



HILLCREST
energy technologies™

公司介绍

2024年4月1日

为未来提供动力的能源解决方案

前瞻性声明通告

DISCLAIMER

This corporate presentation and the information contained herein (the "Presentation") is proprietary and for authorized use only. It is being provided for the use of prospective investors with the express understanding that, without the prior permission in writing from Hillcrest Energy Technologies Ltd. ("Hillcrest" or the "Company"), the investor will not copy this Presentation or any portion of it or use any information contained herein for any purpose other than evaluating a potential investment in securities of Hillcrest.

This Presentation provides general background information about the activities of Hillcrest. Information disclosed in this Presentation is current as April 1, 2024, except as otherwise provided herein and Hillcrest does not undertake or agree to update this Presentation after the date hereof. All information is derived solely from management of Hillcrest and otherwise publicly available third-party information that has not been independently verified by the Company. Further, it does not purport to be complete nor is it intended to be relied upon as advice (legal, financial, tax or otherwise) to current or potential investors. Each prospective investor should contact his, her or its own legal adviser, independent financial adviser or tax adviser for legal, financial or tax advice. Recipients of this Presentation who are considering acquiring securities of the Company are referred to the public filings made by the Company with Canadian securities regulatory authorities, which are available under the Company's SEDAR+ profile at sedarplus.ca.

This Presentation contains "forward-looking information" within the meaning of applicable Canadian securities laws. This information and these statements, referred to herein as "forward looking statements", are made as of the date of this Presentation or as of the date of the effective date of information described in this Presentation, as applicable. Forward-looking statements relate to future events or future performance and reflect current estimates, prediction, expectation or beliefs regarding future events and include, without limitation, statements with respect to: (i) the Company's ability to commercialize its products; (ii) the Company's ability to continue to develop new products; (iii) the ability of the Company to bring its products to the market and the speed with which it can do so; (iv) costs savings and other benefits of using the Company's products; (v) and the impact of the Company's products on the automotive supply chain.

Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects", or "does not expect", "is expected", "budget", "scheduled", "estimates", "projects", "targets", "forecasts", "intends", "anticipates", or "does not anticipate", or "believes" or variations (including negative and grammatical variations) of such words and phrases or state that certain actions, events or results "likely", "may", "could", "would", "might", or "will be taken", "occur", or "be achieved". Forward-looking information is based on opinions and estimates of management at the date the information is made, and is based on a number of assumptions and is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward looking information, including without limitation: (i) commodity prices; (ii) the willingness and ability of third parties to honor their contractual obligations; (iii) the decisions of third parties over which the Company has no control; (iv) environmental and government regulations; (v) availability of financing; (vi) judicial proceedings, (vii) force majeure events; (viii) risks associated

with the Company's ability to meet historic sales performances; (ix) the Company's ability to implement and fulfill its business strategies; (x) general economic conditions; (xi) adverse industry events; (xii) marketing costs; (xiii) loss of markets; (xiv) future legislative and regulatory developments; (xv) inability to access sufficient capital from internal and external sources, and/or inability to access sufficient capital on favourable terms; (xvi) income tax and regulatory matters; (xvii) the ability of the Company to implement its business strategies including expansion plans; (xviii) competition; and (xix) changes in regulation. The foregoing factors are not intended to be exhaustive.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information contained in this Presentation or in certain of the other documents on file with Canadian securities regulatory authorities, which are available on the Company's SEDAR+ profile at sedarplus.ca. The Company and its directors, officers and employees each disclaim any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by applicable law. Accordingly, readers should not place undue reliance on forward-looking statements due to the inherent uncertainty therein. All forward-looking information is expressly qualified in its entirety by this cautionary statement.

An investor should read this Presentation with the understanding that the Company's actual future results may be materially different from what is expected.

This Presentation does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the securities of the Company in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction. The securities of the Company have not been and will not be registered under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**"), or any state securities laws and may not be offered or sold within the United States. Information concerning the assets and operations of the Company included in this Presentation has been prepared in accordance with Canadian standards and is not comparable in all respects to similar information for United States companies.

There is an offering document related to this offering that can be accessed under the Company's SEDAR+ profile at sedarplus.ca and the Company's website at <https://hillcrestenergy.tech/>. Prospective investors should read this offering document before making an investment decision.

No securities regulatory authority has expressed an opinion about these securities and it is an offence to claim otherwise. This offering may not be suitable for you and you should only invest in it if you are willing to risk the loss of your entire investment. In making this investment decision, you should seek the advice of a registered dealer.

投资亮点



率先将革命性的逆变器技术平台推向市场

- 高度差异化的专有硬件和控制固件相结合，提供下一代电源转换功能
- 适应众多快速增长的细分市场，如电动交通、并网发电和储能
- 不断增长的IP（知识产权）组合，且100%由Hillcrest所有



快速进入市场

- 轻资产商业模式
- 正在合作开发多个项目，有明确的商业化路径
- 有能力通过潜在的OEM合作伙伴关系迅速扩大收入规模

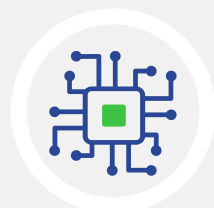


每辆车最多可以节省2200美元

- 与传统逆变器相比，电磁兼容性显著提高
- 与市面上的传统逆变器相比，**99.7%**的逆变器效率具有显著优势

可增加高达1320万美元的太阳能发电收入

- 改善电能质量和谐波
- 与传统逆变器相比，电磁兼容性显著提高
- 与市面上的传统逆变器相比，**99.7%**的逆变器效率具有显著优势



拥有丰富的技术和行业经验

- 加起来近**100**年的汽车行业经验
- 加起来超过**50**年的并网电力系统经验
- 加起来超过125年的电力电子和电力控制经验

什么是功率逆变器？

对电气系统至关重要



逆变器是一种将直流电(DC)转换为交流电(AC)的电力电子器件

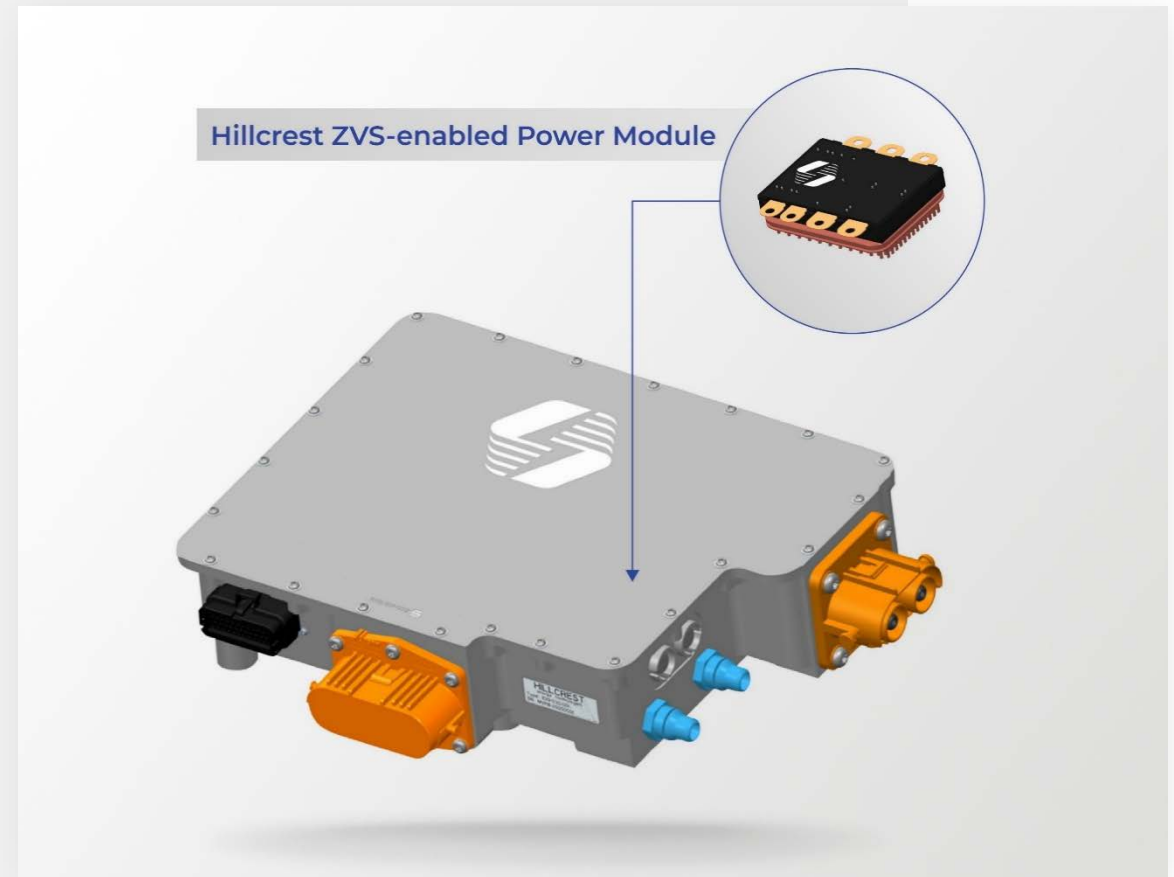


点击[此处](#)查看资料来源

Hillcrest EV牵引逆变器

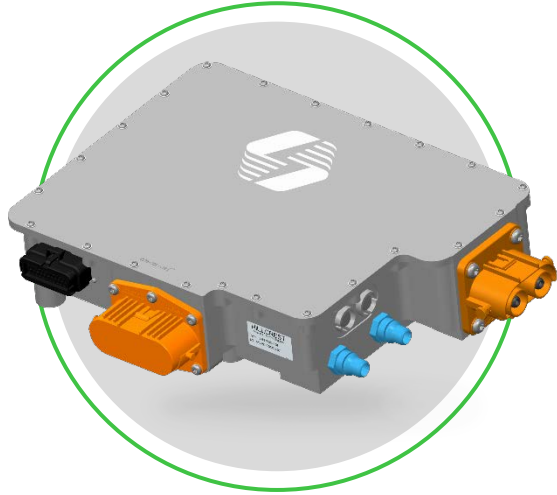
额定350千瓦 | 1000伏碳化硅逆变器

- 目前效率最高的逆变器 (99.6%)
- ZVS技术消除了开关损耗
- 更高的开关频率有可能提高电机的效率。
- 专有的Hillcrest硬件和ZVS软件组合可以适用于几乎任何电动机
- 包括首款支持ZVS的电源模块



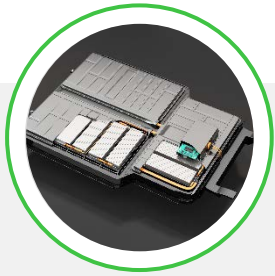
整个动力传动系统的优势

电动车 - Hillcrest ZVS技术的首次应用



功率逆变器

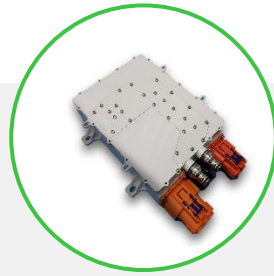
- 逆变器效率 $\approx 99.7\%$
- 直流支撑电容器的尺寸最多可缩小50%
- 优化使用半导体材料



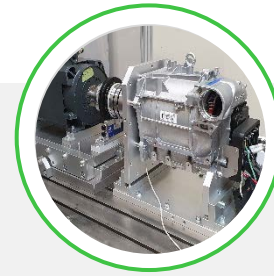
牵引电池组*
电池组体积最多可缩小15%



充电器
扩展充电功能



车载充电器
取消车载充电器



牵引电机
效率最高可提高13%（部分负载），续航能力最高可提高26%；实现了电机技术的新进步

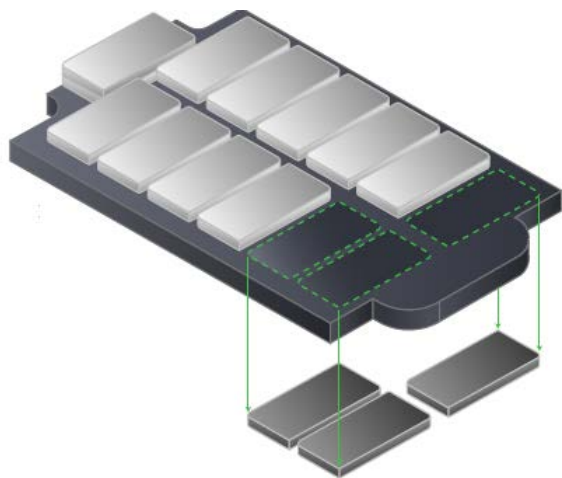


电磁干扰屏蔽
减少电磁干扰屏蔽/滤波器，提高系统可靠性

*基于电池组容量75千瓦时、重量2000磅和每千瓦时132美元的成本进行的估算

对供应链的影响

Hillcrest ZVS牵引逆变器



电池成本最多可节省**1500美元***

电池重量最多可减轻**300磅***

最高达
15%*

- 电池单元减少
- 电池系统的复杂程度降低
- 报废电池废弃物减少
- 减少每辆车所需的关键电动汽车电池矿产资源
- 与供应关键电动汽车电池矿物相关上游温室气体排放减少

*基于电池组容量75千瓦时、重量2000磅和每千瓦时132美元的成本进行的估算



电池组节省高达1500美元*，其他材料成本节省高达700美元



预测生产10万辆汽车的成本节约

Hillcrest ZVS并网逆变器

面向新行业的下一代能力

GRID-TIED INVERTER VALUE PROPOSITION

Hillcrest is redefining the landscape of power inverter capabilities with its Zero Voltage Switching (ZVS) technology. This cutting-edge solution introduces higher switching frequencies without the common drawbacks associated with conventional power inverters.

HIGHEST POSSIBLE
**INVERTER
EFFICIENCY**
UP TO
99.6%

SYSTEM COST SAVINGS
THROUGH SIZE AND WEIGHT
REDUCTION
UP TO **45%** UP TO **60%**
LINE FILTERS DC-LINK CAPACITORS

IMPROVED POWER QUALITY AND HARMONICS

Ability to string more inverters in parallel or run faster motors.

REDUCED ELECTROMAGNETIC INTERFERENCE (EMI)

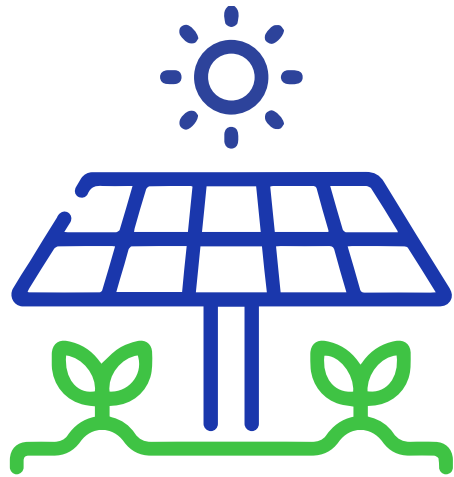
Requires less shielding and filters, reducing costs and weight.

IMPROVED SYSTEM RELIABILITY AND EXTENDED LIFESPAN

Reduces operating and capital costs.

Hillcrest ZVS并网逆变器

提高变频器效率的影响示例



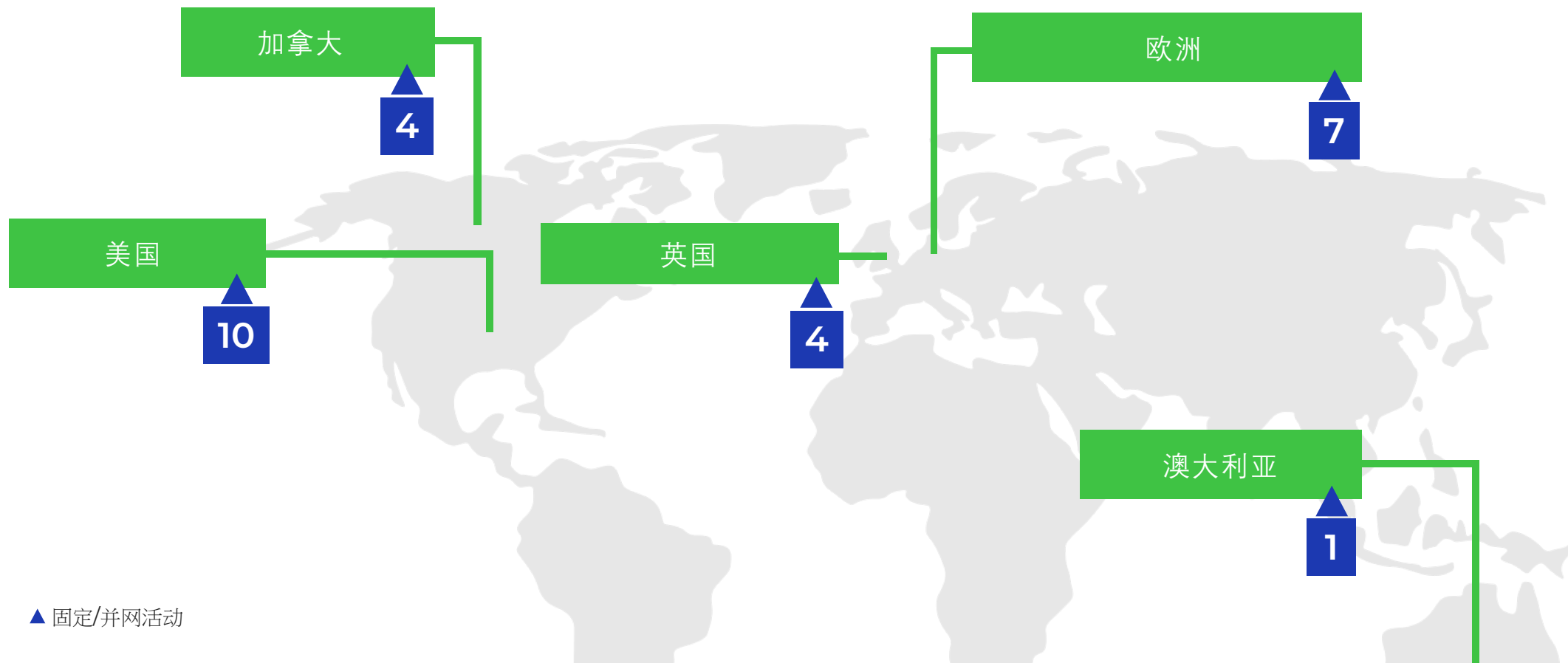
AN ADDITIONAL
US\$13.2M*
in potential revenues over the lifetime of a
250MW SOLAR FARM
with a 2% increase in inverter efficiency



*假设：
容量因数为24.5%
购电价格为49.52美元/兆瓦时
太阳能发电场的寿命为25年

正在进行的商业活动

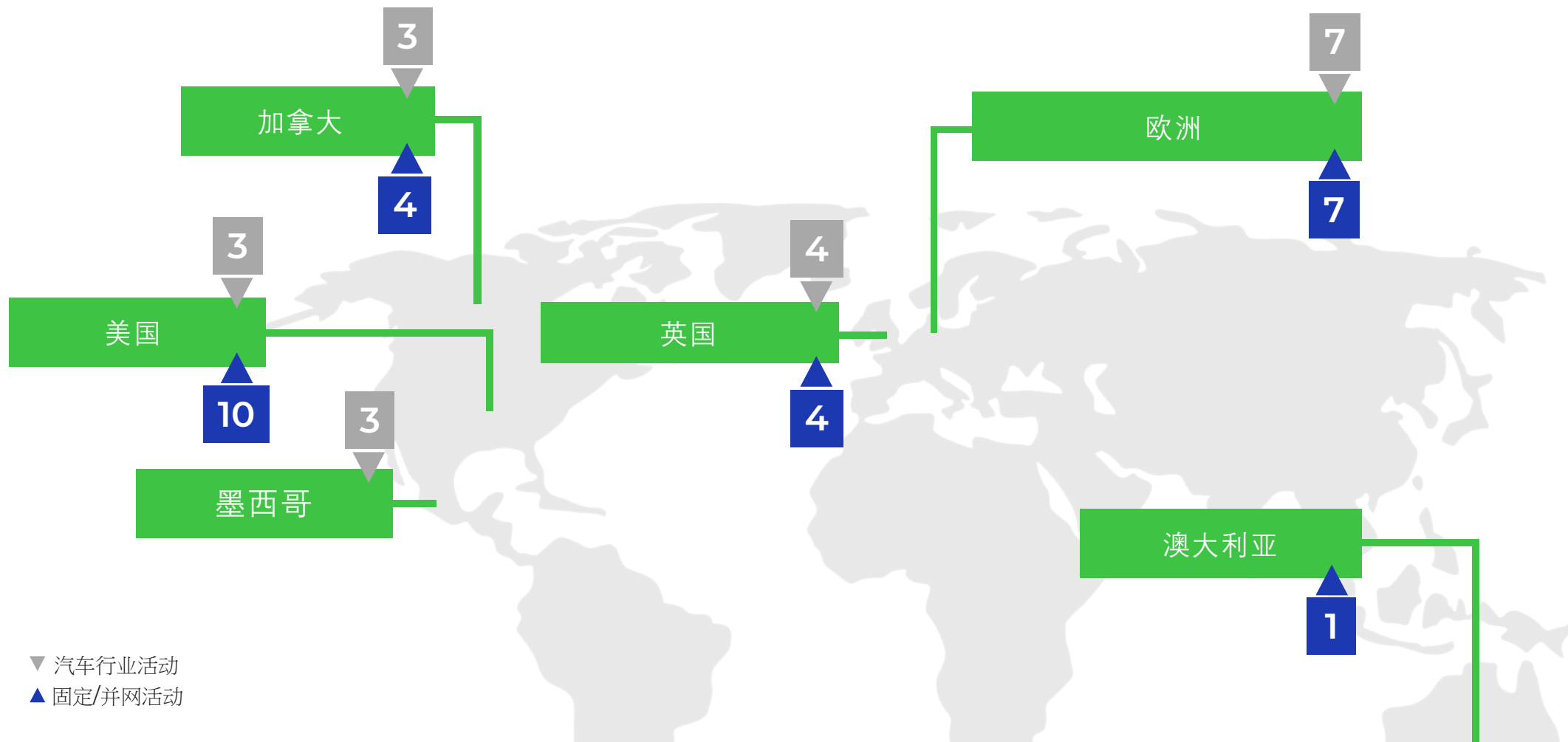
固定 | 并网活动



▲ 固定/并网活动

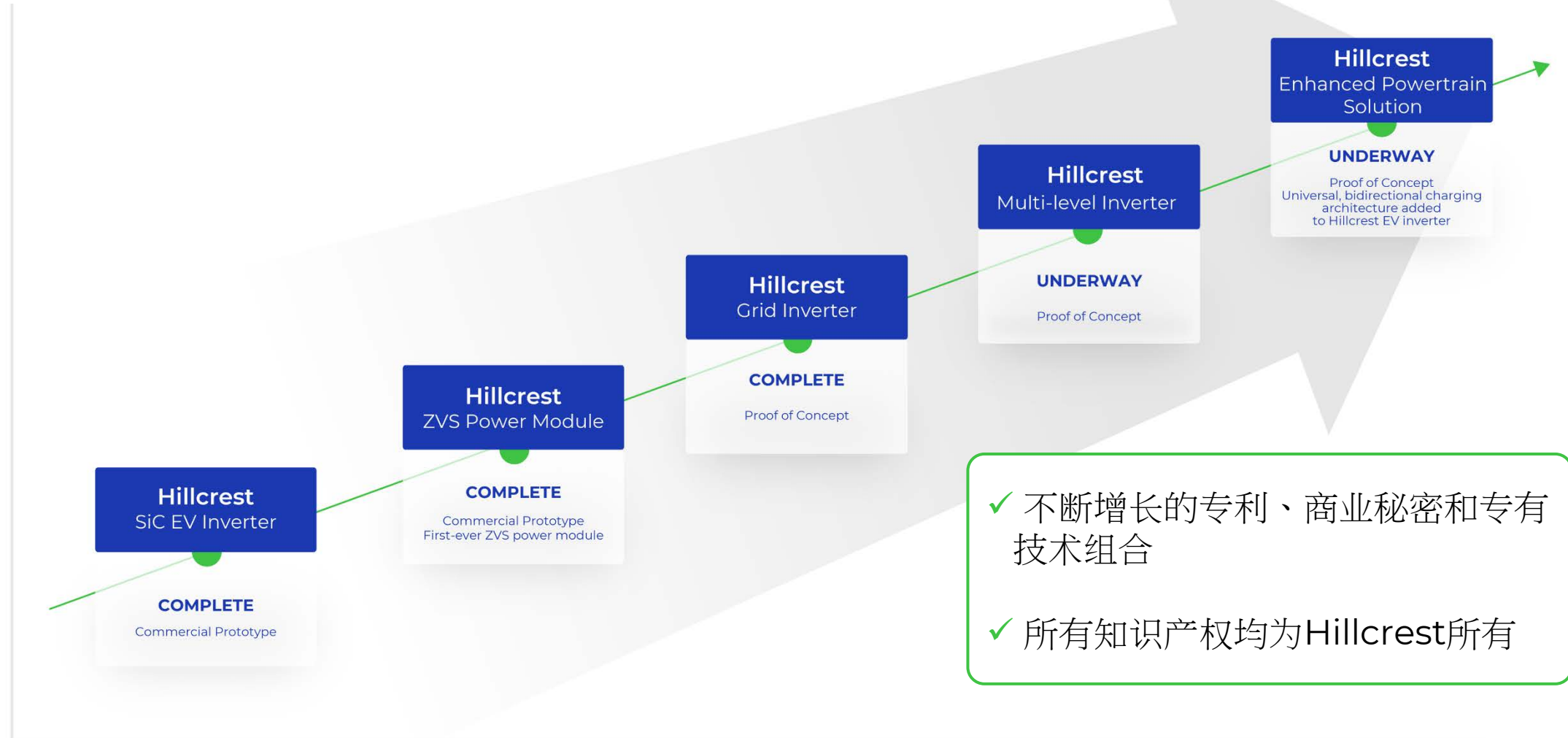
正在进行的商业活动

所有商业活动



产品路线图

一个ZVS技术平台 - 5项产品部署



核心技术团队



ARI BERGER
Hillcrest首席技术官

电机控制技术、系统工程和多学科产品设计方面的专家；拥有十多年的商业经验，特别是在电气化领域，在部署新技术和市场进入战略方面成绩斐然。



JALAL AMINI博士
Hillcrest高级电力电子工程师

高级电力电子工程师，在电网应用、电能质量和可再生能源方面拥有丰富的知识和经验，设计并实现了多种电力电子设备，包括风能转换器、有源滤波器、快速充电器和储能系统、感应电机驱动器和多电平换流器等并网设备。



HARALD HENGSTENBERGER
董事总经理、所有者兼创始人

Systematec团队领导者，资深电气工程师，拥有超过25年的混合动力和电动汽车动力系统设计、制造、测试和验证经验



JAMES HAMOND
Hillcrest高级技术顾问

Hamond先生是一个多面手，曾在消费品、工业和国防领域积累了工作经验，也精通硬件、嵌入式软件、控制和自适应算法、寄存器传输级 (RTL)、热管理和机械设计。他在软开关系统领域工作了15年以上，最近担任Pre-Switch Inc.的首席技术官兼联合创始人。

战略顾问



DAN COKER

Hillcrest战略顾问

汽车行业资深高管和开拓者型企业家，拥有出色的领导能力和全球人脉。在担任Gentherm总裁兼首席执行官20多年的任期内，Coker先生领导了该公司从创立初期发展到一家市值达10亿美元的企业，从根本上改变了汽车热管理领域。



HEINZ-GEORG BURGHOFF博士

Hillcrest商业化顾问

Burghoff 博士是汽车业务和产品战略专家，擅长车辆电子学，曾在戴姆勒克莱斯勒公司(DaimlerChrysler AG)任职超过20年，担任乘用车开发、电动/电子开发以及电池技术和战略指导等多个管理职位。



Dan Mathieson

Hillcrest战略顾问

Mathieson先生是一位具有创新精神的开拓者，曾成功连任五届市长，很善于建立人脉。他高瞻远瞩的领导能力使他所在的社区成为了尖端汽车技术的中心。他目前是[汽车制造商协会Project Arrow](#)项目的顾问委员会成员。

资本概况

截至2024年4月1日

股票上市	CSE: HEAT OTCQB: HLRTF FRA: 7HI
发行在外的流通股	7370万
完全摊薄后的流通股	9720万
未行权的认股权证 (平均行权价格1.68加元)	1480万
未行权的期权	370万
受限制的股票单位	500万
市值 (截止2024年2月14日)	\$1600万加币
3个月日均成交量	123,194

持股情况

内部人士持股	11%
纽约的家族理财室	4.9%
公司的德国顾问	5%
关系密切的商业伙伴	16%
散户投资者	63.1%

概述



100%

自有知识产权组合

99.7%

~ 最大逆变器效率



\$1320万美元

新增太阳能发电收入

\$2200美元

每辆车节省

7个

与电动车和并网电力系统合作伙伴共同开发的项目

免责声明

买方撤销权和转售限制

Statutory Rights of Action

In certain circumstances, purchasers resident in certain provinces of Canada, are provided with a remedy for rescission or damages, or both, in addition to any other right they may have at law, where a presentation and any amendment to it contains a misrepresentation. Where used herein, “misrepresentation” means an untrue statement of a material fact or an omission to state a material fact that is required to be stated or that is necessary to make any statement not misleading in light of the circumstances in which it was made. These remedies, or notice with respect to these remedies, must be exercised or delivered, as the case may be, by the purchaser within the time limits prescribed by applicable securities legislation.

The following summary is subject to the express provisions of the applicable securities laws, regulations and rules, and reference is made thereto for the complete text of such provisions. Such provisions may contain limitations and statutory defenses not described here on which the Company and other applicable parties may rely. Purchasers should refer to the applicable provisions of the securities legislation of their province for the particulars of these rights or consult with a legal adviser.

The following is a summary of rights of rescission or damages, or both, available to purchasers resident in the provinces of Ontario, New Brunswick, Nova Scotia and Saskatchewan. If there is a misrepresentation herein and you are a purchaser under securities legislation in Ontario, New Brunswick, Nova Scotia or Saskatchewan you have, without regard to whether you relied upon the misrepresentation, a statutory right of action for damages, or while still the owner of the securities, for rescission against the Company. This statutory right of action is subject to the following: (a) if you elect to exercise the right of action for rescission, you will have no right of action for damages against the Company; (b) except with respect to purchasers resident in Nova Scotia, no action shall be commenced to enforce a right of action for rescission after 180 days from the date of the transaction that gave rise to the cause of action; (c) no action shall be commenced to enforce a right of action for damages after the earlier of (i) 180 days (with respect to purchasers resident in Ontario) or one year (with respect to purchasers resident in Saskatchewan and New Brunswick) after you first had knowledge of the facts giving rise to the cause of action and (ii) three years (with respect to purchasers resident in Ontario) or six years (with respect to purchasers resident in Saskatchewan and New Brunswick) after the date of the transaction that gave rise to the cause of action; (d) with respect to purchasers resident in Nova Scotia, no action shall be commenced to enforce a right of action for rescission or damages after 120 days from the date on which payment for the securities was made by you; (e) the Company will not be liable if it proves that you purchased the securities with knowledge of the misrepresentation; (f) in the case of an action for damages, the Company will not be liable for all or any portion of the damages that it proves do not represent the depreciation in

value of the securities as a result of the misrepresentations; and (g) in no case will the amount recoverable in such action exceed the price at which the securities were sold to you. The foregoing is a summary only and is subject to the express provisions of the *Securities Act* (Ontario), the *Securities Act* (New Brunswick), the *Securities Act* (Nova Scotia) and the *Securities Act* (Saskatchewan), and the rules, regulations and other instruments thereunder, and reference is made to the complete text of such provisions contained therein. Such provisions may contain limitations and statutory defenses on which the Company may rely.

Notwithstanding that the *Securities Act* (British Columbia), the *Securities Act* (Alberta), and the *Securities Act* (Québec) do not provide, or require the Company to provide, to purchasers resident in these jurisdictions any rights of action in circumstances where this presentation or an amendment hereto contains a misrepresentation, the Company hereby grants to such purchasers contractual rights of action that are equivalent to the statutory rights of action set forth above with respect to purchasers resident in Ontario.

In Manitoba, the *Securities Act* (Manitoba), in Newfoundland and Labrador the *Securities Act* (Newfoundland and Labrador), in Prince Edward Island the *Securities Act* (PEI), in Yukon, the *Securities Act* (Yukon), in Nunavut, the *Securities Act* (Nunavut) and in the Northwest Territories, the *Securities Act* (Northwest Territories) provide a statutory right of action for damages or rescission to purchasers resident in Manitoba, Newfoundland, PEI, Yukon, Nunavut and Northwest Territories respectively, in circumstances where this presentation or an amendment hereto contains a misrepresentation, which rights are similar, but not identical, to the rights available to Ontario purchasers.

The statutory right of action described above is in addition to and without derogation from any other right or remedy at law.

Resale Restrictions

The securities described herein will be offered on a private placement basis in reliance upon prospectus exemptions under applicable securities legislation. Resale of the securities offered hereby will be subject to restrictions under the applicable securities legislation, which will vary depending on the relevant jurisdiction. Generally, such securities may be resold only pursuant to an exemption from the prospectus requirements of applicable securities legislation or pursuant to an exemption order granted by appropriate securities regulatory authorities.



HILLCREST
energy technologies™

联系我们



dcurrie@hillcrestenergy.tech



+1 604 609 0006



<https://hillcrestenergy.tech>

感谢参阅！

为未来提供动力的能源解决方案



Hillcrest与Systematec GmbH

我们的战略伙伴关系



共同开发

- ✓ 持续合作协议
- ✓ Hillcrest指导项目并拥有知识产权
- ✓ 与Hillcrest工程团队无缝整合



能力

- ✓ 位于德国的全方位电力电子工程服务
- ✓ 由13名成员组成的多学科团队拥有丰富的行业经验
- ✓ 对电动汽车行业的全面了解



关系

- ✓ 客户包括众多汽车原始设备制造商和一级供应商
- ✓ 在汽车、电气和电子领域拥有广泛的行业关系网
- ✓ 无可挑剔的声誉

如欲了解更多关于Systematec的信息：[Systematec GmbH](#)

管理团队



DON CURRIE

首席执行官兼董事

拥有数十年北美股票市场经验和上市公司融资成功经验；广泛的拥有和经营私营企业，并在部分上市公司董事会任职的经验，是一名值得信赖的关系和业务建立者。



Daryn Gordon

首席财务官

Gordon先生是特许专业会计师（CPA,CA），拥有二十多年的上市公司从业经验，职业生涯始于全球审计公司Grant Thornton LLP和普华永道加拿大分公司，并在14年前转为向加拿大上市公司提供首席财务官服务。



JAMES BOLEN

首席商务官

Bolen先生是一名资深高管，擅长领导创新团队从概念开发到取得商业化成功的整个过程，曾是Global Power Technologies USA的共同所有者兼总经理，该公司是一家为远程工业架构提供超可靠电力系统的全球领先企业。



JAMIE L. HOGUE

首席运营官

二十多年来，在能源、水、自然资源和可持续发展政策领域逐步积累了领导、组织发展、市场营销和财务分析方面的专业知识。



ARI BERGER

首席技术官

电机控制技术、系统工程和多学科产品设计方面的专家；拥有十多年的商业经验，特别是在电气化领域，在部署新技术和市场进入战略方面成绩斐然。

董事会成员



DAVID FARRELL

独立主席

Farrell先生（金融学士、法学学士、公司董事协会ICD.D任命）是一位企业董事，拥有超过25年的企业和投资银行经验，并曾为众多初创公司谈判、构建并完成了价值超过250亿美元的并购和结构化融资交易。



MICHAEL MOSKOWITZ

独立董事

技术行业经验丰富的高管，曾担任松下北美业务运营负责人。Moskowitz先生在可持续能源、智能出行、沉浸式体验、集成供应链和消费者生活方式等关键领域推动技术创新。



DON CURRIE

首席执行官兼董事

拥有数十年北美股票市场经验和上市公司融资成功经验；广泛的拥有和经营私营企业，并在部分上市公司董事会任职的经验，是一名值得信赖的关系和业务建立者。



KYLIE DICKSON

独立董事

作为一名加拿大注册会计师，她在多项融资和并购交易中发挥了关键作用，曾任Equinox Gold Corp.业务发展副总裁、Trek Mining业务发展副总裁、JDL Gold Corp.、Anthem United Inc.和Esperanza Resources的首席财务官，以及Minefinders Corporation的财务总监。

董事会成员（接上页）



MICHAEL KRZUS

董事

曾任纽约证券交易所上市公司首席执行官和董事，拥有38年能源行业经验，曾在加拿大、美国、澳大利亚和荷兰的大型和小型上市公司担任高级技术和行政管理职务。



ROBERT LAMBERT

独立董事

目前担任Jadestone Energy Inc.副主席、也是Ipex Energy Ltd.的创始人以及Oilfield Capital International LLP合伙人。在过去12年中，他曾担任Petra Petroleum Inc.首席执行官、Eland Oil & Gas PLC高级独立董事、GB Petroleum Ltd.首席执行官，并曾在25年的国际职业生涯中在Conoco Inc.担任高管和高级运营职务。



TOM MILNE

独立董事

高级财务管理人员，在能源勘探和生产、管道、油砂和通信技术领域拥有丰富的国际经验；曾担任上市和私营公司董事，包括AMEX上市油砂公司的审计委员会主席。