

HPQ SILICON PUREVAP™: IMPACTING THE GLOBAL SILICON, SOLAR AND BATTERY INDUSTRIES

MONTREAL, QC, CANADA (August 19th, 2019) HPQ Silicon Resources Inc. - TSX-V: HPQ; OTCPink: URAGF; FWB: UGE - ("HPQ" or "the Company") is pleased to present the market with key metrics on the impact of the Company's progress since the H2 2018 closing of a CDN\$ 5,250,000 financing¹ and provide guidance for H2 2019 for the PUREVAP™ Quartz Reduction Reactor (QRR) technology.

Since the 2015 commencement of the Company's quest to improve the global economics and supply concerns of the Silicon market, the $PUREVAP^{TM}$ project has reached several substantial operational milestones:

- 1. Unique Proprietary Capability of converting low quality inputs in to high purity Silicon (Si) 2;
- 2. Production yields may exceed 90% of input material³;
- 3. Demonstrating to the market that the technology functions as expected.⁴

The potential economic implications for the global downstream Silicon market and shareholders is extremely significant in that the HPQ $PUREVAP^{m}$ QRR technology may:

- 1. Reduce raw material cost by 50%, representing a direct 20% reduction in OPEX⁵;
- 2. Reduce HPQ Silicon Manufacturing CAPEX by 90% or more versus all other manufacturer⁶.

The addressable market for $PUREVAP^{TM}$ Silicon ("Si") is enormous with applications growing beyond just solar. The market for standard grade material is estimated to increase from US\$ 7.5B in 2018 to US\$ 12B in 2023⁷.

The global solar energy market is forecasted by Deutsche Bank to grow 10x by 2035 to be a US \$ 400B industry. The Solar Grade Silicon ("SoG-Si") sub-market is expected to grow from US \$7.1B to US \$11.8B by 2028⁸.

Although not commercialized it is well publicized that <u>silicon could replace graphite anodes in Lithium</u> batteries. As <u>reported by CNBC</u>, private Venture Capital backed firms are exploring the use of silicon in batteries and are positioning to provide the auto industry with the solutions it needs to substantially improve vehicle performance. Presently, Silicon content in lithium-ion battery anodes is roughly 6% and is estimated to represent an addressable market value of US \$ 1B by 2022⁹. If Silicon replaces other materials in batteries, this new addressable market will grow exponentially.

Bernard Tourillon, President & CEO of HPQ Silicon Resources Inc. stated: "HPQ is ready to solve the real world challenges facing Silicon markets today. We are ready to start commercializing our PUREVAP $^{\text{TM}}$ QRR technology. We are aiming to completely revolutionize the economics of the \$24B industry and create significant cash flow." Mr. Tourillon continued: "In the coming months we will be meeting with end users to see exactly what specs they will be needing for their applications and tweaking our output for them."

In H2 of 2019 the Company anticipates that the Gen3 Pilot Plant will be operational and should prove scalability. Throughout H2 the Company will be meeting with industry participants and, by the end of H2, start sending test material from the Gen2 unit with a goal of booking orders for material produced by the Gen3 Pilot Plant, as soon as operationally feasible.

¹ HPQ August 13th 2018 Release

² HPQ February 26th 2019 Release

³ HPQ April 25th 2019 Release

⁴ HPQ May 23 2019 Release

⁵ HPQ June 17th 2019 Release

⁶ HPQ July 11th 2019 Release

⁷ CRU – Silicon Market Outlook – November 14 2018 (Pages 20 - 23)

⁸ HPQ_NEW_DECK_JUNE_2019_AGM_V2.pdf

⁹ Source Marketandmakerts.com



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*TM "Quartz Reduction Reactors" (QRR), a truly 2.0 Carbothermic process (patent pending), which will permit the transformation and purification of quartz (SiO₂) 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 (SiO₂) 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 CEO Verified Discussion Forum, 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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