



## HPQ SILICON ENTERS INTO CONFIDENTIAL TECHNICAL DISCUSSIONS WITH AN ADVANCED MATERIAL DEVELOPER REGARDING ENERGY STORAGE APPLICATIONS

**Montreal, Quebec, Canada, (June 11, 2020):** [HPQ Silicon Resources Inc.](#) (“HPQ” or the “Company”) [TSX-V: HPQ; FWB: UGE; Other OTC : URAGE](#); is pleased to announce that HPQ has signed a non-disclosure agreement (“NDA”) with an advanced materials developer for the purposes of exchanging technical information and sending silicon samples produced by the *PUREVAP™ Nano Silicon Reactor (NSiR)* for energy storage applications testing. For industry competitive reasons, and according to the terms of the NDA, the identity of the advanced materials developer must remain confidential.

*“This NDA is further indications that the game changing potential of the *PUREVAP™ NSiR* process we are developing with [PyroGenesis Canada Inc. \(TSX-V: PYR\)](#) is attracting interest from participants involved in the energy storage race. Being able to start technical discussions before producing samples is an incredible advantage, as it allows us to better match our material characteristics with what market participants are looking for”* said Bernard Tourillon, President and CEO HPQ Silicon. *“Silicon’s potential to meet energy storage demand is undeniable and generating [massive investments](#), and serious industry interest, so our timing could not be better. Suffice it to say, we are very pleased to continue attracting such early interest. However, I must caution investors that although this agreement does signal the interest in our unique products, we are still at the very preliminary stages and there is no guarantee that anything of commercial value will materialize from these efforts. It does however demonstrate the potential for new and exciting advances by HPQ in the silicon energy space.”*

### GAME CHANGING POTENTIAL OF OUR *PUREVAP™ NANO SILICON (Si) REACTOR* GETTING NOTICED

Nano Silicon (Si) Powders have been [identified](#) as the key element that will allow the manufacture of high-performance Li-ion batteries to deliver on the [research](#) promises of an almost tenfold (10x) increase in the specific capacity of the anode, inducing a 20-40% gain in the energy density of Li-ion batteries. The *PUREVAP™ NSiR* process is purposely being developed to address the fact that current manufacturing processes to make Nano Silicon (Si) Powders are not very scalable and simply too expensive to be commercially feasible, requiring up to US\$ 30,000/kg<sup>1</sup> selling prices to justify production.

### GLOBAL ENERGY STORAGE MARKET READY TO EXPLODE

A [recent report](#) by Wood Mackenzie Power & Renewable’s Report projects that energy storage deployments are estimated to grow 1,300% from a 12 Gigawatt-hour market in 2018 to a 158 Gigawatt-hour market in 2024. Meanwhile, at current growth rates of 2% per year, [global energy consumption](#) will be an estimated 125,000 Terawatt-hours, which is 800,000 times more than the estimated storage capacity. An estimated US\$71 billion in investments will be made into storage systems where batteries will make up the lion’s share of capital deployment

#### About Silicon

Silicon (Si), also known as silicon metal, is one of today’s strategic materials needed to fulfil the Renewable Energy Revolution (“RER”) presently under way. Silicon does not exist in its pure state; it must be extracted from quartz (SiO<sub>2</sub>), in what has historically been a capital and energy intensive process.

#### About HPQ Silicon

[HPQ Silicon Resources Inc. \(TSX-V: HPQ\)](#) is a Canadian producer of Innovative Silicon Solutions, based in Montreal, building a portfolio of unique high value specialty silicon products needed for the coming RER.

<sup>1</sup> Source: Quotation from a producer (Confidential), [Media article](#)



Working with [PyroGenesis Canada Inc. \(TSX-V: PYR\)](#), a high-tech company that designs, develops, manufactures and commercializes plasma - based processes, HPQ is developing:

- The **PUREVAP™ “Quartz Reduction Reactors” (QRR)**, an innovative process (patent pending), which will permit the one step transformation of quartz (SiO<sub>2</sub>) into high purity silicon (Si) at reduced costs, energy input, and carbon footprint that will propagate its considerable renewable energy potential;
  - > HPQ believes it will become the lowest cost (Capex and Opex) producer of silicon (Si) and high purity silicon metal (3N – 4N Si);
- The **PUREVAP™ Nano Silicon Reactor (NSiR)**, a new proprietary process that can use different purities of silicon (Si) as feedstock, to make spherical silicon nanopowders and nanowires;
  - > HPQ believes it can also become the lowest cost manufacturer of spherical Si nanopowders and silicon-based composites needed by manufacturers of next-generation lithium-ion batteries;
  - > During the coming months, spherical Si nanopowders and nanowires silicon-based composite samples requested by industry participants and research institutions’ will be produced using **PUREVAP™ SiNR**.

HPQ is also working with industry leader [Apollon Solar](#) of France to:

- Use their patented process and develop a capability to produce commercially porous silicon (Si) wafers and porous silicon (Si) powders;
  - > The collaboration will allow HPQ to become the lowest cost producer of porous silicon wafers for all-solid -state batteries and porous silicon powders for Li-ion batteries.
  - > The plan is to deliver porous Si wafer to a battery manufacturer (under NDA) for testing in 2020.

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 any of the Company’s Quartz Projects.*

*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 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.*

**For further information contact**

Bernard J. Tourillon, Chairman, President and CEO Tel (514) 907-1011

Patrick Levasseur, Vice-President and COO Tel: (514) 262-9239

<http://www.hpqsilicon.com> Email: Info@hpqsilicon.com