



Corporate Presentation 公司报告

January 2021 / 2021年1月



Forward Looking 前瞻性声明

Certain statements in this presentation may contain **“forward looking”** statements that involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. It is uncertain if further work will in fact lead to production of a mineral resource and of lithium compounds.

Frontier has filed on SEDAR a NI-43-101 compliant Technical Report, "PAK prefeasibility study, Spark resource estimation" updated on March 23, 2020. All technical information should be reviewed according to this resource estimate.



Frontier Lithium is an emerging lithium mineral and chemicals company Frontier Lithium 是一家新兴的锂矿和化学品公司

Frontier is aiming to produce battery-grade lithium hydroxide and other chemicals to the growing electric vehicle and energy storage markets in North America as well as supply premium mineral concentrates required by high quality glass manufacturers./ Frontier的目标是为北美不断增长的电动汽车和储能市场生产电池级氢氧化锂和其他化学品，并为高品质的玻璃制造商提供所需的优质矿物精矿。

North America's Highest Quality
北美最高品质

4 Discoveries 四个发现区
2 Deposits 两个矿床
Ontario's largest spodumene resource 安大略省最大的锂辉石资源
Exploration Upside 勘探潜力



Growing market
不断发展的市场

Located in Great Lakes 位于五大湖区
Successful Lithium Chemical test work 锂化学品测试工作获得成功
PFS scheduled to start in 2021 预计2021年开始进行预可行性研究



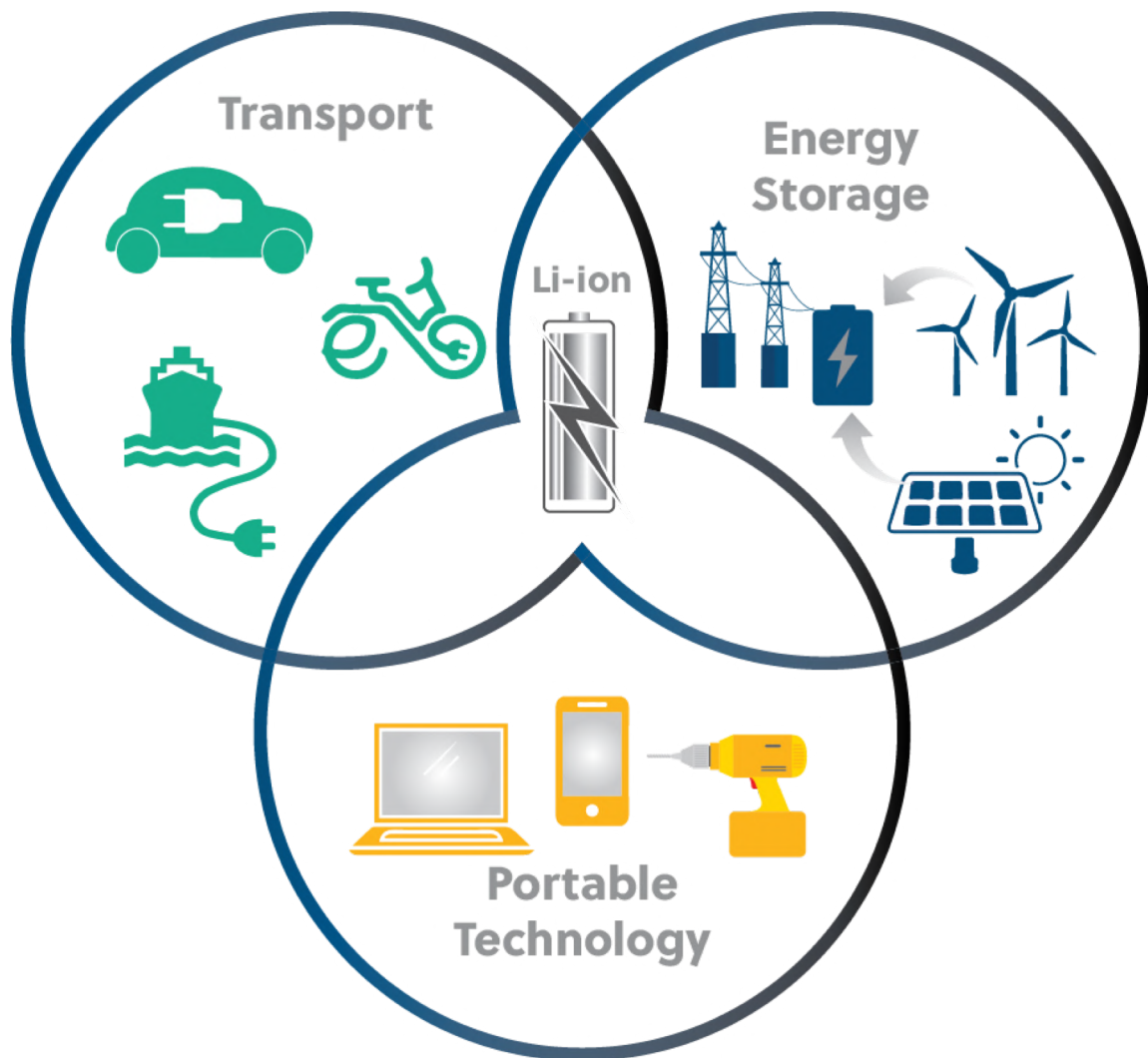
Right Team 合适的团队

~ 30% ownership 持有约30%股权
Strong Technical Partners 强大的技术合作伙伴
Formidable Mining & Finance background 强大的矿业和金融背景

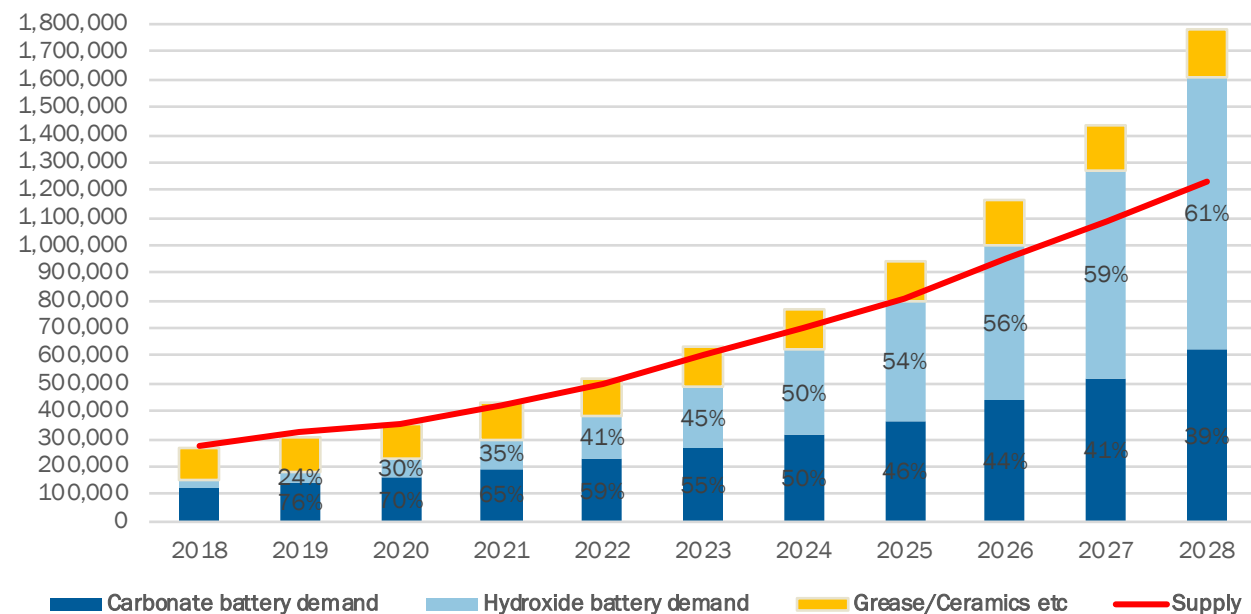


Lithium Market 锂市场

The convergence of three multi-trillion-dollar industries 三个万亿美元级行业交汇点



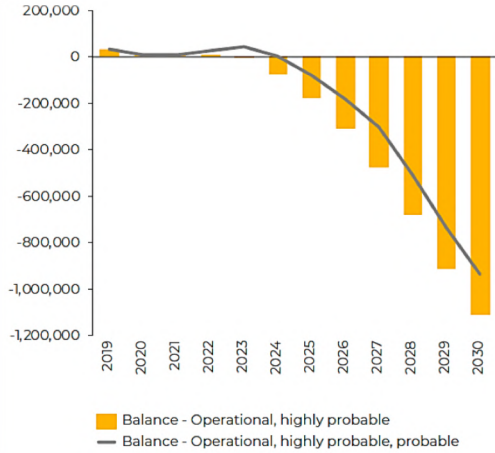
Lithium Chemical Supply/Demand to 2028 (LCE)
2028年及之前的锂化学品供应/需求 (LCE)



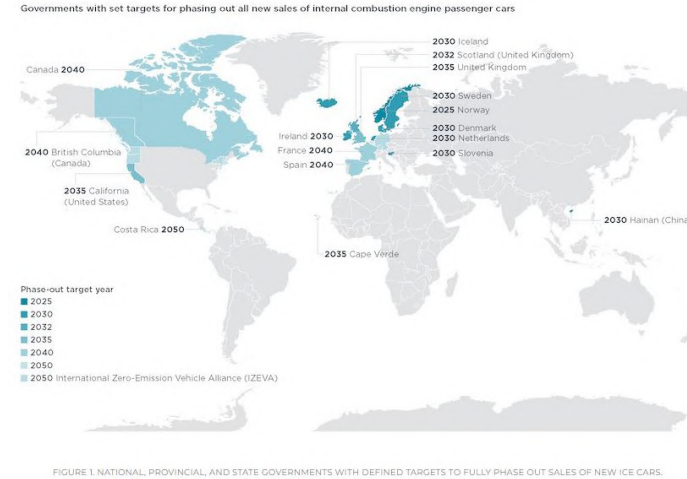
Source 来源: RK Equity

Lithium Market Trends 锂市场趋势

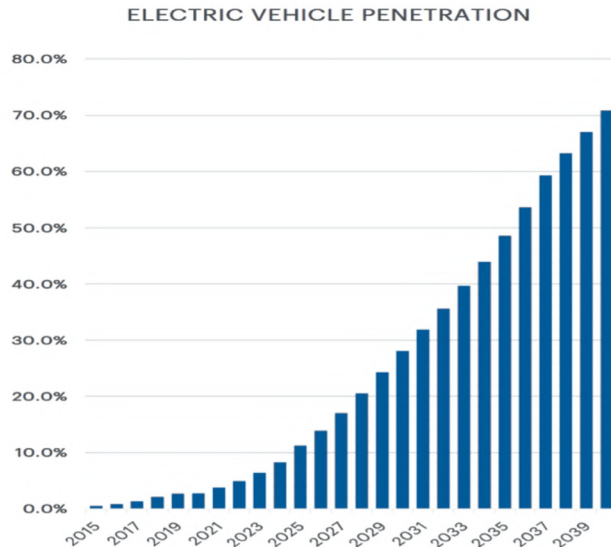
Supply Deficit 供应短缺



Post-Covid Stimulus
后疫情时代的刺激措施



EV - A global trend
电动汽车 - 全球趋势



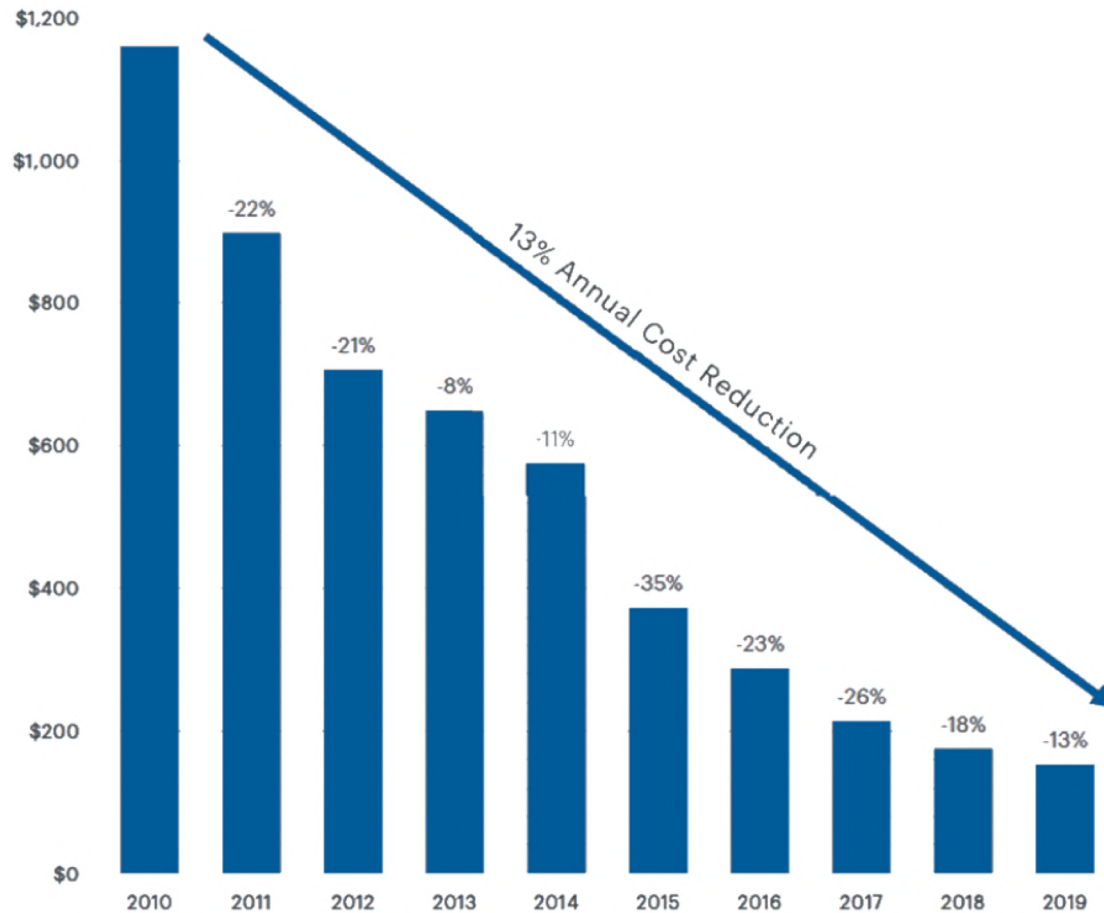
Regional Supply Chains
区域供应链



EV adoption IS DRIVEN BY ECONOMICS

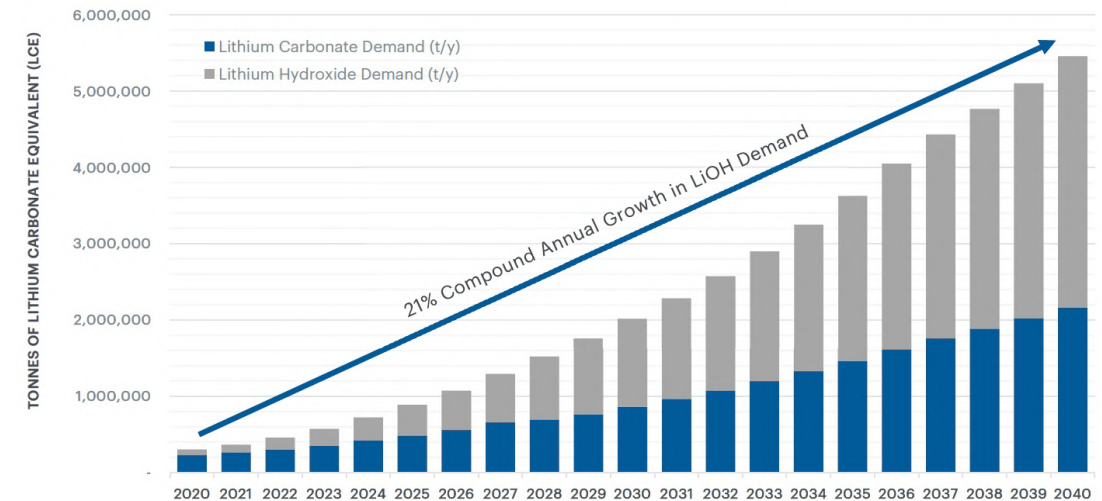
经济因素驱动电动汽车渗透率提升

LI-ION BATTERY COSTS DOWN 87% SINCE 2010
(PACK PRICE - REAL 2019 \$/KWH)

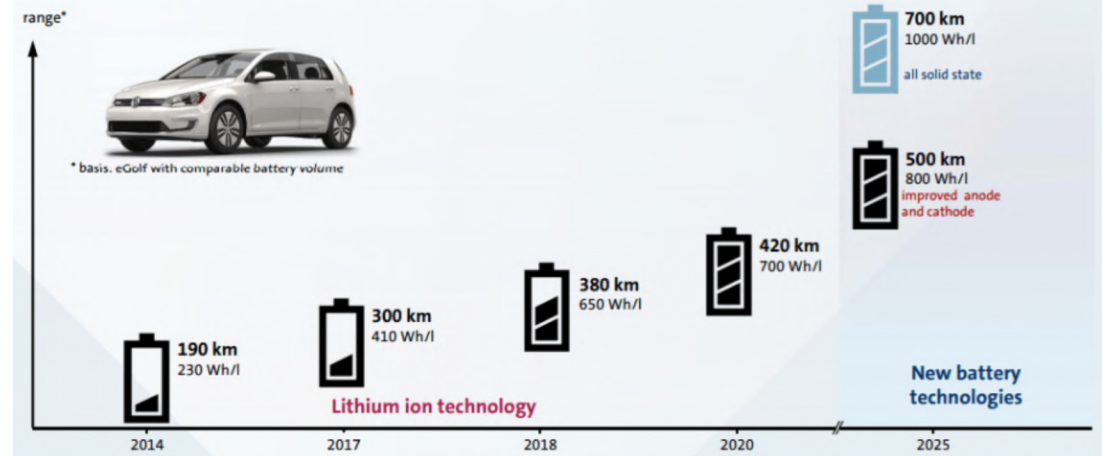


Source 来源: Bloomberg New Energy Finance <https://about.bnef.com/blog/behind-scenes-take-lithium-ion-battery-prices>

LITHIUM CHEMICAL DEMAND 2020-2040



Advances in battery technology will improve range, weight and costs



Advances in battery technology will improve range, weight, and costs by Volkswagen

Market Facts and Price History 市场和价格走势

Exchange 交易所 — FL;TSX.V - LIOTF;OTC - HL2;Frankfurt

Market Capitalization 市值 — \$110,379,000

52-week Price Range / 52周价格区间 — \$0.135 - \$0.71

Shares Issued 已发行股数 — 175,467,882

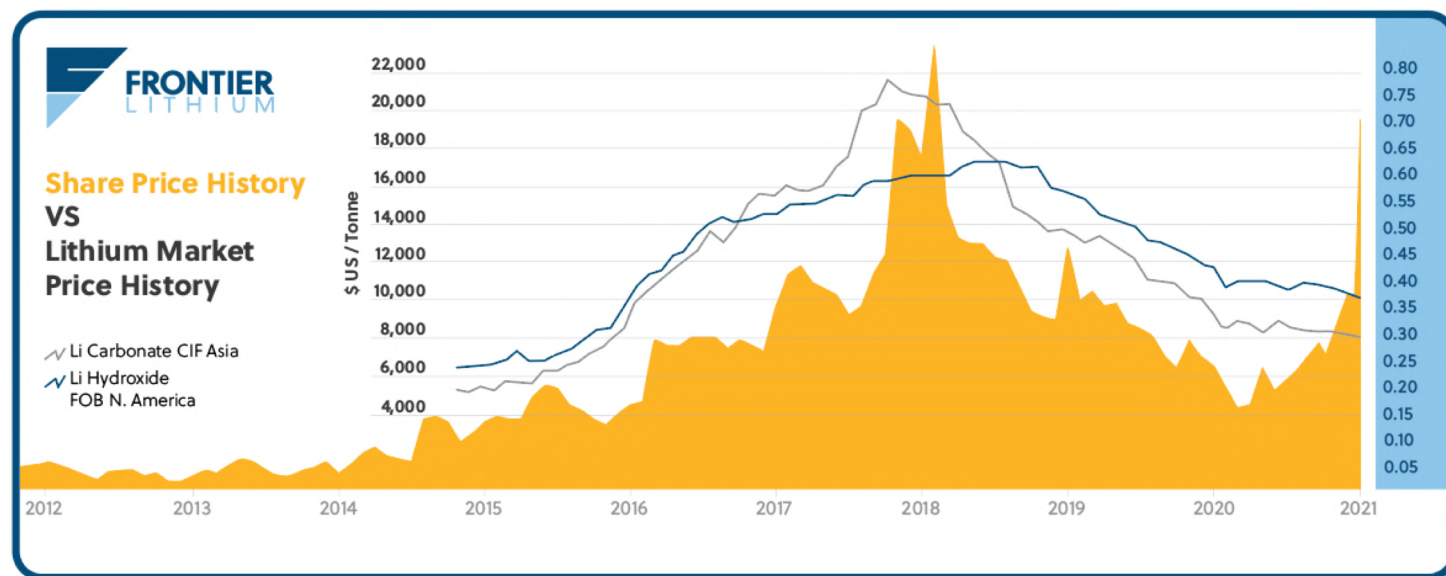
FL Executive Options 期权 — (Avg. Price 均价 \$0.26) 8,266,666

Warrants 认股权证 (Avg. Price 均价 \$0.37) — 11,572,627

Fully Diluted 完全摊薄后股数 — 196,958,288

CASH (\$CAD) 现金（加元） — \$2,047,166

As of Jan 21, 2020 截止2020年1月21日



BOARD OF DIRECTORS 董事会



Rick Walker

Chairman 董事会主席

Rick Walker has been the owner/operator of Consbec Inc. since 1975. Consbec is the largest surface drilling and blasting contractor in North America and the only private Canadian company who manufactures and transports bulk explosives.自1975年以来，Rick Walker一直是Consbec公司的所有者/经营者。Consbec是北美最大的地面钻探和爆破承包商，也是加拿大唯一一家生产和运输散装炸药的私营公司。



John Kelly, P.Eng. 专业工程师

Director 董事

Mr. Kelly was Vice President of Mining, Ontario Division, Inco Ltd. before he retired at 1998. / Kelly先生在1998年退休前是Inco Ltd.安大略分部采矿业务的副总裁。



Mike Koziol, P.Geo, P.Eng. 专业地质学家、专业工程师

Director 董事

Mr. Koziol is a geologist with over 35 years of experience exploring for gold and base metals in the Canadian Shield. / Koziol先生是一名地质学家，在加拿大地盾地区拥有超过35年的黄金和基本金属勘探经验。



John R. Didone, CPA, CA, CMA 注册会计师、注册管理会计师

Director 董事

Mr. Didone is a Partner at SRWC LLP, Chartered Professional Accountants based out of Sudbury, Canada. He has been with the firm since 1980 and over this time has gained considerable insight of business affairs, in particular his demonstrated experience offering professional advice on the expansion of national companies. / Didone先生是SRWC LLP的合伙人，该公司是加拿大Sudbury的特许专业会计师事务所。自1980年以来，他一直在该公司工作，在这段时间里，对商业事务有了相当深入的了解，特别是在为国内公司的扩张提供专业建议方面的经验。



Stephen J.J. Letwin

Director 董事

Mr. Letwin is a Director of Hess Midstream (2018) and of Margaux Resources and also is the President and CEO of Mancal Corporation. Mr. Letwin was President and CEO of IAMGOLD Corporation for ten years and was also a member of their Board of Directors. Letwin先生是Hess Midstream (2018年)和Margaux Resources的董事，同时担任Mancal Corporation的总裁兼首席执行官，曾担任IAMGOLD公司总裁兼首席执行官十年，也是其董事会成员。



Ernest (Ernie) Marcotte, P. Eng, FCIM 专业工程师

Director 董事

Mr. Marcotte has over 40 years of experience in the mining industry involving metallurgical and mining operations, environmental control, mineral processing, research and development, design engineering, plant commissioning and corporate management. / Marcotte先生在采矿业拥有超过40年的经验，涉足冶金和采矿运营、环境控制、矿物加工、研究和开发、设计工程、工厂调试和企业管理。



Bruce Barker, LLB 法学士

Director 董事

Mr. Barker is a Partner of Bennett Jones LLP, a leading Canadian law firm. Mr. Barker practices corporate law, with an emphasis on mergers and acquisitions, banking and corporate finance, and recently co-chaired the firm's Corporate Department. / Barker先生是加拿大著名律师事务所Bennett Jones LLP的合伙人，擅长公司法，重点是兼并和收购、银行和公司融资，最近还担任该公司企业部的共同主席。

EXECUTIVE LEADERSHIP TEAM 高管团队



Trevor R. Walker, MBA 工商管理硕士

President & Chief Executive Officer 总裁兼首席执行官

Trevor R. Walker is the President and CEO of Frontier Lithium. Walker joined Frontier Lithium in 2010, and since then he has played a key strategic role in focusing the company on its PAK Lithium deposit in Northwestern Ontario. / Trevor R. Walker是Frontier Lithium的总裁兼首席执行官，于2010年加入Frontier Lithium，此后，在使公司专注于位于安大略省西北部的PAK锂矿床方面发挥了重要的战略作用。



Garth Drever, P.Eng, P.Geo 专业工程师、专业地质学家

Vice President (Exploration) 勘探副总裁

Garth Drever is a geologist with over 35 years of mineral exploration experience primarily with Cameco Corporation. He specializes in innovative technologies for detecting ore bodies and has worked on many uranium deposits worldwide. / Garth Drever是一名地质学家，主要在Cameco公司拥有超过35年的矿产勘探经验，擅长探测矿体的创新技术，并曾在世界各地的许多铀矿床工作。



Bora Ugurgel

Manager, Investor Relations & Communications 投资者关系和公关经理

Bora Ugurgel has close to 10 years of experience in the mining research and service and supply industry. Most recently, he was the Managing Director of the Ultra-Deep Mining Network (UDMN) and the Chief Operating Officer for the Centre for Excellence in Mining Innovation (CEMI). / Bora Ugurgel在采矿研究、服务和供应行业有近10年的经验，最近曾担任超深采矿网(UDMN)的董事总经理和采矿创新卓越中心 (CEMI)的首席运营官。

The Electric Avenue is geologically similar to the world-famous Greenbushes tin belt in Western Australia. They both host high grade and high purity spodumene pegmatites. / 在地质方面Electric Avenue 类似于西澳洲世界著名的Greenbushes锡带，二者都包含高品位、高纯度锂辉石伟晶岩。

The Project encompasses 26,774 hectares along 65 km of Ontario's Electric Avenue. **Four** spodumene-bearing pegmatites have been discovered on what remains largely unexplored. 该项目面积26,774 公顷，沿着安大略省的Electric Avenue 延伸，已经在几乎没有勘探的地区发现了四处含锂辉石的伟晶岩。

Currently 150 km of adequate seasonal winter road provide infrastructure and skilled labor access to the PAK site. Zero carbon energy sourced power line is under construction for the region. 目前150公里的季节性冬季道路可供人员和基础设施进入PAK项目。该地区正在建设零碳排放的输电线路。

The Port of Thunder Bay, located at the head of the Great Lakes/St. Lawrence Seaway System, makes PAK Lithium Project readily accessible to the world. 位于五大湖区/圣劳伦斯航道系统的顶端的Thunder Bay港，使得PAK锂项目方便进入全球市场。

PAK Lithium Project: Mineral Resource

Deposit	Measured			Indicated			Inferred		
	M Tonnes	Grade % Li ₂ O	Tonnes Li ₂ O	M Tonnes	Grade % Li ₂ O	Tonnes Li ₂ O	M Tonnes	Grade % Li ₂ O	Tonnes Li ₂ O
PAK 2018	1.25	2.30	28.68	7.25	1.69	122.47	1.95	2.01	38.44
Spark 2020	—	—	—	3.25	1.59	51.71	12.23	1.36	166.18
Pennock	—	—	—	—	—	—	—	—	—
Bolt	—	—	—	—	—	—	—	—	—
Totals	1.25		28.68	10.50		174.18	14.14		204.62

Note that mineral resources; do not include amounts that have been identified as mineral reserve; do not have demonstrated economic viability



Assets – Deposits

资产- 矿床



PAK Deposit – The Technical Grade Pit / PAK矿床 – 技术级矿坑

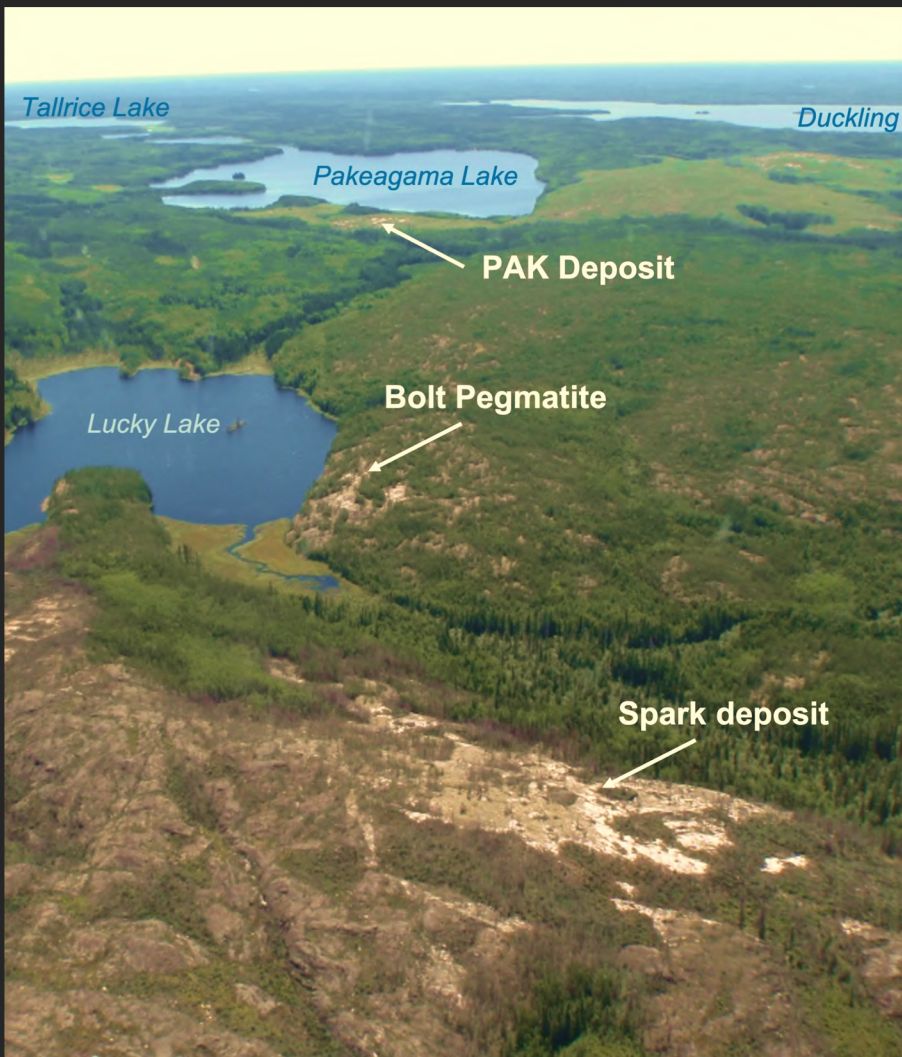
- 9.3 Mt resource, average grade 2.04% Li_2O , < 0.1% Fe_2O_3 资源量为930万吨，氧化锂平均品位2.04%，氧化铁含量< 0.1%
- 500m strike length 300m deep estimated true width varying from 10 to 125m with a sub-vertical orientation (est. average of 45m) 走向长度500米，深度300米，预计真实宽度10米至125米不等，接近垂直（预计均值为45米）
- A 2018 PFS focused on spodumene concentrate business model estimated \$300 NPV with an IRR of 38%. / 2018年的预可行性研究专注于锂辉石精矿的业务模型，预计净现值为\$300，内部收益率为38%。
- Produced a rare 7.2% concentrate similar to Albemarle's premium product. 生产罕见的7.2%的精矿，类似于Albemarle的优质产品。
- Life of Mine sample product qualified by glass/ceramics market. 采样产品符合玻璃/陶瓷市场需求。

Spark Deposit – Upcoming Drill Program / Spark矿床 – 即将进行的钻探活动

- At surface at least 2 times larger than the PAK pegmatite, 地表至少是PAK伟晶岩的两倍。
- Widths greater than 100m, strike length of more than 300m. 宽度大于100米，走向长度大于300米。
- Mineral grades and composition are similar to PAK Lithium Deposit and they are 2.3 km apart. 矿产品位和成分与PAK锂矿类似，二者相隔2.3公里。
- 3.25 million tonnes averaging 1.59% Li_2O in the Indicated category 指示资源量325万吨，氧化锂品位1.59%。
- 12.23 million tonnes averaging 1.36% Li_2O in the Inferred category 推断资源量1223万吨，氧化锂品位1.36%。
- Deposit remains open in all directions 矿床向所有方向开放。

Assets - Discoveries

资产-发现区



Bolt – in between PAK and Spark 位于PAK和Spark之间

- The pegmatite has been traced for over 600 m with zones up to 50 m wide. 已经发现伟晶岩有600多米，最宽50米。
- Initial channel sampling has resulted in 1.5% Li_2O over 36.4 m. 初始的槽探发现氧化锂品位1.5%的36.4米矿段。
- It is concordant with host rock and appears to be vertically emplaced. 它与主岩一致，似乎位置是垂直的。

Pennock – Blue Sky Potential 蓝天潜力

A historical LCT Pegmatite showing 30 km northwest of the PAK Lithium Deposit was confirmed by channel sampling. 历史的LCT伟晶岩表象区位于PAK锂矿床的西北部30公里处，通过槽探确认。

- The outcrop (30mx16m) consists entirely of spodumene and quartz intergrowth (SQUI); 露头（30米x16米）完全包含锂辉石和石英共生（SQUI）
- The entire channel of 16 metres grades 2% Li_2O with a 12 m zone averaging 2.35% Li_2O and averaged less than 0.1% Fe_2O_3 整个16米的槽探中氧化锂的品位为2%；其中12米的氧化锂品位为2.35%，氧化铁含量不足0.1%。
- The channel is part of a 1.5 km long pegmatite dyke; 槽探区域是1.5千米伟晶岩岩脉的一部分
- Substantiates fertility of Ontario's Electric Avenue for high-quality LCT pegmatites hosting rare low-iron spodumene. 证实安大略省Electric Avenue包含优质LCT伟晶岩的程度，其中有罕见的低铁锂辉石。

Lithium Concentrates

锂精矿



7.2 % Li₂O, 0.135 % Fe₂O₃
Technical Grade - Spodumene Concentrate

High Quality, Low Impurity 品质高、杂质少

In 2020 Frontier produced a high quality spodumene concentrate product with an average grade of 7.2% lithium oxide ("Li₂O") and low impurities from the PAK Deposit composite sample. / 2020年，Frontier从PAK矿床复合样品中生产出了平均品位为7.2%的氧化锂和低杂质的优质锂辉石精矿产品。

Lithium Rich Mineral
Spodumene 富锂的
锂辉石

Lithium Mineral
Concentrate 锂精矿

Chemical Conversion
Plants 化学加工厂

Direct Sales
直接销售

Lithium
Chemicals 锂化学品

Chemical Markets
化学市场

Technical Market 技术市场

Glass 玻璃
Ceramics 陶瓷
Continuous Casting 连续浇铸

Fiberglass 玻璃纤维
Glass-Ceramics 玻璃陶瓷
Other 其他

Chemical Compound	Frontier Lithium composite sample average	Albemarle ⁽ⁱ⁾ SC 7.2 Premium	Albemarle ⁽ⁱ⁾ SC 7.2 Standard
Li ₂ O	7.2 %	min. 7.2 %	max. 7.2 %
Al ₂ O ₃	24.4 %	min. 25.0 %	min. 25.0 %
SiO ₂	64.8 %	min. 62.5 %	max. 62.5 %
Fe ₂ O ₃	0.135 %	max. 0.12 %	max. 0.17 %
Na ₂ O	0.16 %	max. 0.35 %	max. 0.35 %
K ₂ O	0.11 %	max. 0.30 %	min. 0.40 %
P ₂ O ₅	0.05 %	max. 0.25 %	min. 0.35 %
CaO	0.03 %	max. 0.10 %	min. 0.10 %

Lithium Chemicals

锂化学品

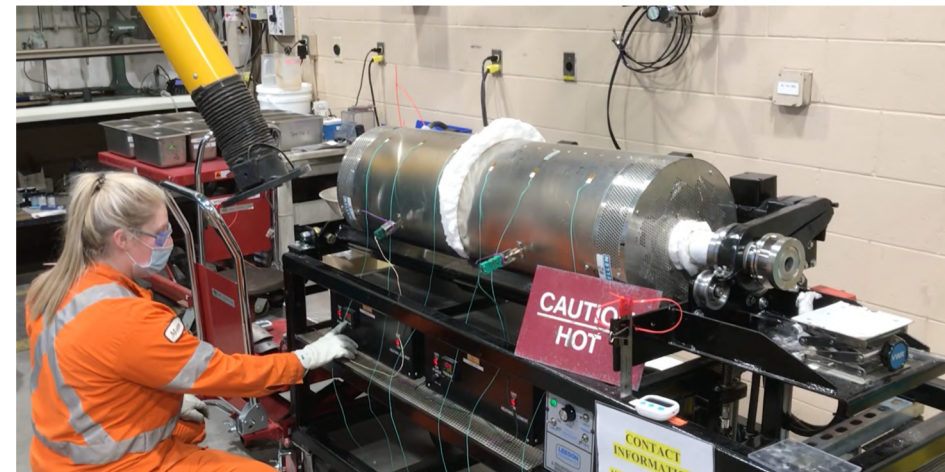


56.5% LiOH
Lithium hydroxide monohydrate - $\text{LiOH} \cdot \text{H}_2\text{O}$

Strategic Partners 战略合作伙伴



Frontier has identified specific technology and markets of interest for premium lithium compounds produced from the transformation of spodumene concentrate. The company has entered into a strategic partnership agreement with XPS Expert Process Solutions a Glencore company, and a private hydrometallurgical expert, to develop a patent pending process for refining spodumene concentrate into battery quality lithium hydroxide. / Frontier已确定了从锂辉石精矿转化生产优质锂化合物的特定技术和市场。该公司已与Glencore公司的XPS Expert Process Solutions及一位私人水冶专家签订战略合作协议，以开发一种正在申请专利的工艺，将锂辉石精矿提炼成电池级的氢氧化锂。



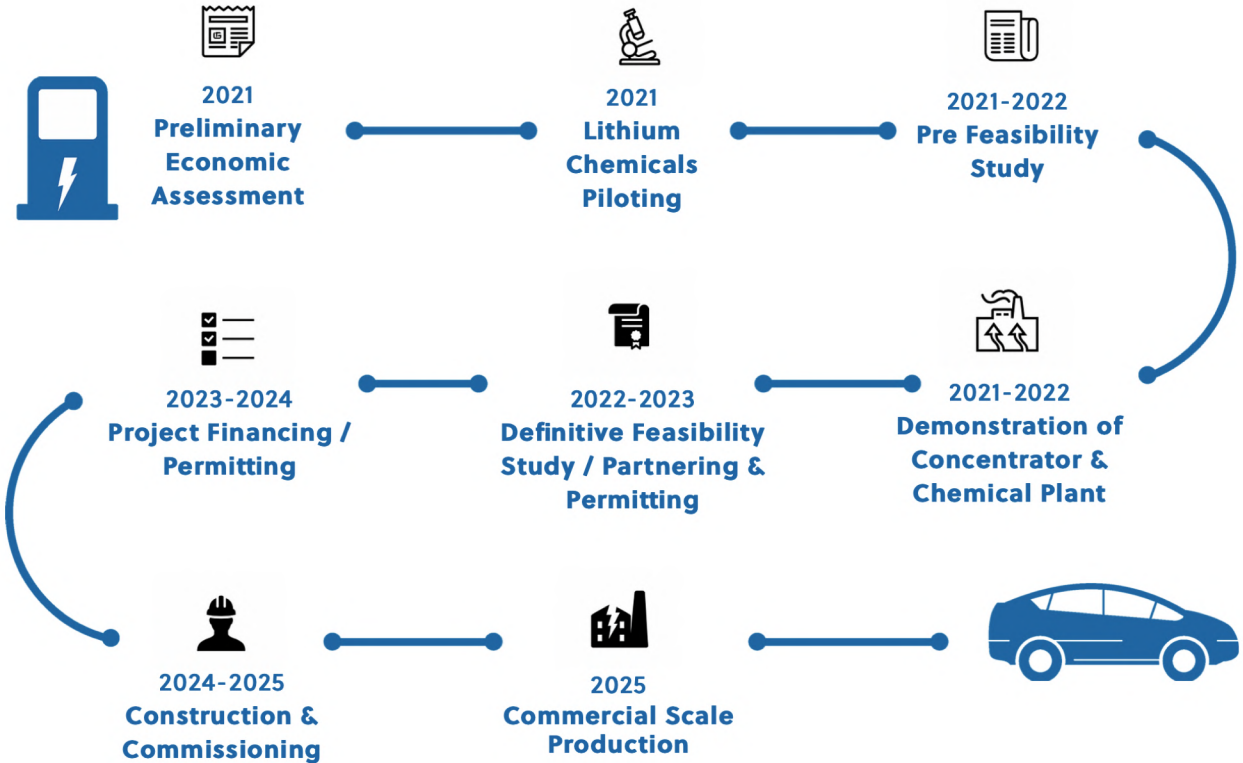
Path to Production 投产之路



Option to Primary Spodumene Concentrates Production Plan 原生锂辉石精矿生产计划



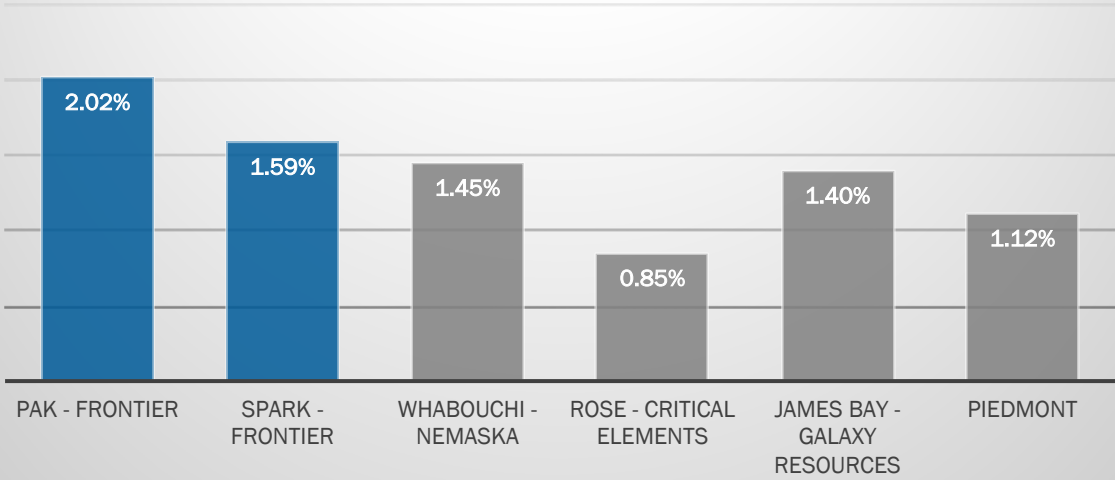
Vertically Integrated Lithium Chemicals Production Plan 垂直一体化的锂化学品生产计划



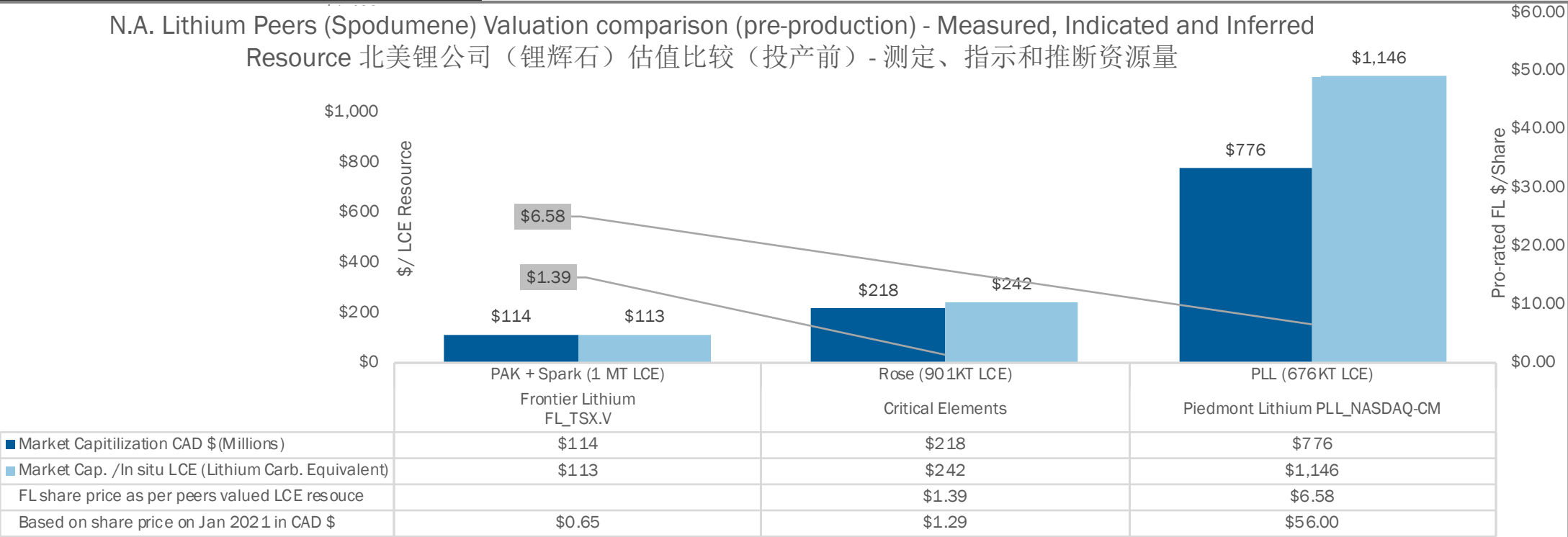
*The project timelines are estimates and subject to adverse developments in business and economic conditions in the principal markets. 预期的时间表是预估性质的，会受到主要市场商业和经济条件的影响。

Valuation & Peer Comparison 估值与同行比较

Measured and Indicated Resource Grade
测定和指示资源量品位 %Li₂O



N.A. Lithium Peers (Spodumene) Valuation comparison (pre-production) - Measured, Indicated and Inferred Resource
北美锂公司（锂辉石）估值比较（投产前）- 测定、指示和推断资源量



Why Frontier belongs in your portfolio 应将Frontier放入您的投资组合的理由

Great Asset 非常优质的资产

North America's highest-grade, large tonnage hard-rock lithium resource in the form of a rare low-iron spodumene. In development stage with two deposits and significant exploration upside in the Great Lakes region.北美最高品位的大吨位硬岩锂资源，为罕见的低铁锂辉石。处于开发阶段，在五大湖区有两个矿床和巨大的勘探潜力。

The Right Team 合适的团队

Management and directors with approximately 30% ownership and decades of experience in resource extraction, refining and capital markets. A strategic technology partnership with XPS, a Glencore company, developing a lithium chemicals production process.管理层及董事拥有约30%股权，在资源开采、提炼及资本市场拥有数十年经验。与Glencore公司XPS建立战略技术合作关系，开发锂化学品生产工艺。

Growing Market 不断壮大的市场

The Electric Vehicles lithium demand is expected to grow 10-fold this decade and it is in short supply of North American production. Post Covid policy related stimulus efforts supporting Northern US and Southern Ontario auto OEM manufacturers, are further charging the EV adoption rate. 电动车锂电需求在这十年内预计将增长10倍，而北美产量供不应求。新冠疫情政策后，相关刺激措施支持美国北部和安大略省南部的汽车OEM制造商，正在进一步提高电动汽车的渗透率。



Frontier's objective is
to become
a strategic regional
supplier.
Frontier的目标是成
为区域性的战略供
应商。

www.frontierlithium.com

