

### **HPQ SILICON FILES SECOND PROVISIONAL PATENT APPLICATION**

Montreal, Qc, Canada, (Sept 04, 2019) HPQ Silicon Resources Inc. - TSX-V: HPQ; OTCPink: URAGF; FWB: UGE ("HPQ" or "the Company") is pleased to announce that a new provisional patent application covering a critical part of the PUREVAP™ Quartz Reduction Reactor (QRR) process has been filed. This is the second distinct patent filing for HPQ and PyroGenesis Canada Inc. (TSX-V: PYR) since the 2015 commencement of the Company's quest to improve the global economics and supply concerns of the Silicon (Si) market.

The first patent filing is currently pending and covers the entire novel  $PUREVAP^{TM}$  QRR process usage of a plasma arc within a vacuum furnace for the one step production of Silicon (Si) from Quartz (SiO<sub>2</sub>). This new provisional filing is focused on a new and novel process for continuous operations of the plasma arc furnace under vacuum.

"Our approach to protecting and strengthening the PUREVAP™ Intellectual Property Portfolio combines both Patents Protection and Trade Secrets," said Bernard Tourillon, President & CEO of HPQ Silicon Resources Inc. "The filing of this new provisional patent is another step forward in securing and protecting value for stakeholders. HPQ PUREVAP™ QRR is ready to solve the real world challenges facing Silicon markets today, completely revolutionize the Silicon industry and prepares us for commercialization which will in turn create tremendous value for HPQ shareholders."

While PyroGenesis filed the new provisional patent application, it is covered by the HPQ 2016 acquisition of the Intellectual Property rights to the  $PUREVAP^{TM}$  QRR as it relates to the production of Silicon (Si) from Quartz (SiO<sub>2</sub>), and can therefore be transferred to HPQ at anytime. As part of the agreement, PyroGenesis retains a royalty-free, exclusive irrevocable worldwide license to use the process for purposes other than the production of Silicon (Si) from Quartz (SiO<sub>2</sub>). However, if PyroGenesis develops any other such application, HPQ does have a right of first refusal in the event of any sale or otherwise disposal.

"The new provisional patent application represents another significant milestone in our long term relationship with HPQ Silicon, and underscores our belief that what we are doing is truly unique as well as demonstrating our confidence in the ultimate commercial viability of the PUREVAP<sup>TM</sup> project," said P. Peter Pascali, President and CEO of PyroGenesis. "At PyroGenesis we have developed an approach to protecting Intellectual Property, and we have the patent portfolio to prove it. We only engage in patent applications where we feel (i) that we will prevail with an award and (ii) that there is commercial application to protect."

### **About Silicon**

Silicon (Si) is one of today's strategic materials needed to fulfil the renewable energy revolution presently under way. Silicon does not exist in its pure state; it must be extracted from quartz, one of the most abundant minerals of the earth's crust and other expensive raw materials in a carbothermic process.

## **About HPQ Silicon**

HPQ Silicon Resources Inc. is a TSX-V listed company developing, in collaboration with industry leader PyroGenesis (TSX-V: PYR) the innovative *PUREVAP*<sup>TM</sup> "Quartz Reduction Reactors" (QRR), a truly 2.0 Carbothermic process (patent pending), which will permit the transformation and purification of quartz (SiO<sub>2</sub>) into Metallurgical Grade Silicon (Mg-Si) at prices that will propagate its significant renewable energy potential.

HPQ is also working with industry leader Apollon Solar to develop a metallurgical pathway of producing Solar Grade Silicon Metal (SoG Si) that will take full advantage of the  $PUREVAP^{TM}$  QRR one-step production of high purity silicon (Si) and significantly reduce the Capex and Opex associated with the transformation of quartz (SiO<sub>2</sub>) into SoG-Si.



HPQ focus is becoming the lowest cost producer of Silicon (Si), High Purity Silicon (Si) and Solar Grade Silicon Metal (SoG-Si). The pilot plant equipment that will validate the commercial potential of the process is on schedule to start in 2019.

This News Release is available on the company's <u>CEO Verified Discussion Forum</u>, a moderated social media platform that enables civilized discussion and Q&A between Management and Shareholders.

### Disclaimers:

The Corporation's interest in developing the PUREVAP™ QRR and any projected capital or operating cost savings associated with its development should not be construed as being related to the establishing the economic viability or technical feasibility of the Company's Roncevaux Quartz Project, Matapedia Area, in the Gaspe Region, Province of Quebec.

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 on-going filings with the securities regulatory authorities, which filings can be found at 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.

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