HPQ's Statement on U.S. - Canada Tariff Situation, Reinforces Case for Domestic Fumed Silica Production

HPQ Plans to Start Commercial Production of Fumed Silica Using Its Pilot Plant in Q4 2025, Becoming Canada's First Domestic Supplier

Montreal, Canada, March 12th, 2025 — HPQ Silicon Inc. ("HPQ" or the "Company") (TSX-V: HPQ, OTCQB: HPQFF, FRA: O08), a technology company specializing in green engineering processes, would like to inform shareholder that recently announced **tariffs and resulting counter tariffs** on critical feedstock including **fumed silica has NO impact on discussions with parties under LOI and other NDAs interested in our Fumed Silica material and technologies.** Also, the Company would like to add that it intends to start commercial production of fumed silica using its pilot plant this year.

HPQ, through its subsidiary **HPQ Silica Polvere Inc. (HSPI)** [1], is progressing as planned with the development of its **Fumed Silica Reactor (FSR) system**. Following the successful production **of its first batch in late February 2025**, the pilot plant is now optimizing operations **to increase throughput from 20–30 kg per batch to over 480 kg per day**. During this phase, the fumed silica produced will undergo internal testing, with samples sent to parties under LOI (as per the July 9, 2024, release) and other NDAs.

By Q4 2025, HSPI will begin **commercial production of fumed silica** using its **pilot-scale FSR system**, making it **Canada's first domestic producer of fumed silica.** With escalating U.S. tariff threats and potential countermeasures, the timing is critical, as these trade policies are expected to **disrupt supply chains and increase the cost of imported materials.**

"Fumed silica is used in thousands of everyday products, yet Canada has no domestic production, *leaving Canadian manufacturers vulnerable to unpredictable trade policies that could swiftly drive prices up.* ***As a result, prices are expected to rise by at least 25%, squeezing businesses and limiting growth***," said **Bernard Tourillon, President & CEO of HPQ Silicon and HPQ Silica Polvere**. *"HPQ's Fumed Silica Reactor technology has the potential to change that. Our goal is to use the pilot plant to begin commercial fumed silica production in Canada in Q4 2025. At the same time, we will lay the groundwork to scale up production and establish, over the next few years, a reliable, nationally beneficial supply, thereby reducing reliance on U.S. and other fumed silica imports."*

Fumed Silica: A High-Value Material Caught in a Trade War

Fumed silica is a **high-performance industrial material** used in applications ranging from cosmetics and paints to lithium-ion batteries, adhesives, and reinforced polymers. Its **high surface area, lightweight structure**, and **ability to enhance** mechanical strength, viscosity, and stability make it indispensable across multiple sectors.

The global fumed silica market **valued at approximately US $2.0 billion in 2024** and is projected to **grow to over US $3.4 billion by 2034**[2], driven by increasing demand for high-performance materials in renewable energy, electric vehicles, and advanced coatings. The **US and Canadian** fumed silica market is **valued at approximately US $411 million in 2024** and is projected to **grow to over US $587 million by 2034**[3]**.**

High capital and operational costs, along with environmental challenges tied to traditional fumed silica manufacturing, have **left Canada without domestic production capacity**. As a result, local manufacturers relying on this critical feedstock must import **20,000 to 24,000 tonnes (t) annually—primarily from U.S. suppliers—at an average yearly cost of approximately US $200 million** [4]. With new tariffs and counter-tariffs being enacted, **the cost of imported fumed silica is set to rise by 25%, significantly impacting key Canadian industries such as automotive, construction, personal care, pharmaceuticals, and renewable energy.**

HPQ's Fumed Silica Reactor: A Pathway to Supply Independence for Canadian Industry

HPQ Silicon, through its subsidiary **HPQ Silica Polvere Inc. (HSPI)** [1]**,** is developing a low-Capex, low-Opex plasma-based fumed silica production technology in collaboration with **PyroGenesis Canada Inc**. Unlike traditional multi-step production methods, which typically require between **100 and 120 kWh per kg of fumed silica** [5], HSPI's one-step, energy-efficient process consumes only **8 to 12 kWh per kg** [6]. This significant reduction in energy use lowers operating cost and carbon emissions while maintaining superior product quality.

Strategic Advantages: A Scalable, Cost-Effective Alternative Undergoing Pilot-Scale Validation

Two weeks ago, the HSPI pilot plant successfully produced its first batch of material, marking a major milestone in the commercialization of its technology (February 27, 2025, release). As a 20-fold scale-up from previous lab tests, the pilot plant demonstrated its ability to replicate, at industrial scale, the visually morphological characteristics consistent with those observed in lab-scale fumed silica production.

Following the successful first pilot-scale tests, HSPI is now focused on optimizing batch and semi-continuous fumed silica production. Ongoing efforts aim to increase throughput from 20–30 kg per batch to over 480 kg per day while producing commercial grade materials with surface areas ranging from 150 to 300 m^2/g. The overarching goal is to achieve full-capacity operations, enabling multiple daily production cycles and delivering commercial-quality material. With an expected 20 hours of daily operation, the system is projected to produce approximately 161 kilograms per day, equivalent to an annual output of 50,000 kilograms (50 TPY).

By Q4 2025, the fully paid pilot-scale FSR system, will start delivering high-performance fumed silica, providing buyers with a cleaner, more efficient and Canadian alternative to legacy production methods.

HSPI's FSR design enables a modular, scalable approach to fumed silica production, based on increasing the FSR capability designs by a 20-fold scale up of the pilot system to an initial production target of at least 1,000 metric tons per year FRS reactors. Once the first system is operational in the coming years, the goal will become building multiple Fumed Silica Reactors to have the capacity to meet Canada's full market demand of 20,000 to 24,000 metric tons annually.

"*This is not just about mitigating tariffs*," **added Tourillon**. "*This is about using Canadian know-how to create a more resilient independent supply chain for critical materials. Over time HSPI's Fumed Silica Reactor could ensures that Canadian manufacturers are no longer at the mercy of U.S. trade policies. We are pioneering a technology that makes Canada self-sufficient in a high-value material while enhancing our global competitiveness*."

REFERENCE SOURCES

[1] A wholly owned subsidiary of HPQ Silicon Inc. when technology supplier PyroGenesis announced its intention to exercise its option to acquire a 50% stake in HSPI in May 2024.

[2] Global Market Insights: **Fumed Silica Market – By Product, Application Analysis, Share, Growth Forecast, 2025 - 2034**

[3] FACT"MR: **Fumed Silica Sales Outlook for North America (2024-2034)**

[4] Management estimates of Canadian market size based on information from Sales data per regions from MarketsandMarkets 2017 "fumed silica market – global forecast to 2022"

[5] Frischknecht, Rolf, et al. "Life cycle inventories and life cycle assessment of photovoltaic systems." International Energy Agency (IEA) PVPS Task 12 (2020).

[6] Updated energy consumption estimate made by PyroGenesis Canada Inc. (August 2024)

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 Inc. 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) manufacturer of Fumed Silica using the **FUMED SILICA REACTOR**, a proprietary technology owned by HPQ Silica Polvere Inc being developed for HSPI by PyroGenesis.
2) Becoming a producer of silicon-based anode materials for battery applications with the assistance of NOVACIUM SAS.
3) HPQ SILICON affiliate NOVACIUM SAS is developing a low carbon, chemical based on demand and high-pressure autonomous hydrogen production system.
4) HPQ SILICON affiliate NOVACIUM SAS is developing a new process to transform black aluminium dross into a valuable resource.
5) Becoming a zero CO_2 low-cost (Capex and Opex) producer of High Purity Silicon (2N+ to 4N) using our ***PUREVAP™ "Quartz Reduction Reactors" (QRR),*** a proprietary technology owned by HPQ being developed for HPQ by PyroGenesis.

For more information, please visit HPQ Silicon web site.

About PyroGenesis Inc.

PyroGenesis, a high-tech company, is a proud 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 four 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 m2 and 2,940 m2 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. PyroGenesis' shares are publicly traded on the TSX in Canada (TSX: PYR), the OTCQX in the US (OTCQX: PYRGF), and the Frankfurt Stock Exchange in Germany (FRA:

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