Corporate Presentation

May 24th, 2022

Toronto Stock Exchange (TSX:EFL) & (OTCQB:EFLVF)

Disclaimer

This presentation contains forward-looking statements, including statements that relate to, among other things, the effect of the ongoing global COVID-19 public health emergency on the Company's operations, its employees and other stakeholders, including on customer demand, supply chain, and delivery schedule, the size of the Company's sales pipeline and the ability to satisfy orders thereunder, the Company's ability to satisfy its ongoing debt obligations, anticipated increased collaboration with OEMs and OEM channels constituting a source of sales growth for the Company, anticipated continued increase in sales momentum in fiscal 2022 through OEMs and directly to large global companies, including Fortune 500 companies, the future direction of the Company's business and products, including E-bus applications and additional intellectual property protection, the Company's ability to source supply to satisfy demand for its products and satisfy current order volume, technology development progress, all trademark logos and trademarks are owned by the respective Company's, the Company's application for a listing on NASDAQ and its ability to be listed thereon, pre-launch plans, plans for product development, plans for shipment using the Company's technology, production plans, the Company's markets, objectives, goals, strategies, intentions, beliefs, expectations and estimates, and can generally be identified by the use of words such as "may", "will", "could", "should", "would", "likely", "possible", "expect", "intend", "estimate", "anticipate", "believe", "plan", "objective" and "continue" (or the negative thereof) and words and expressions of similar import. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, such statements involve risks and uncertainties, and undue reliance should not be placed on such statements. Certain material factors or assumptions are applied in making forward-looking statements, and actual results may differ materially from those expressed or implied in such statements. Important factors that could cause actual results to differ materially from expectations include but are not limited to: the COVID-19 outbreak will not have significant further effects on the Company's supply chain or operations; that current customers will continue to make and increase orders for the Company's products, and in accordance with communicated intentions, that the Company's alternate supply chain will be adequate to replace material supply and manufacturing, that the Company's interpretation of the effect of any comfort given to Litarion's auditors of the Company's financial support for Litarion's operations is correct, that Litarion's insolvency process will proceed in an orderly fashion that will satisfy Litarion's debt without a significant negative effect on the Company or its assets, actions taken by creditors and remedies granted by German courts in the Litarion insolvency proceedings and their effect on the Company's business and assets, negative reactions of the Company's existing customers to Litarion's insolvency process, general business and economic conditions (including but not limited to currency rates and creditworthiness of customers), Company liquidity and capital resources, including the availability of additional capital resources to fund its activities, level of competition, changes in laws and regulations, legal and regulatory proceedings, the ability to adapt products and services to the changing market, the ability to attract and retain key executives, the granting of additional intellectual property protection, and the ability to execute strategic plans. Additional information about material factors that could cause actual results to differ materially from expectations and about material factors or assumptions applied in making forward-looking statements may be found in the Company's Annual Information Form for the year ended September 30, 2021 under "Risk Factors", and in the Company's most recent annual Management's Discussion and Analysis under "Qualitative And Quantitative Disclosures about Risk and Uncertainties" as well as in other public disclosure documents filed with Canadian securities regulatory authorities. The Company does not undertake any obligation to update publicly or to revise any of the forward-looking statements contained in this document, whether as a result of new information, future events or otherwise, except as required by law.

Our Mission

To accelerate the energy transition with safer and better batteries through technology advancement

About Electrovaya

Lithium ion battery market leader with 25 years of expertise in designing developing and manufacturing Lithium-Ion Batteries (LIB)

Technology Leadership
Key Lithium ion battery technologies with over 100 patents issued

Disruptive & Proven Technology
Safer and longer lasting batteries for heavy duty applications. Development of next generation solid state batteries

Validation-Safety
Electrovaya Infinity Batteries models are UL-2580 listed and have a zero-incident track record

Battery Systems
Electrovaya has designed and built battery systems for a wide range of applications including electric vehicles, material handling, energy storage and aerospace applications

Addressable Markets

APPLICATION	USAGE	FOCUS	MARKET
 **E-Cars**	1-2 hrs/day	Capital Cost Safety Range Performance	$200+ Billion Dollar Addressable Market*
 **E-Buses E-Delivery Trucks**	12-20 hrs/day	Efficiency Lifetime Safety Ownership Cost	Nascent, Multi-billion Dollar Market
 **E-Forklifts/ Warehousing**	20-24 hrs/day	Efficiency Lifetime Safety Ownership Cost	$2.5 Billion Addressable Market**
 **Autonomous Robotics / AGV**	12-20 hrs/day	Efficiency Lifetime Safety Ownership Cost	Nascent, Billion Dollar Market
 **Energy Storage Systems**	12-20 hrs/day	Efficiency Lifetime Safety Ownership Cost	Nascent, Multi-Billion Dollar Market

*Based on sales of key markets (US, Europe, China, Japan, South Korea) (competitor data)
**ITA US Factory Shipments Report (competitor data)

Current Technology Challenges

Cost of Ownership

More nuanced than $/kWh for a many significant applications. Cost of ownership the main driver for commercial applications

Safety

Concerns for adoption in sensitive applications (aerospace, public transit etc)

Performance

Higher energy density needed in order to enable electrification of new markets (e.g aircraft) and enable higher performance vehicles

gtm: Solar Grid Edge Storage Wind Podcasts White Papers Webinars

INDUSTRY PERSPECTIVE

Beyond Declining Battery Prices: 6 Ways to Evaluate Energy Storage in 2021

Balance of systems, software, supply chain constraints, and reliability and performance guarantees al weigh on total costs.

AAROH KHARAYA | FEBRUARY 01, 2021

FT FINANCIAL TIMES

Battery recalls and supply crunch challenge electric vehicle revolution

Rising costs may have to be passed on to automobile makers and their customers

Business aviation

The magic number that makes electric flight viable

By Dan Thisdell | 11 September 2020

Today's attempts to fly on battery power rely on the same Lithium-ion technology that

Electrovaya Platform Technology Solutions

Infinity Batteries

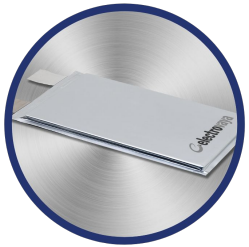
- Based on proprietary separator and electrolyte technology
- Superior Safety & Lowest Cost of Ownership
- Commercial today
  Global partners & users
- E-bus, E-forklift, E-trucks, Energy storage systems

Solid State Batteries

- Based on proprietary separator and electrolyte technology
- Highest Energy Density
- In late stage development
- Passenger EVs, Over the road (OTR) trucking, aerospace

Infinity Batteries

Lithium-ion ceramic cells with highest cycle life and safety setting the industry standards.



Li-Ion Ceramic Technology*

Heavy Duty Vehicles

Material Handling Equipments

Current Partner: Raymond

RAYMOND

Autonomous Guided Robots

Example Partner: Jabil

JABIL

badger technologies

Electric Trucks and Buses

Coming Soon

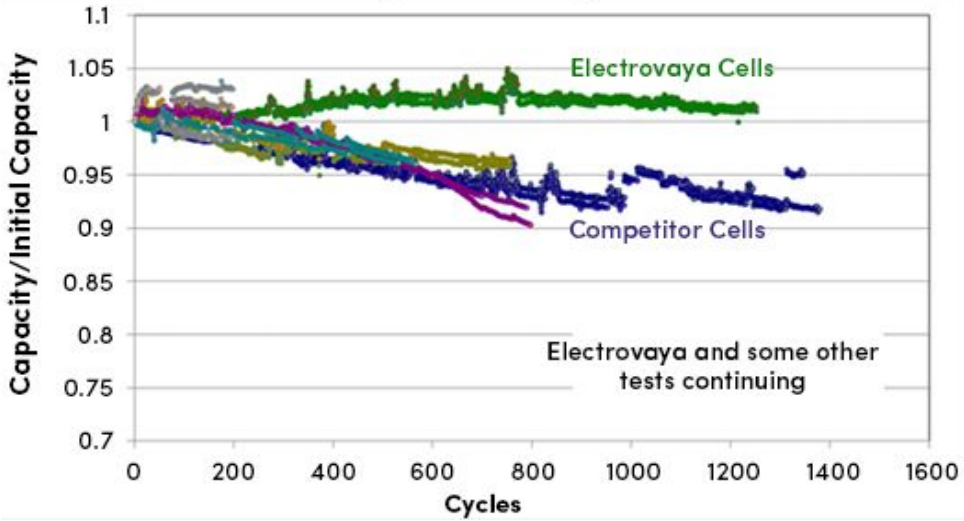
- **High Cycle Life**
  Lowest Cost of Ownership
- **Safety**
  Zero Fire Incidents
- **High Reliability**
  Performance in 24/7 applications

*An earlier iteration of our lithium-ion ceramic technology has also been used in ~20,000 Daimler Smart cars (no active cooling).
*The vehicle is unique as it was of few electric vehicles that have no known battery safety incidents.

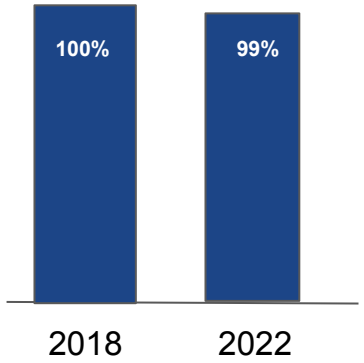
Infinity Batteries: Cycle Life Advantage

Electrovaya Patented Technology provides the longest Cycle life in Industry: Electrovaya batteries can operate for >25 years with 1 cycle/day

Electrovaya batteries lifetime VS competitors



Electrovaya E-forklift battery performance from a Fortune 100 company after 4 years of continuous operation (equivalent to 192,000 miles of driving)



Infinity Batteries: Cost of Ownership

Our Infinity platform have Best Cycle Life in Industry, **Providing overall lowest cost of ownership** when compared to other lithium ion batteries, fuel cells and lead acid batteries.

Heavy Duty Vehicles (HDV) Operate at ~2 cycles per day → ***Battery replacement*** needed every 6 years

Energy Storage Systems (ESS) require a ***Battery Augmentation*** to compensate for the performance degradation

Electrovaya Infinity Platform	
Battery Cost ($/KWh)	+25%
Battery Life (years)	+80%
Total cost of ownership	-55%

Infinity Batteries: Safety (1/2)

Fire safety is major concern with Lithium-ion Battery

Over 200,000+ **EV recalls** due to battery safety concerns 2020/21

Electric Buses are being taken **out of service** Due to Fire Hazards

Multiple Fire incidents reported with Leading Energy Storage Systems Manufacturers

Infinity Batteries: Safety (2/2)

Electrovaya prides itself by providing leading edge safety Lithium ion battery cells and systems

Superior Safety provided by Electrovaya proprietary fire propagation technology

UL LISTED
LITHIUM-ION EV BATTERY
MH64253

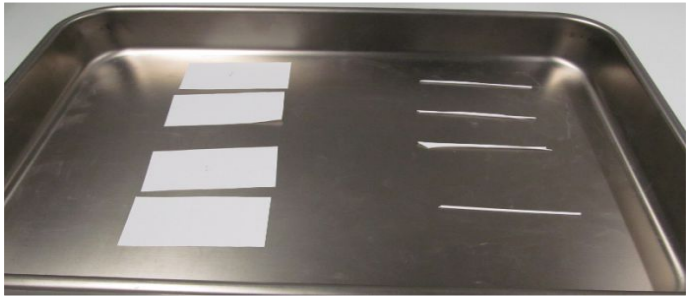
Electrovaya batteries passed Extensive UL battery safety standard testing and are **UL-2580** listed

VALID

Over 1000 forklift batteries deployed for more than 4 years at customers sites with **Zero Safety incident.**

Electrovaya Ceramic vs Coated PO

15 min at 130°C



Infinity Battery Products

Material Handling Electric Vehicles & AGVs

High Voltage Battery Systems

Infinity Batteries- Material Handling User Base

OEM Customers

RAYMOND

JABIL

End Users Examples (not a complete list)

Retail & eCommerce

Walmart

FORTUNE 100 *Confidential User

The Home Depot

Ashley HOMESTORE

Lowe's

Food distribution

MARS incorporated

Unilever

Maple Leaf

Mondelēz International

Manufacturing

P&G

PVH

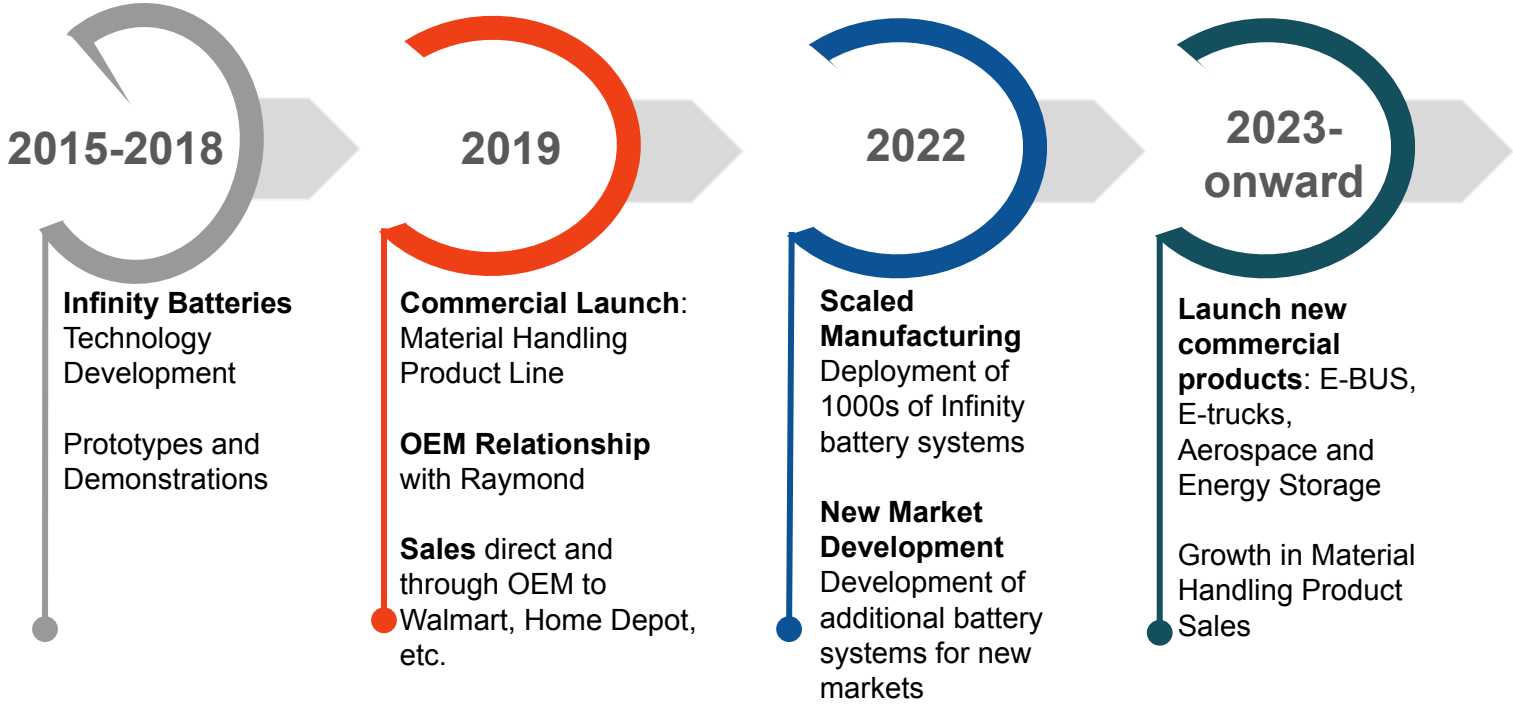
PHILLIPS-VAN HEUSEN CORPORATION

Logistics

CEVA LOGISTICS

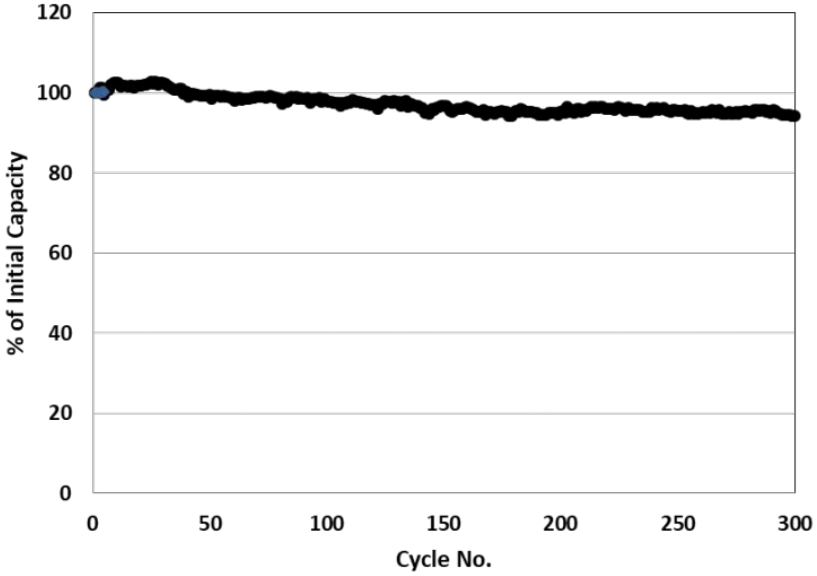
interstate warehousing a Tippmann Group Company

Infinity Batteries- Target Road Map



Solid State Batteries- A Disruptive Technology

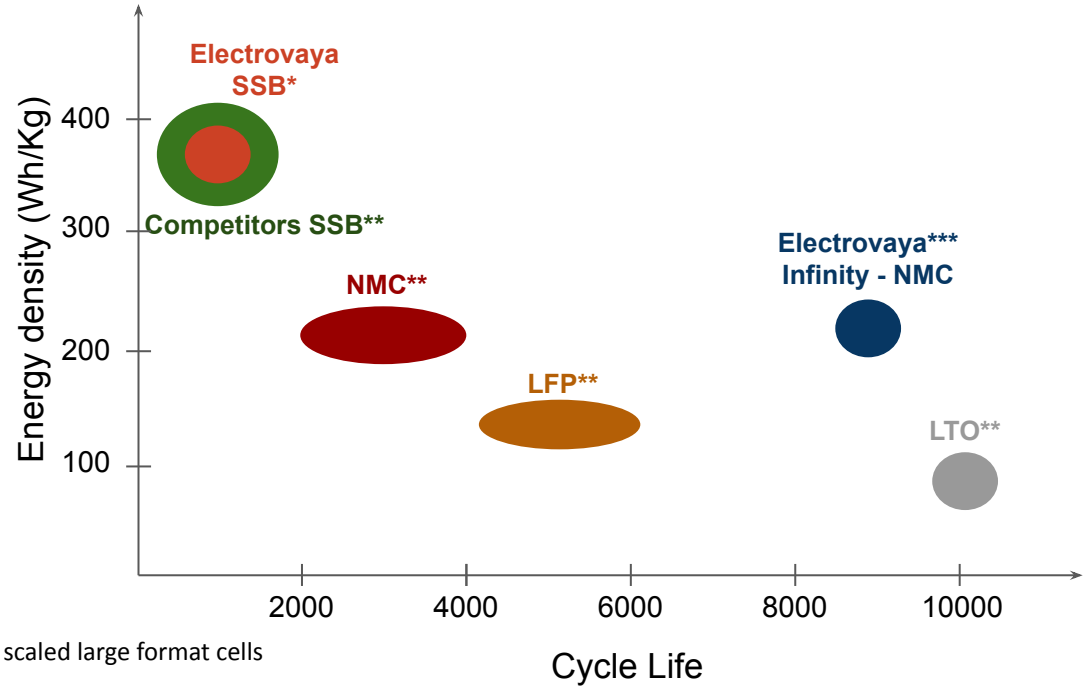
Electrovaya's Labs division is focused on the technology development and scale up of high energy density solid state batteries on track to reach automotive targets



Solid State Batteries- Performance

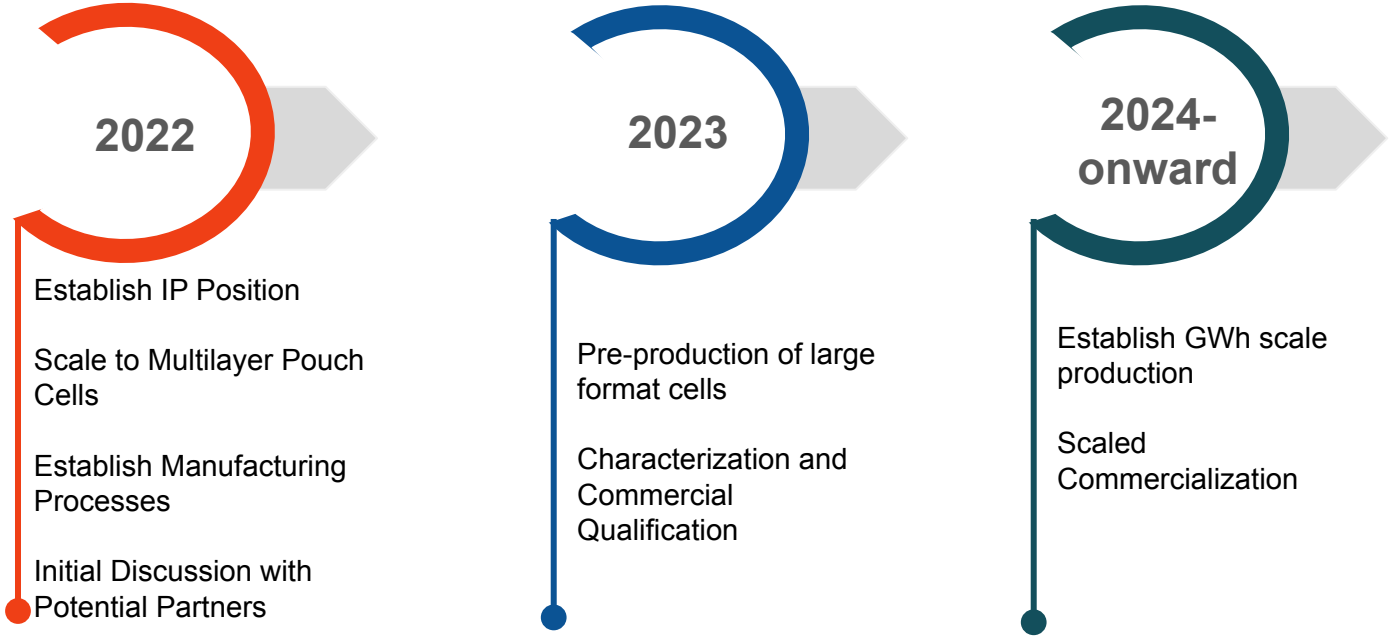
Electrovaya's Labs: promising early results

- Highest energy density **>350 Wh/Kg**
- Utilizes **most standard manufacturing processes**
- Preliminary Results demonstrate meeting automotive performance targets
- Initial IP developed and filed



*Based on Electrovaya's estimates for scaled large format cells
** Competitor data sheets/estimates
***Based on long term test data

Solid State Batteries- Target Road Map



Management Team

Dr. Raj S. Das Gupta,
CEO, Director

Massachusetts Institute of Technology

UNIVERSITY OF CAMBRIDGE

John Gibson,
CFO

ICAS

University of Glasgow

Dr. Sankar Das Gupta,
Executive Chairman

Imperial College London

UNIVERSITY OF TORONTO

Dr. Jeremy Dang,
VP, Business & Project Development

UNIVERSITY OF TORONTO

Dr. Elmira Memarzadeh
Director, Engineering Programs

UNIVERSITY OF ALBERTA

Jason Roy,
Director, Investor Relations and Communications

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Imperial College London

UNIVERSITY OF WATERLOO

Dr. James Jacobs,
Director

OBERLIN COLLEGE LEARNING AND LABOR

UNIVERSITY OF TORONTO

Dr. Bejoy Das Gupta,
Director

IIF INSTITUTE OF INTERNATIONAL FINANCE

UNIVERSITY OF OXFORD

LSE THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Kartick Kumar,
Director

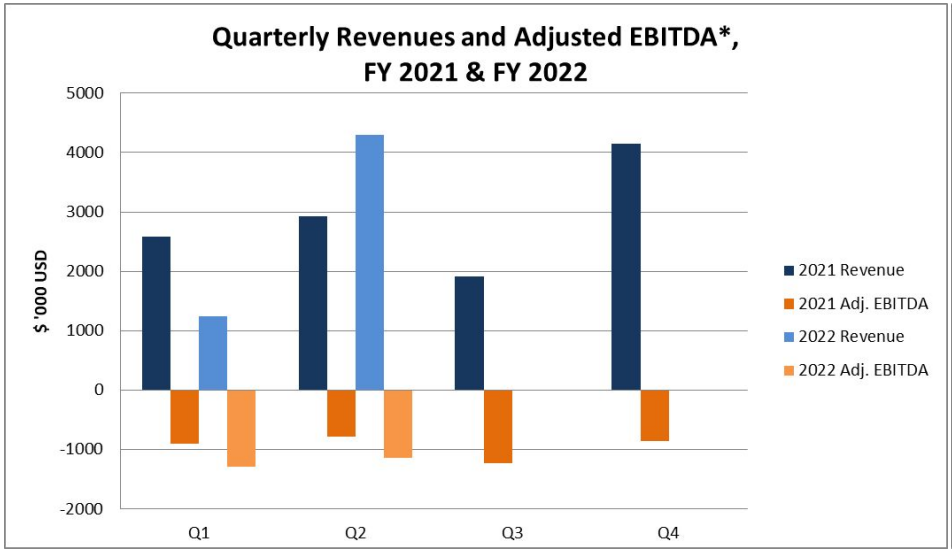
WORLD BANK GROUP

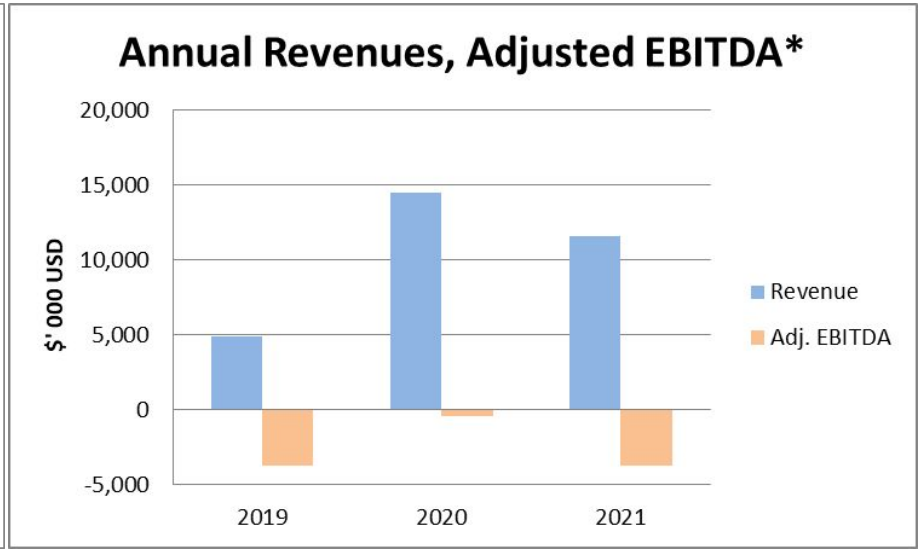
UNIVERSITY OF CAMBRIDGE

UNIVERSITY OF TORONTO

Financials

FY2022 revenue target $21-$25 million - double FY2021





** Non-IFRS Measure: Adjusted EBITDA does not have a standardized meaning under IFRS. Therefore it is unlikely to be comparable to similar measures presented by other issuers. We believe that certain investors and analysts use Adjusted EBITDA to measure the performance of the business. Adjusted EBITDA is defined as loss from operations, plus finance costs, stock-based compensation and depreciation costs.*

Capital Share Structure

Ticker:	**TSX:EFL**
Shares Outstanding* :	**146,805,856**
Share Price* :	**CAD $0.71**
Market Cap* :	**CAD $104,232,542**
Insider Ownership:	**~ 40%**

* Stock price, shares, and market cap are current as of 4:00 PM EDT, May 10th, 2022

Ticker:	**OTCQB:EFLVF**
Shares Outstanding* :	**146,805,856**
Share Price* :	**USD $0.56**
Market Cap* :	**USD $81,844,265**
Insider Ownership:	**~ 40%**

* Stock price, shares, and market cap are current as of 4:00 PM EDT, March 10th, 2022

Investor & Media queries, please contact:

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