

## HPQ FUMED SILICA REACTOR PROJECT REACHES FIRST KEY MILESTONE

**MONTREAL, Canada, May 17<sup>th</sup>, 2023** — [HPQ Silicon Inc.](#) (“HPQ” or the “Company”) ([TSX-V: HPQ](#)) ([OTCQX: HPQFF](#)) ([FRA: O08](#)), a technology company engaged in green engineering processes for producing silica and silicon material, is pleased to provide shareholders with an update on the progress of the Fumed Silica Reactor Pilot Plant (“Pilot Plant”) project being developed by its 100% owned subsidiary, HPQ Silica Polvere Inc. (“HPQ Polvere”). See below a list of Fumed Silica market applications.

The Pilot Plant project being developed in partnership with technology provider [PyroGenesis Canada Inc.](#) ([TSX: PYR](#)) ([NASDAQ: PYR](#)) ([FRA: 8PY](#)) (“Pyrogenesis”) has reached its first key milestone of completing engineering tasks related to the design and fabrication of the Pilot Plant.

*“We have achieved more than just completing the first significant milestone of this project,” said Mr. Bernard Tourillon, President and CEO of HPQ Silicon Inc. “This milestone demonstrates great advancements with this project although it’s been flying under the radar compared to our Gen3 QRR pilot plant project.”*

With this milestone finalized, the project is moving onward towards completing the following two (2) remaining phases:

1. Completing the fabrication, assembly, and installation of the Pilot plant,
  - a. Milestone tentatively scheduled to be finished end of Q3 2023.
2. Pre-commissioning, commissioning, start-up, testing and process optimization,
  - a. Tentatively scheduled to start in Q4 2023 and run until end of Q2 2024

Between Q3 2022 and Q1 2023, a series of twelve (12) of lab scale tests were completed. These tests are important as they provide useful information to:

1. Identify the production parameters which optimize the process and fumed silica quality at a small scale and,
2. Evaluate the properties of the Fumed Silica powders produced at lab scale and compare them with commercial grade material.

The lab test tests showed promising results by successfully demonstrating a capacity to produce Hydrophilic Fumed Silica comparable to commercial-grade materials.

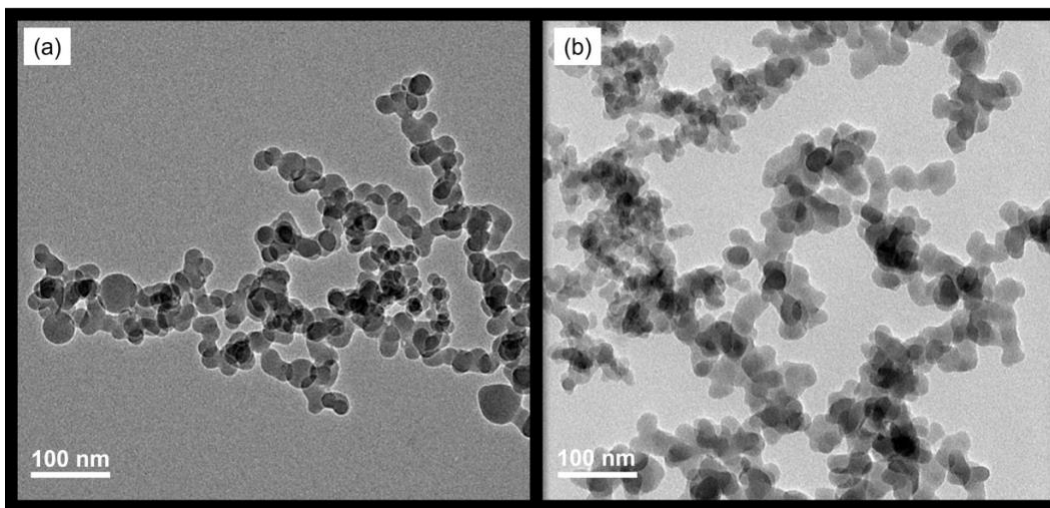


Image 1) TEM images of fumed silica nanoparticles,  
(a) HPQ Silica Polvere, (b) commercially available material



A set of five tests, which could produce sample material for clients, are set to be completed by the end of May 2023.

*“With these final five (5) lab scale tests fast approaching, our confidence that we will be able to produce commercial material with the pilot plant grows as the team continues to focus on getting the pilot plant ready to start producing goods; we are about to enter the home stretch of this program and start the pilot plant,” added Mr. Tourillon.*

#### **About Fumed Silica.**

Fumed silica (Pyrogenic Silica) is a microscopic white powder with high surface area and low bulk density. Its commercial applications encompass various industries including personal care, pharmaceuticals, agriculture (food & feed), adhesives, sealants, construction, batteries and automotive to name a few. According to MarketsandMarkets 2017 "fumed silica market – global forecast to 2022", demand for fumed silica is growing at 6% CAGR, with an estimated global addressable of US \$ 2.2 billion by 2022.

#### **About PyroGenesis Canada Inc.**

PyroGenesis Canada Inc., a high-tech company, is a leader in the design, development, manufacture and commercialization of advanced plasma processes and sustainable solutions which reduce greenhouse gases (GHG) and are economically attractive alternatives to conventional “dirty” processes. PyroGenesis has created proprietary, patented, and advanced plasma technologies that are being vetted and adopted by multiple multibillion dollar industry leaders in three massive markets: iron ore pelletization, aluminum, waste management, and additive manufacturing. With a team of experienced engineers, scientists and technicians working out of its Montreal office, and its 3,800 m<sup>2</sup> and 2,940 m<sup>2</sup> R&D and manufacturing facilities, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. The operations are ISO 9001:2015 and AS9100D certified, having been ISO certified since 1997. For more information, please visit: [www.pyrogenesis.com](http://www.pyrogenesis.com)

#### **About HPQ Silicon**

[HPQ Silicon Inc. \(TSX-V: HPQ\)](#) is a Quebec-based TSX Venture Exchange Tier 1 Industrial Issuer.

HPQ is developing, with the support of world-class technology partners [PyroGenesis Canada Inc. \(TSX: PYR\)](#) ([NASDAQ: PYR](#)) and [NOVACIUM SAS](#), new green processes crucial to make the critical materials needed to reach net zero emissions.

HPQ activities are centred around the following five (5) pillars:

- 1) Becoming a green low-cost (Capex and Opex) producer of High Purity Silicon (2N+ to 4N) using our proprietary **PUREVAP™ “Quartz Reduction Reactors” (QRR)** being developed by PyroGenesis.
- 2) Becoming North America’s first producer of micron size High Purity Silicon (3N & 4N) powders with the assistance of NOVACIUM SAS.
- 3) Working to become the first producer of nano silicon materials from High Purity Silicon chunks using our proprietary **PUREVAP™ Nano Silicon Reactor (NSiR)** being developed by PyroGenesis.
- 4) Becoming a green low-cost (Capex and Opex) producer of Fumed Silica using our proprietary **FUMED SILICA REACTOR** being developed by PyroGenesis.
- 5) Developing a small and compact process for the on-demand production of hydrogen via hydrolysis of Silicon and other materials.

For more information, please visit [HPQ Silicon web site](#).



**Disclaimers:**

This press release contains certain forward-looking statements, including, without limitation, statements containing the words "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect", "in the process" and other similar expressions which constitute "forward-looking information" within the meaning of applicable securities laws. Forward-looking statements reflect the Company's current expectation and assumptions and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated. These forward-looking statements involve risks and uncertainties including, but not limited to, our expectations regarding the acceptance of our products by the market, our strategy to develop new products and enhance the capabilities of existing products, our strategy with respect to research and development, the impact of competitive products and pricing, new product development, and uncertainties related to the regulatory approval process. Such statements reflect the current views of the Company with respect to future events and are subject to certain risks and uncertainties and other risks detailed from time-to-time in the Company's ongoing filings with the security's regulatory authorities, which filings can be found at [www.sedar.com](http://www.sedar.com). Actual results, events, and performance may differ materially. Readers are cautioned not to place undue reliance on these forward-looking statements. The Company undertakes no obligation to publicly update or revise any forward-looking statements either as a result of new information, future events or otherwise, except as required by applicable securities laws.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

This News Release is available on the company's [CEO Verified Discussion Forum](#), a moderated social media platform that enables civilized discussion and Q&A between Management and Shareholders.

- 30 -

**Source:** HPQ Silicon Inc.

**For further information contact:**

Bernard J. Tourillon, Chairman, President, and CEO Tel +1 (514) 846-3271

Patrick Levasseur, Director Tel: +1 (514) 262-9239

Email: [Info@hpsilicon.com](mailto:Info@hpsilicon.com)