SILICON METAL: The Future of Energy Storage
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The Corporation’s is focus on developing the PUREVAP™ processes. The PUREVAP™ Quartz Reduction Reactor (QRR), a new carbothermic process to transform Quartz and Carbons into Silicon Metal, and the PUREVAP™ Silicon Metal (Si) Nano Reactor (SiNR), a new process to transform Silicon Metal into Spherical Nano powders and Nano wires for Lithium-ion batteries. The terms Silicon Metal and Si are used interchangeably. Metallurgical Grade Silicon or Mg Si refers to Silicon Metal of a purity between 98.0% Si and 99.5% Si.

Any monetary values given to end product produce by the equipment, projected capital or operating cost and savings associated with the development of process should not be construed as being related to the establishing of the economic viability or technical feasibility on any of the Company’s Quartz properties or more specifically the Roncevaux Quartz Project, Matapedia Area, in the Gaspe Region, Province of Quebec.
Energy Storage Dominance in the 21st century is akin to:
- Control of Coal in the 19th century
- Control of Oil in the 20th

**Silicon Metal: The Future of Energy Storage!**

Needed to Break Li-ion Batteries Limitations!

“Silicon anodes are projected to replace graphite anodes in Li-ion batteries with a huge impact on the amount of energy stored. Silicon anodes are generally viewed as the next development in lithium-ion battery technology... Silicon's ability to absorb more charge translates to longer battery life and smaller batteries.”

Yury Gogotsi, Director, A.J. Drexel Nanomaterials Institute, Drexel University

“With returns from improvements in battery cathode performance beginning to taper, Berdichevsky began to consider the next bottleneck—the poor energy density of the traditional graphite anode.”

Gene Berdichevsky, Engineer, Employee #7 at Tesla and founder of Sila Nano technologies

“Scientists at the University of California Riverside have been focused on nano silicon for a while, but it’s been degrading too quickly and is tough to produce in large quantities”

HPQ - A Silicon Metal Focus Renewable Energy Company!

In collaboration with world class technology partners:

- HPQ is in the final phase of demonstrating its unique capacity to be the lowest cost producer of the advance Silicon Metal (Si) materials needed for the next generations of Lithium-ion battery

- HPQ is developing:
  - The PUREVAP™ Quartz Reduction Reactor (QRR) (Patent Pending)
    - A New Scalable, Versatile and Low Capex and Opex Carbothermic Process to meet high purity Silicon Metal (Si) demand generated by Renewable Energy
  - The PUREVAP™ Silicon Metal Nano Reactor (SiNR) (Provisional Patent Filed)
    - A New Scalable, Versatile and Low Cost Plasma base Process that can transform Silicon Metal (Si) into the Spherical Nano powders and Nanowires of Si Next Generation Lithium-ion batteries makers are looking for
HPQ - Fast Tracking Silicon Metal Innovation!

- Lab scale and proof of concept tests already completed
- Fully funded pilot plant and testing program
- PUREVAP™ QRR pilot plant & PUREVAP™ SiNR test plant about to go live and produce
  - Nanoscale Spherical Si Powders and Nano Si Wires for next Gen Li-ion Batteries
  - Porous Silicon Metal Wafers for solid state Li-ion Batteries
  - Results to date have already generated NDA discussions with a solid state Lithium-ion battery manufacturer
- High Purity Porous Silicon Metal Powders for Li-ion Batteries
- Metallurgical Grade Silicon Metal (1N) and Chemical Grade Silicon Metal (2N)
CORPORATE OVERVIEW (February 2020)

**Project**
- HPQ, working with PyroGenesis Canada Inc (TSX-V: PYR), is developing the PUREVAP™ QRR and the PUREVAP™ SiNR, two new innovative plasma base processes which will permit the low cost manufacturing of High Purity Silicon Metal, Spherical Nano-powders and Nanowires for Next Generation Lithium-ion Batteries

**PUREVAP™ Pilot Plant - SiNR Test Plant H1 2020 Start**
- HPQ is about to start its 50 TPA PUREVAP™ QRR pilot plant & PUREVAP™ SiNR Test Plant that will:
  - Demonstrate our ability to be a low Opex and Capex producer of high purity Silicon Metal (Si)
  - Demonstrate our ability to be a low cost producer of Spherical Nano-powders and Nanowires
  - Qualifying and selling products to potential customers (Batteries and Others)

**Unique Capability of PUREVAP™ Process**
- **PUREVAP™ QRR & SiNR**
  - QRR - reduce raw material cost by 50%, representing a direct 20% reduction in OPEX
  - QRR - reduce HPQ Manufacturing CAPEX by 90% or more versus all other new Silicon Metal plants
  - QRR - process allows HPQ to Produce any Purity Silicon (Si) up to 4N Si in one step
  - SiNR - lowering the cost of making Spherical Nano-powders and Nanowires needed for Li-Ion Batteries

**Advancing Silicon Innovations**
- Silicon Metal (Si) is a key material for the ongoing renewable energy revolution
- HPQ to maximize the PUREVAP™ QRR Capability of converting low quality inputs in the high purity Si needed for Advance Materials Innovations, and maximize the PUREVAP™ SiNR Unique Proprietary Capability of transforming Si into Spherical Nano-powders and Nanowires

**PUREVAP™ Silicon Metal addressable markets**
- Expected to reach US$ 24B over the coming years (US$ 12B for Standard Si by 2023; US$ 1B for batteries Si by 2022; and US$ 11.8B for Solar Si by 2028)

**HPQ implementing a multi prong development approach**
- Near term: Focus on generating cash flow by using the PUREVAP™ QRR and SiNR for high value niche market silicon applications (Si for batteries (Nanopowders, Nanowires and Wafers, 2N+Si...)
- Medium term: Focus on High Purity silicon for advanced PV applications, developing in partnership with Apollon Solar, a new PUREVAP™ QRR metallurgical pathway for Solar Grade Si

**Strong support from key stakeholders**
- HPQ-Silicon has strong support from PyroGenesis Canada Inc, which holds on a fully diluted basis about 12.5% of the capital of the Corporation PLUS the Government of Québec which holds on a fully diluted basis about 9.9% of HPQ-Silicon. Apollon Solar is also a shareholder
SILICON METAL (Si)

- One of today’s key strategic minerals (EU Commission - US DOJ)
- Needed for Renewable Energy Transition
- Does not exist naturally in its pure state
  - Expensive Carbothermic process needed to extract it from Quartz (SiO2)
  - Quartz is one of the most abundant minerals in the earth’s crust

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<tr>
<th>Global Megatrends</th>
<th>Implications</th>
<th>End Customer Product</th>
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<tbody>
<tr>
<td>Population Growth</td>
<td>Growing middle class China and India: consumption economy</td>
<td>Silicons: healthcare, cosmetics, packaging</td>
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<tr>
<td>Urbanization</td>
<td>India, Brazil and other emerging markets: infrastructure build</td>
<td>Silicon: aluminum for cars, housing growth, Silicon: Silicone sealants for construction</td>
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<tr>
<td>Energy Efficiency</td>
<td>Reduce weight of vehicles and Electric vehicles</td>
<td>Silicon as alloying agent for aluminum to replace steel in vehicles, Prospects for silicon alloys in batteries</td>
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<td>Alternative Energy &amp; Sustainability</td>
<td>Growing demand for solar and other sources of renewable energy</td>
<td>Silicone sealants for wind turbine and solar, Higher consumption of silicon for polysilicon used to make solar cells, Prospects for silicon Base Energy Storage</td>
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Usages

- Metallurgical Grade Si (98.0% - 98.9% Si)
  - Aluminum
  - Silicones
  - Photovoltaic

- Chemical Grade Si (99.0% - 99.5% Si)
SILICON METAL DEMAND OUTLOOK

Standard Silicon Metal Demand (98.5 to 99.5% Si purity) going from:

- 2.8 Million MT Demand worth US$ 7.5 Billion in 2018
- To ~ 3.8 Million MT Demand worth US$ 12 Billion in 2023
- Projected Increase Driven by Chemical Sector (2N+ Si) and EV Growth

(Source CRU - Silicon Market Outlook - November 14, 2018)

CHALLENGES TO MEET ANTICIPATED DEMAND

✔ Conventional process limitation caps 2N+ Si output at ~ 40% of Plant Capacity

Quartz SiO₂ to Silicon Metal (Si) Standard Carbothermic Process

SiO₂ 99.5% + Low Ash Coal + Wood Chips ➞ Electric Arc Furnace ➞ Energy Consumption: ~ 12,000 kWh/t
✓ New plants will be needed (Source CRU - Silicon Market Outlook - November 14, 2018)

Greenfield plants will provide the majority of new capacity
Contribution to the expected growth in annual production capacity outside China and the CIS between 2010 and 2020 &

- Creep: 6%
- Conversions: 16%
- Brownfield: 20%
- Greenfield: 58%

NEW CONVENTIONAL PLANTS HAVE:
• Minimum Size Requirement > 30,000 MTY

REQUIRE SIGNIFICANT INVESTMENTS:
(Capex from most recent new plants)
• PCC BakkSiSilicon hf 2018 turnkey plant in Húsavík (Iceland) cost US$ 300M
  o US$ 9.38 Capex per Kg of annual capacity
• Mississippi Silicon (Rima Subsidiary) 2015 plant in Burnsville Mississippi (USA) cost US$ 220M
  o US$ 6.11 Capex per Kg of annual capacity

CONVENTIONAL PROCESS:
✓ Capital intensive mature technology with relatively flat opex curve and limited cost control options
  ➢ 90% of conventional process cost range bound between US$ 1,450/MT to US$ 2,000/MT
  ➢ Requires 6+ MT of raw material to make 1 MT of Standard Si
  ➢ Raw Materials, Electricity and Depreciation(Capex) make up bulk of cost (~ 80%)

✓ Strategic Risk with the largest single cost raw material: Low Ash Coal
  ➢ ~ 50% of the world supply of low Ash Coal controlled by largest Si producer in the world
HPQ PROPRIETARY SOLUTION!

PUREVAP™ A SCALABLE - VERSATILE - ADAPTABLE PROCESS TO MEET NEW SILICON METAL DEMAND

- Scalable by increments of 2,500 MTY - The maximum size of one PUREVAP™ Reactor

Quartz SiO₂ to MG Si (2N+)

The PUREVAP™ QRR, a proprietary (patent pending) 2.0 carbothermic process:

- SiO₂ 98.8%
  - 92.1% Total Carbon
- A one Step Process
- 2N+ Si @ 17.9% Conversion Yield
- 4N+ Si @ 90.0% Conversion Yield

LOW CAPEX (Kg OF ANNUAL CAPACITY MATRIX) - Very Competitive Versus Traditional Process

- Matches the scale costs of Tier 1 producers for a fraction of the investment (85% - 90% less)
- US$ 6.22 Capex per Kg of annual capacity with (2) 2,500 MTY PUREVAP™ Reactor Plant
HPQ VERSUS CONVENTIONAL Si PRODUCERS

Silicon Market Outlook (Source CRU - Silicon Market Outlook - November 14, 2018)

Silicon prices support new investment after 2019

US spot price 5.5.3 grade (Metallurgical) silicon vs avg. operating cost at plants outside China and CIS, $/t

HPQ PUREVAP™ QRR PROCESS

- Only Requires 4.5 MT of raw material and only one reductant to make 1 MT of Si
- Handle standard clean coal as reductant (carbon) versus Low Ash Coal needed for traditional process
- Raw material cost reduced by 50%, representing a direct 20% reduction in OPEX versus best in class

PUREVAP™ estimated operating cost to produce 2N Si
(To be firm up during Gen3 Pilot Plant)
The aluminum alloy chassis of Tesla cars is 10% Si!

- Aluminum silicon alloy makes the aluminum lighter and stronger.
- Small quantities of Silicon powder are already used in Tesla batteries.
- Silicon in the windshield.

PLUG - IN EV SALES (annual)

- 566,000 in 2015
- 54,000,000 in 2030E
An unexpected positive for HPQ DUREVAP™: Silicon Metal for Lithium-ion Batteries
✓ Working on a low cost process to make Silicon Metal Nano Powders and Nanowires
  ➢ In Partnership with PyroGenesis, we are developing the DUREVAP™ Silicon Metal (Si) Nano Reactor (SiNR) to produce the Spherical Nano Si powders and Si Nanowires for next Gen Li-ion Batteries
✓ Porous Silicon Metal Wafers and Powders for Li-Ion Batteries
  ➢ Combining HPQ DUREVAP™ QRR unique capacity with Apollon Solar SAS patented low cost approach of Making Porous Si Wafers allow HPQ to focus on commercializing Porous Si Wafers for solid state Li-Ion batteries and Porous Si powders Li-ion Batteries earlier then other early stage R&D competitors
Silicon Metal can increase battery charge 10X and energy density of batteries by 40%

Silicon Metal Allows greater energy storage capabilities

Allows for smaller size batteries for electronic devices and electric cars

Energy storage potential for renewable energy could reshape the global economy

Silicon Metal can increase battery charge 10X and energy density of batteries by 40%

Anode Chemistry Option Theoretical Capacity

<table>
<thead>
<tr>
<th>Anode Chemistry</th>
<th>Theoretical Capacity</th>
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<tbody>
<tr>
<td>Silicon</td>
<td>4500</td>
</tr>
<tr>
<td>Graphite</td>
<td>1000</td>
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G P S

SILICON METAL: “THE GRAPHITE KILLER FOR LITHIUM-ION BATTERIES”
MASSIVE ENERGY STORAGE DEMAND COMING

✓ Billions pouring into R&D and Gigafactories

- Impact on raw Battery Materials demand massive
- Presently Graphite, a low energy density material is the principal ingredient in Lithium-ion Batteries

**The energy density of anode materials**

<table>
<thead>
<tr>
<th>Material</th>
<th>2018</th>
<th>2023</th>
<th>2028</th>
</tr>
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<tbody>
<tr>
<td>Lithium</td>
<td>305,577</td>
<td>1,323,842</td>
<td>2,190,341</td>
</tr>
<tr>
<td>Graphite Anode</td>
<td>352,448</td>
<td>1,481,736</td>
<td>2,432,496</td>
</tr>
<tr>
<td>Cobalt</td>
<td>98,141</td>
<td>277,912</td>
<td>360,380</td>
</tr>
<tr>
<td>Nickel</td>
<td>116,616</td>
<td>694,323</td>
<td>1,314,677</td>
</tr>
</tbody>
</table>

- Graphite use in Li-ion anodes sell for ~ US$ 10/Kg
- Energy storage and EV demand cannot be met until Silicon Metal anodes replace Graphite one!
- Substituting Graphite anode with Silicon Metal ones represents a massive demand opportunity
- Graphite addressable market in 2018 ~ US$ 3.4B; projected to increase to ~ US$ 14B in 2023 and ~ US$ 24B in 2028
- Spherically Si Nano Powders and Si Nanowire identified as Key materials that could replace Graphite anode!
- Manufacturing Nano Powders not yet commercially feasible with US$ 30,000/kg selling prices

Source: Benchmark Minerals Intelligence
HPQ & PYROGENESIS SOLUTION!

THE PUREVAP™ Si NANO REACTOR (SiNR) A SCALABLE - VERSATILE - PROCESS
A new proprietary process to make the Spherical Nanopowders and Nanowires of Silicon Metal needed for Next Generation Li-ion Batteries

During the coming months, our Gen2 PUREVAP™ QRR will be converted into Proof of Commercial Scalability PUREVAP™ Si NANO REACTOR (SiNR)

- Tests will be done to prove the scalability, low-cost and feedstock flexibility of process
- Spherical Silicon Metal Nano-Powders and Nanowires samples will be produced for Research centers and potential end users

Silicon Metal (Si) to Spherical Nanopowders and Nanowires of Si

FEEDSTOCK:
PUREVAP™ QRR Si or MG Si or potentially Recycled Solar Cells

END PRODUCT:
SPHERICAL NANOPOWDERS & NANOWIRES OF SILICON METAL
PROOF OF CONCEPT TEST VALIDATED POTENTIAL OF PUREVAP™ SI NANO REACTOR

- Gen2 PUREVAP™ QRR successfully used to synthesize:
  - Spherical Nano Powders (size <0.5 µ) from Silicon Metal (Si)
  - Nanowires (size <0.2 µ) from Silicon Metal (Si)
HPQ GLOBALLY RENOWNED TECHNICAL PARTNERS

PyroGenesis Plasma Expertise: One of the largest in the World

- +25 years of experience & > 70 employees
- >60 Patents worldwide (issued or pending)
- 40,900 ft² Manufacturing facility
- The inventors of Plasma Atomization (Gold Standard)

World Leader In Advanced Plasma Processes

Leaders in High Purity Spherical Metal Powders for Industrial 3D printing

Technology Sold To US Navy For Use On Aircraft Carriers

Developer of PUREVAP One-Step Process To Produce High Purity Low Boron Silicon Metal

Agreements With Global Manufacturers and Trading Houses

Technology Tested and Validated By DARPA

Developer of DROSRITE™: a Green Aluminum Recovery from Dross process

Contract backlog worth $29.5MM at the end of Q3 2019
A French Engineering and R&D Company fully dedicated to the field of renewable energy and energy transition

Created in 2001 by a team of engineers and scientists with longstanding expertise in Silicon Purification and Crystallization - Solar Silicon - Photovoltaic Cells - Photovoltaic Modules

Part of Elixens Group, active in Fine Chemistry, Aromatic and Renewable Energies

23 Patents to their name, Including one for the manufacturing of Porous Silicon Wafers from Metallurgical Grade Silicon Metal

Obtained, an independently confirmed, world record conversion efficiency of 22.6% with ANU University of Australia, using monocrystalline ingots, for a solar cell made with 100% “SoG Si UMG”
HPQ GLOBALLY RENOWNED TECHNICAL PARTNERS

- Apollon Solar has a Strong background in silicon processes
- Diversification strategy: from photovoltaics to new applications

Photovoltaics - Cost reduction

New markets - High value

2005-2016
- PHOTOSIL project
- SoG production pilot

2011 - 2015
- Patent for porous Si production (2012)
- Low-cost porous silicon from metallurgical Silicon

2017 - today
- Collaboration with HPQ: Silicon for PV and Porous Silicon for storage
- Patent on plasma purification (2001)
- Patent for porous Si production (2012)
Combining HPQ PUREVAP™ QRR with Apollon Solar patented low cost approach of Making Porous Si

**PROCESS FLOW BETWEEN PUREVAP AND ANODIZATION**

- Base on equipment and process developed for the Solar Industry
- Presently, Silicon Metal Powders used are blended with graphite for Li-ion batteries, resulting in less than 5 wt% Si content in Li-ion batteries.

Still:
- Silicon Metal Powder demand for Li-ion batteries CAGR ↑
- Silicon Metal Powder market for Li-ion batteries to exceed

**LOW COST POROUS SILICON METAL FOR BATTERIES**

**PUREVAP™ QRR Si**

**CRystallization**

**WAfering**

**Anodization**

**Porous Si Wafer**

- Used for solid state Li-ion Batteries
- Or crushed into Porous Si Powders for Li-ion Batteries

**US $1 Billion**

2016 - 2022

2022
A LONG-TERM POTENTIAL MARKET FOR HPQ: SOLAR

Solar Grade Silicon: A Large & Growing Market, A High Volume & Low Margin Industry

Renewable Solar Energies:

Solar Grade Si market: US$ 7.1 B in 2018

HPQ TECHNOLOGICAL SOLUTION

FROM QUARTZ TO SOLAR WAFERS

How HPQ will implement its technological solution
By Combined Expertise In Three Critical Steps:

The PUREVAP™ technology of PyroGenesis transforms Quartz (SiO₂) to High Purity Silicon (4N+ Si < 1 ppm B) in one step - “PUREVAP™ Si”

PyroGenesis and Apollon Solar experts are developing a streamlined metallurgical pathway (UMG) for upgrading the “PUREVAP™ Si” to HPQ Solar Grade Silicon (SoG Si)

Apollon Solar has the expertise to transform HPQ SoG Si into high performance multicrystalline and monocrystalline solar cells: “wafers”

HPQ QUARTZ

PYROGENESIS’ PUREVAP™ PROCESS

SoG Si TO WAFER WITH APOLLON
LEGACY PROCESSES

Present Carbothermic process
Quartz to silicon metal (Si)

SiO$_2$ 99.5% + Low Ash Coal + Wood Chips → ElectricArc Furnace → Energy Consumption: 12,000 kWh/t

MG Silicon Metal 98.0% to 99.5% Si

Present Chemical process
MG-Si to SoG-Si

MG Silicon Metal Is Dissolved In Hydrochloric Acid To Form Trichlorosilane (HSiCl$_3$) → Trichlorosilane (HSiCl$_3$) is Further Refined → SIEMENS Reactor → Solar Grade Silicon Metal Polysilicon 99.9999+% Si

Energy Consumption: between 72,000 to 120,000 kWh/t
70% of the GHG generated by any solar project comes from the production of SoG Si
(source: Energy Policy, February 2014, Pages 229-244)

HPQ’s SoG Si is poised to produce the lowest carbon footprint

SoG Si in **CHINA**, world’s largest producer, generates 141 Kg of CO₂ per Kg of SoG Si

* Estimates will be firm up after Pilot plant phase

SoG Si in **GERMANY** using the same process, generates 87 Kg of CO₂ per Kg of SoG Si

SoG Si in **QUEBEC** with the PUREVAP™ expected to produce 5.4 Kg of CO₂ per Kg of SoG Si
PUREVAP™ POTENTIAL AND MILESTONES

Successful Gen1 & Gen2 Bench Tests (2016-2019) Validated the Processes

Gen3 QRR Pilot Plant and GEN 2 SINR platforms Operational 2020

Sales and potential offtake agreements anticipated in 2020 Commercial Sales 2021

ATTRACTION INTEREST FROM KEY INVESTORS

August 2018 $5,250,000 Financing

• The Quebec government agreed to finance 20% of the Gen3 project total cost
  ➢ Investissement Québec (IQ) funded a $1,800,000, 5 years, 5% unsecured Convertible Debenture
    ✓ Convertible into common shares at $0.12\textsuperscript{1} per HPQ share and interest payments are accruable
    ✓ IQ received 15,000,000 Warrants, (Terms one for one, exercise price $ 0.17\textsuperscript{2}, duration 36 months)

• PyroGenesis Canada Inc invested $1,950,000 to finance remaining Gen3 project total cost
  ➢ PyroGenesis acquired 16,250,000 Units of HPQ at $0.12 per Unit (representing a 30 % premium to market)
    ✓ Each Unit comprised one share and one warrant, (warrant exercise price $ 0.17\textsuperscript{2}, duration 36 months)

• PyroGenesis also granted HPQ a $1,500,000 Equity Line Credit to cover un-expected cost overruns that could potentially occur during the Gen3 project

As per Beauce Gold Field plan of arrangement: 1) the Conversion price of the debenture was reduced to $0.11 and 2) the exercise price of warrants was reduced to $0.155
UBS estimates that over the next ten years the energy storage market in the United States could grow to as much as $426 billion, and there are many ways to buy into the surge (CNBC Dec 30 2019: The battery decade: How energy storage could revolutionize industries in the next 10 years)

- **HPQ - Silicon:** An investment opportunity to participate in the Surge!

- **PUREVAP™ QRR** pilot plant & **PUREVAP™ SiNR** test plant about to go live

- Ready to start commercializing the following **PUREVAP™ Products**:
  - Nanoscale Spherical Si Powders and Nano Si Wires for next Gen Li-ion Batteries
  - Porous Silicon Metal Wafers for solid state Li-ion Batteries
    - Already under NDA with a solid state Lithium-ion battery manufacturer
  - High Purity Porous Silicon Metal Powders for Li-ion Batteries

- In 2020 samples will be sent to research centers for independent validation and to potential end users for product qualification and sales

- Supported by two (2) world class technology partners
MANAGEMENT, BOARD AND CAPITAL SUMMARY

**Management**

Bernard J Tourillon, BAA, MBA  
Chairman, President, CEO and Director

Patrick Levasseur  
Vice-President, COO and Director

Noelle Drapeau, LLL, MBA, PMP  
Corporate Secretary and Director

Francois Rivard  
CFO

**Independent Director**

Richard Mimeau, B.Sc.  
Director

Peter Smith, PhD, P. Eng.  
Director

Robert Robitaille, M.B.A., L. Ph.  
Director

Daryl Hodges H. BSc, M.Sc.  
Director

**Major Investors**

Management & Board ≈ 9.7% ≈ 10.5% (FD)  
PyroGenesis ≈ 9.7% ≈ 12.5% (FD)  
Investissement Quebec ≈ 9.9% (FD)  
Strategic Investors ≈ 2.8% ≈ 6.2% (FD)  
Key Investors ≈ 18.8% ≈ 21.2% (FD)

**Consultants/ Technical Advisors**

Marcel Drapeau, BA, BSC. Comm, LLL  
PyroGenesis Canada Inc  
Apollon Solar Sa

**Transfer Agent**

Computershare

**Auditors**

Raymond Chabot Grant Thornton

**Capital**

Shares Outstanding 230,537,866  
Warrants 62,628,000  
Options 11,400,000  
Debenture 16,653,361  
Fully Diluted 321,219,227
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