVL Engineering to simulate the impact of Exro Coil Driver™ integration in one of the best-performing electric vehicles. The objective was to showcase how the Coil Driver™ can bridge the gap between performance and cost.

The simulation produced two scenarios: the first scenario demonstrates the impact of replacing the standard 3-phase inverter with the adaptive Coil Driver™ while maintaining the same motor geometry (referred to as the 'Performance Boost' scenario), and the second scenario focuses on reducing the motor cost while still meeting or exceeding key performance criteria (referred to as the 'Cost Reduction' scenario).

**19%** LESS MAGNET MATERIAL

ELIMINATE OR REDUCE RARE EARTH METALS



*Flexibility to Choose Performance or Cost Management.*

# The Exro Impact – Multiple Paths for Cost Reduction

Case Example – Medium-duty truck with 300kWh battery and 186 miles of range.

	Exro Savings (\$USD)
10-13% MOTOR COST REDUCTION	\$1,500 to \$2,000 (Motor cost reduction)
UP TO 7.5% IMPROVEMENT IN HIGHWAY DRIVING RANGE	~\$5,000 (Battery pack size reduction)
REMOVAL OF OBC	\$500 to \$2,000
REMOVAL OF 2-SPEED GEARBOX	\$1,500 to \$3,000
<b>TOTAL</b>	<b>Up to \$12,000 in savings per medium-duty vehicle</b>

In 2022, Volvo sold 4,300 electric trucks and could have potentially saved **more than \$50 million USD** with Exro drive.

Please note that the calculation assumes that the vehicle spends 85% of the time on the highway. Savings are largely dependent on the application and driving pattern.



# A Systematic Go-to-Market Strategy

Roadmap to capitalize on a rapidly growing and changing electrification ecosystem

## Attack Market in Waves: Build on Momentum with Key Ecosystem Players

Sequentially approach market to broaden partnerships and customer base while increasing wallet share

## Expand Technology Offering Through Core Products Partnerships

Leverage low-volume production partnerships to develop new technology applications



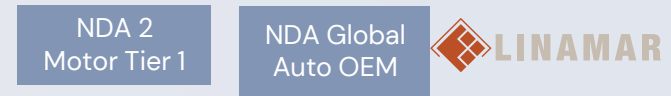
## Continue Successful Track Record of Innovation

Build upon existing technology to develop tailored solutions attracting visibility from sizeable OEMs



## Increase Penetration of Engineering, Testing and Consulting With OEMs

Capitalize on high-volume partnerships with Tier-1 OEMs to secure complementary contracts for Exro's Vehicle Service division



## Expand Other Ancillary Revenue Opportunities

Further monetize high-value customer base by providing software solutions, integration expertise and data capabilities for a complete turnkey electrification offering





# Establishing Credibility in Taking New Technology to Market

HB4	20% increase in range	VMC	Launched at APTA	SEA	Integration on road
					

## Building the technology runway with industry leading partners

NDA 1 – Off HWY		NDA 2 – Motor Tier 1		NDA 3 – Global Automotive OEM	
Low Voltage	Next Milestone – Nov.23	High Voltage	Next Milestone – Dec.23	High Voltage	Next Milestone – Q1'24
	Hybrid-diesel co-development for agricultural application European customer with 12 billion in revenue		Motor Tier 1 OEM for commercial trucking – European customer with 25K employees and customers like Volvo, MAN, Scania		Motor Tier 1 OEM passenger vehicles (Big 3) – Innovation project to demonstrate reduced rare earth, increased constant power



# Strategic Partnership with Tier 1 Automotive

Status	Moved to Definitive Agreement and on road pilot
High Voltage Silicon Carbide 800V	Commercial heavy duty commercial truck Integrated eAxle co-development
	Met all performance and price targets for first milestones and moved to definitive agreement. Next step is demo truck in Q1'24 followed by production launch at Q4'24



“Exro came to us with a unique solution for our electric drive program that we believe is a step in the right direction for accelerating the adoption of electric vehicles. This integrated design can pave the way for cost-effective and high-performing electric propulsion systems that are essential to scale the transition to electric mobility.”

**Linda Hasenfratz, Chief Executive Officer** at Linamar

“Having worked closely for the last two years, we’ve witnessed the progressive evolution of Exro’s technology, by integrating Exro’s technology into Linamar’s full eAxle system, we aim to offer a cost-effective 4-in-1 eAxle which will reduce the integration complexity to our customers as well as offer superior performance to the medium duty truck market beginning in late 2024.”

**Kevin Ledford, Global Vice President of Electrification** (eLIN) at Linamar.

# The Exro Benefit...

...Beyond the vehicle

Cell Driver™ is a fully integrated energy storage system with the following benefits:

- Reduce electricity demand charges through peak shaving
- Support vehicle charging while time-of-use rates are high
- Minimize downtime during grid outages
- Proprietary cell-level control enables used EV batteries to have a second life in stationary energy storage, reducing environmental footprint and supply chain constraints

*A recent analysis we conducted showed that a **single Cell Driver™** was able to reduce a commercial building's annual electricity bill expense by 41%.*



# Comprehensive Intellectual Property Protection Program

## → Motor Control Patents- Coil Driver™

6 patent families on architecture

1 patent family on control software

## → Battery Control Patents – Battery Control System™

4 patent families on architecture

## → Ecosystem Patent (Motor + Battery Control)

1 patent family

## PATENT STATUS

→ 34 issued patents and 17 pending applications

→ IP wholly-owned in 16 patent families providing or seeking global protection in strategic countries

→ Global portfolio coverage including: US, CA, CN, DE, DK, EP, FR, GB, HK, IN, IT, JP, SK

→ Additional trade secret protection for proprietary software and algorithms



51

Patents Issued + Applications Pending

*Exro's patented control technology expands the capabilities of electric motors, generators, and batteries*

exro



# Ready to Scale

Start of Production September 2023



Capacity of ~100,000 Coil Drivers™/year/8 hr shift

Class 10,000 clean room with SMT line(s)

Net-Zero targeted building



**ISO 9001**

Quality Management System

**ISO 14001**

Health & Safety

**ISO 45001**

Environmental Management

**ISO 26262**

Automotive Functional Safety

**IATF 16949**

Global Automotive Quality Management System

# Management

Strong team in place to see Exro through accelerated growth



**Sue Ozdemir**  
Chief Executive Officer

- Former CEO of GE's Small Industrial Motors Division – General Electric (NYSE: GE) (“GE”).
- \$160M revenue enterprise



**John Meekison**  
Chief Financial Officer

- 20+ Years Experience as CFO in Capital and Small Cap Markets.
- Previous Capital Experience – Haywood Securities



**Darrell Bishop**  
Chief Investment Officer & Sales

- 10+ Years Experience in Investment Banking and Capital Markets
- Previous Capital Experience – Peters & Co Limited, Haywood Securities, National Bank
- Mechanical Engineer & MBA



**Eric Hustedt**  
Chief Technology Officer

- 20+ Years Experience – Automotive Inverter Design and Manufacturing
- International Rectifiers Automotive
- KSR International, Vishay Intertechnology (NYSE: VSH)



**Spyros Gorgogiannis**  
Chief Engineering Officer – Exro Energy

- 20+ years of experience in green energy products development and commercialization
- PhD in Engineering from the University of Warwick



**Simon Strawbridge**  
Chief Operating Officer

- 20+ Years Experience – Automotive Inverter Design and Manufacturing
- KSR Electronic Systems, Electronic Motion Systems

# Board of Directors

Extensive automotive industry experience & connections



**Rod Copes**

Chairman

- Former Chief Operating Officer at Rivian Automotive; Former division President at Harley-Davidson
- 30+ years automotive executive



**Sue Ozdemir**

Chief Executive Officer



**Terence Johnsson**

Director

- Former Vice President at Audi, Volkswagen, General Motors
- 35+ years automotive sales experience



**Aleksandra Miziolek**

Director

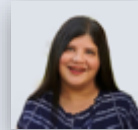
- Director Solid Power Inc., since 2022
- Former Director, Tenneco from 2020 to 2022
- Former SVP, Chief Transformation Officer and General Counsel, Cooper-Standard Holdings Inc., from 2014 to 2019



**Frank Simpkins**

Director

- Director, Power Solutions International, Inc. since 2017
- Advisory Board member, Anovion Technologies, since 2022



**Anita Ganti**

Director

- Engineering Services, Wipro Limited from 2015 to 2019
- Former Vice President – Global Technology, Flextronics from 2013 to 2015

# Capital Structure



## Public company in US & Canada

Basic shares outstanding	167,316,177
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Stock options outstanding	9,718,126
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Warrants outstanding	17,073,322
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Fully-diluted shares outstanding	194,107,625
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→ TSX: EXRO

→ OTCQB: EXROF

→ NASDAQ ready

Capitalization and Q3 2023

\*Exro Technologies has letter of acceptance to list on NASDAQ  
For more information, read our press release "[Exro Technologies Announces Application to List on Nasdaq](#)".





# Key Investment Highlights

01

**Best-in class engineering**, and industry expertise in advanced power electronics applied to electric motors and batteries

02

**Broad and highly unique patented portfolio of proven and de-risked technologies** ready for acceleration of commercialization

03

**First-mover advantage in large TAM** with technologies offering the adaptability to be scaled across several end-markets

04

**Scalable manufacturing model supports rapid growth** across market verticals while maximizing ROI

*Opportunistic, ground-floor entry point for new investors with technology de-risked, manufacturing capabilities in place and commercialization beginning*



# Thank you

**Sue Ozdemir**

Chief Executive Officer

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**Darrell Bishop**

Chief Investment Officer & Sales

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