

# HPQ Fumed Silica Pilot Produces Significant Material Volumes in Key Milestone

Material Produced in the Reactor and Collected in Product Recovery Unit

Montreal, Canada, May 15<sup>th</sup>, 2025 — <u>HPQ Silicon Inc.</u> ("HPQ" or the "Company") (<u>TSX-V: HPQ</u>, <u>OTCQB: HPQFF</u>, <u>FRA: 008</u>), a technology company developing next-generation processes for advanced material manufacturing, would like to inform shareholders that HPQ Silica Polvere Inc. ("HSPI")<sup>[1]</sup> proprietary Fumed Silica Reactor (FSR) Pilot Plant has reached a Significant Milestone during its 4th Phase-one batch test.

HSPI's technology supplier, <u>PyroGenesis Inc.</u> (TSX: <u>PYR</u>, OTCQX: <u>PYRGF</u>, FRA: <u>8PY1</u>) ("PyroGenesis"), has confirmed that the Pilot Plant is advancing in validating the scale-up of its equipment from labscale to pilot-scale. As part of this validation and following continuous process improvements after each of the first 3 Phase-one batch tests, the Pilot Plant achieved a key objective: **the production and collection of substantial quantities of white powder material—potentially fumed silica—in the dedicated product recovery unit, commonly known as the "baghouse."** 



Image 1) Sample of material produced during the test

# In its May 13th, 2025, press release, PyroGenesis emphasized the importance of this development:

"...producing and then collecting fumed silica from the product recovery unit, known as the 'baghouse,' confirms most of the underlying assumptions that the process can make, as expected, fumed silica at commercial scale. This is what makes this milestone probably one of the most, if not the most, important milestones in the entire process. Having overcome all the challenges to get to this point, then the remaining balance of challenges should be very manageable."

This achievement is another step in validating the potential of HSPI's proprietary process to produce commercial-scale fumed silica, effectively positioning the Company's next phase of development and eventual commercialization.



## Next step: Testing the material

Having visually observed that the material collected in the baghouse looks like fumed silica, the powder material collected is in the process of being tested to confirm a) if it is fumed silica or an intermediary material, and b) if it contains any impurities.

"Saying we're excited by the results would be an understatement. Achieving these outcomes so early in the testing phase significantly boosts our confidence in our ability to replicate this milestone and consistently produce commercial-quality material," said Bernard Tourillon, President & CEO of HPQ Silicon and HPQ Silica. "Once we receive confirmation and are satisfied with the material's quality, we will be ready to distribute samples to third parties."

#### **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.

#### About HPQ Silicon

HPQ Silicon Inc. (TSX-V: HPQ) is a Quebec-based TSX Venture Exchange Industrial Issuer.

HPQ is developing, with the support of world-class technology partners <u>PyroGenesis Canada Inc.</u> and <u>NOVACIUM SAS</u>, 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:

- 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<sub>2</sub> 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 <u>HPQ Silicon web site</u>.

## 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: 8PY).www.pyrogenesis.com

#### Cautionary Note Regarding Forward-Looking Information

This press release contains "forward-looking information" and "forward-looking statements" within the meaning of applicable securities legislation (collectively, "forward-looking statements"), including, but not limited to, statements relating to future financial or operating events or future performance of the Company, and reflecting management's expectations and assumptions regarding the Company's growth, results, performance, and business prospects and opportunities. Such forward-looking statements reflect management's current beliefs and are based on information currently available to it. In some cases, forward-looking statements can be identified by words such as "aim", "anticipate", "aspire", "attempt", "believe", "budget", "could", "estimate", "expect", "forecast", "intend", "may", "mission", "plan", "potential", "predict", "progress", "outlook", "schedule", "should", "study", "target", "will", "would" or the negative of these terms or other similar expressions concerning matters that are not historical facts.

In particular, forward-looking statements include, but are not limited to, the Company's ability to develop its lowcost (Capex and Opex) manufacturing of Fumed Silica using its Fumed Silica Reactor (FSR) and enter in commercial production within the timeline, to provide high-performing and reliable advanced materials while promoting sustainability and supply chain traceability, and to position its fumed silica operation in the capital markets, the expected results of the initiatives described in this press release, and those statements which are discussed under the "About HPQ Silicon" paragraph and elsewhere in the press release which essentially describe the Company's outlook and objectives.

Additionally, the forward-looking statements include, but are not limited to, the Company's future results, the intended pilot plant testing and timeline of the Fumed Silica Reactor commercial scale up, the economic performance and product development efforts, as well as the Company's expected achievement of milestones, including the ability to conclude an offtake agreement and obtain sufficient financing for the future development on favorable terms for the Company.

Further, these forward-looking statements include the Company's ability to achieve its Fumed Silica strategy and its intended results, market trends, the consumer demand for materials, the Company's competitive advantages, macroeconomic conditions, the impact of applicable laws and regulations, and any information as to future plans and outlook for the Company are or involve forward-looking statements.

Forward-looking statements are based on estimates and assumptions that, while considered reasonable by the Company at the time of such statements, are inherently subject to significant business, economic, and competitive uncertainties and contingencies. These estimates and assumptions are not guarantees of future performance and may prove incorrect. These statements rely on various factors, including current technological trends, safe and effective operations, timely delivery and installation of future production equipment at estimated prices, assumed Fumed Silica sale prices, future exchange and interest rates, political and regulatory stability, commodity prices and production costs, the receipt of necessary approvals, licenses, and permits on favorable terms, sustained labor stability, financial and capital market conditions, availability of critical supplies and equipment, tax assumptions,



CAPEX and OPEX estimates, economic and operational projections, local infrastructure, and overall business prospects. Forward-looking statements are also subject to risks, uncertainties, and other factors that may cause actual results to differ materially, including the outcome of development, engineering, and planning activities, market conditions, competition, pricing pressures, risks inherent to mining exploration and development, the commercial viability of the Company's technology, project timelines, business continuity challenges, geopolitical instability, and other industry risks. Additionally, there can be no assurance that the conditions precedent of offtake agreements, product qualification requirements, and commercial operations will be met, nor that the Company will fulfill the expectations of financing partners and certifying bodies.

Forward-looking statements are subject to known or unknown risks and uncertainties that may cause actual results to differ materially from those anticipated or implied in the forward-looking statements. Risk factors that could cause actual results or events to differ materially from current expectations include, among others, delays in the scheduled delivery times of the equipment, the ability of the Company to successfully implement its strategic initiatives and whether such strategic initiatives will yield the expected benefits, the availability of financing or financing on favorable terms for the Company, the dependence on commodity prices, the impact of inflation on costs, the risks of obtaining the necessary permits, the operating performance of the Company's assets and businesses, competitive factors in the graphite mining and production industry, changes in laws and regulations affecting the Company's businesses, political and social acceptability risk, environmental regulation risk, currency and exchange rate risk, technological developments, as well as earnings, capital expenditure, cash flow and capital structure risks and general business risks. A further description of risks and uncertainties can be found in HPQ's Annual Information Form dated March 21, 2025, including in the section thereof captioned "Risk Factors", which is available on SEDAR+ at <u>www.sedarplus.ca</u> Unpredictable or unknown factors not discussed in this Cautionary Note could also have material adverse effects on forward-looking statements.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that may cause results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Forward-looking statements are provided for the purpose of providing information about management's expectations and plans relating to the future. The Company disclaims any intention or obligation to update or revise any forward-looking statements, except to the extent required by applicable law.

Market and industry data presented throughout this press release was obtained from third-party sources and industry reports, publications, websites and other publicly available information, as well as industry and other data prepared by the Company or on the behalf of the Company based on the Company's knowledge of the markets in which the Company operates, including information provided by suppliers, partners, customers and other industry participants.

The Company believes that the market and economic data presented throughout this press release is accurate as of the date of publication and, with respect to data prepared by the Company or on behalf of the Company, that estimates and assumptions are currently appropriate and reasonable, but there can be no assurance as to the accuracy or completeness thereof. The accuracy and completeness of the market and economic data presented throughout this press release are not guaranteed and the Company does not make any representation as to the accuracy of such data.

Actual outcomes may vary materially from those forecast in such reports or publications, and the prospect for material variation can be expected to increase as the length of the forecast period increases. Although the Company believes it to be reliable as of the date of publication, the Company has not independently verified any of the data from third-party sources referred to in this press release, analyzed or verified the underlying studies or surveys relied upon or referred to by such sources, or ascertained the underlying market, economic and other assumptions relied upon by such sources. Market and economic data are subject to variations and cannot be



verified due to limits on the availability and reliability of data inputs, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey.

*Further information regarding the Company is available in the SEDAR+ database <u>(www.sedarplus.ca)</u>, and on the Company's website at: <u>www.hpqsilicon.com</u>* 

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.

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Source: HPQ Silicon Inc.

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